Perceiving meaning

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Perceiving Meaning

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Submitted to the Department of Philosophy
Of Smith College
In partial fulfillment
Of the requirements for the degree of
Bachelor of Arts

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November 9, 2018
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**References**
Acknowledgements

Jay Garfield supported my ideas from the beginning. His generosity and mentorship have enabled my early amorphous thoughts to develop into this thesis. He read many drafts and provided invaluable feedback. He taught me how to read difficult philosophers and how to write well. Jay empowers all who work with him, and I will always be grateful for him.

Nalini Bhushan taught the first philosophy seminar I've taken, and that wondrous experience has been formative of my approaches to philosophy and to life. She has been my academic advisor during the past three years and supported my intellectual growth. Nalini’s wisdom and hospitality are unforgettable.

Samuel Ruhmkorff’s beautiful ways of teaching brightened my first year at Smith. I remain inspired by his ability to encourage and enlighten students.

Danielle Ramdath, Jessica Bascal, and Nnamdi Pole are among the teachers and professors who run the Mellon Mays Undergraduate Fellowship. They provided resources that enabled my pursuit in philosophy. I am grateful for the support and encouragement they give to many aspiring academics.

I thank my friends Nashwa Al-Sharki, Mariya Gemash, Nilay Binjola, Ellen Sulser, Lucia Simnova, Audrey Gibson, Emma Watson, Phoebe Metz, Maxwell Vega, Eleanor Devlin, Olivia Messenger, Louis Brown, and Ela Eroglu. Your conversations, silliness, and support are nourishing.

I thank my parents, Amy and Yuhong, and my brother Anderson. Your love continues to carry me forward.
1

Which Problem of Perception?

We experience a world of things that matter: trees we climb, forest fires we fear, fireworks we find beautiful; wine we drink; politicians we hate; friends we love. We do not see a face and infer that it is our beloved; a raging fire and infer that it is dangerous… How is this possible? In perceptual experience, objects manifest meaning by virtue of our desires, capacities, and commitments. But what makes these possible? They are determined in turn by our sociocultural roles, environmental contexts, and biological constraints. This dependence relation is reciprocal: our desires, capacities, and commitments also determine our roles, contexts, and even biology. All our activities are situated in infrastructure and social norms, which have contributed to selection pressures that have regulated our evolutionary history. Thus, the meanings we perceive are not “merely subjective” but are grounded in our biological and cultural evolution.

Does this conflate perception with inference or imagination? One might think that perception registers only low-level properties, such as colors, sounds, and smells which impinge directly on sensory organs; thus, the meaning of objects must be inferred or imagined on the basis of these low-level properties. But does this apparently more conservative position even make sense?

It does not. Let us start with an example to see why. In a church, all the churchgoers see the same plate of sacramental bread and cups of wine. They also all “see” the “same” meaning of the objects. As they swallow wine, they feel Christ’s blood trickle down their throats and feel an exhilarating intimacy with the divine. Except for one churchgoer, a suspicious child. She thinks that this ritual is ridiculous. Although she
visually perceives the same cup as other churchgoers do, when she swallows the wine, she feels only the tingle of alcohol. Christ’s blood is not to be found anywhere, and she feels intimacy only with an impending claustrophobia. She pities these churchgoers for their collective delusion, while the churchgoers pity this lost child.

The child and the churchgoers, on the conservative view, perceive the same cups of wine because their retinas receive light stimulation that originates from the same source of reflection. In contrast, the meaning of this object is not perceived. Light waves do not carry potential information that could be manipulated by neural processes and produce the meaning that the wine is Christ’s blood. Hence, only low-level properties (sensory properties) can be perceived, whereas high-level properties (conceptual properties) must be constructed elsewhere, such as by inference or imagination.

But not so fast. The child and the churchgoers alike perceive cups of wine. What is a cup, and what is wine? Approximately, a cup is an object used to hold liquids, and wine is a beverage made from fermented grapes. Is this information present in light waves? Not any more than the information that the wine is Christ’s blood is. Does this entail that we perceive only blotches of dark red, which is the actual content delivered by stimulation? Do we subsequently draw inferences to construct the information that these low-level properties amount to cups of wine?

Most people believe that they perceive cups of wine, whereas they rarely perceive blotches of red; this happens only when they produce or attend very closely to a painting, or engage in some other task that requires precise attention to the redness itself, as opposed to the cup. Fortunately, some philosophers and cognitive scientists share this intuition, against the conservative view of perception (e.g., Heidegger 1927/2010; Merleau-Ponty 1945/2012; Siegel 2010; Thompson 2007; Varela et al. 2000). They argue that we perceive ordinary objects, rather than sensory bits. But if we can perceive an object as belonging to a category, what other kinds of meaning can we perceive? Can we perceive the color blotches not only as wine but also as Christ’s blood, or even God’s forgiveness for our sins? How complex can perceived meaning be?
I must ask these questions because I reject the conservative view of perception. This view is married to a dualism between conceptual reasoning as based in inferential activity, on the one hand, and sensory properties as based in perceptual processes, on the other hand. This dualism arises from assumptions deep in Western history, according to which people have assumed that we are distinguished from other animals by our capacity to reason, a capacity radically distinct from the capacity for sensation.

The account of perception I will defend illuminates another aspect of our human condition: we are unusual in the animal kingdom not because we can reason, but because we can suffer in so many ways. While many organisms suffer primarily from threats to biological survival, we alone suffer from non-biological threats. Freedom from suffering seems to be impossible to guarantee, even when we are completely well-fed, safe, and loved. Our longing for a “return to nature,” imagined as some sublime realm of purity, has been a constant trope throughout our cultural history. Such longing reflects our consciousness of our many strange ways of suffering. This aspect of the human condition fuels my theory of perception as much as the epistemological, phenomenological, and biological arguments I will marshal for it. In the last chapter, I will return to this point and show how it is related to my theory of perception.

**The Problem of the Contents of Perception**

Two parallel but distinct debates arise in philosophy and cognitive science when we ask about the extent of the cognitive penetration of perception. I must explain these debates in order to distinguish them from my project, which is independent of them, but which might otherwise be confused for an attempt to address them. Philosophers and cognitive scientists who support modularity of mind argue that perceptual processing is modular and explain that the phenomenal experience of high-level properties is based in underlying inferential or non-perceptual activity (Marr 1982/2010; Fodor 1983; Pylyshyn 1999; Raftopoulos 2015). Although theorists differ on the extent to which the mind is modular, in general they agree that only low-level properties are admissible in the contents of perception.
Cognitive penetration is the opposing position. When examining similar neurobiological evidence or computational models, cognitive scientists who defend extensive cognitive penetration argue that sensory processing is “penetrated” by top-down influences from high-order cognitive functioning, such as expectation, attention, and memory, which aid the synthesis of perceptual experience (Hegdé & Kersten 2010; Hsieh et al. 2010; Humphreys & Riddoch 2001; Kok et al. 2014; Moore & Cavanagh 1998; Neri 2014; Summerfield & de Lange 2014). According to this position, high-level properties are part of the contents of perception. Philosophers have also argued for this position by employing phenomenological methods (Bayne 2009; Kriegel 2007; Macpherson 2012; Siegel 2007, 2010; Stokes 2012). Some philosophers and cognitive scientists even reject any boundary separating perception and inferential activity altogether (Clark 2016; Lupyan et al. 2010; Vetter & Newan 2014).

The reality of cognitive penetration has gained much empirical support, as indicated by a recent boom in publications.¹ But a landmark article by Firestone and Scholl examines hundreds of pro-penetration publications and argues that six major limitations undermine the probative value of all studies (2016).² These limitations are not just potential challenges; Firestone and Scholl argue that the studies are actually flawed. For example, many of these studies fail to distinguish between direct causal interaction between non-perceptual and perceptual processes and an indirect interaction by which non-perceptual processes modulate the input for perceptual systems. This marks a distinction between genuine top-down effects and mere context effects or unconscious inferences (Firestone & Scholl 2016). They argue that only the former can support cognitive penetration.

¹ For a database of scientific publications on cognitive penetration, see http://perception.yale.edu/Brian/refGuides/TopDown.html. This database currently holds 181 papers from 42 different journals, published since 1995. About 20 were published before 2005, 40 between 2005 and 2010, and 124 between 2010 and 2018; this reflects the increasing rates of publications in support of cognitive penetration.

² There have been previous studies that criticize studies that support cognitive penetration, but none of them as as comprehensive and forceful as this one (Jogan & Stocker 2014; Morgan et al. 2013; Storrs 2015). Also see previous publications of the authors (Firestone 2013; Firestone & Scholl 2014).
Most of their criticism relies on the fact that pro-penetration studies rely on subjective reports of phenomenological experience and lack neurobiological data. Firestone and Scholl argue that it is impossible to tell whether these reports reflect changes in the participants’ perceptions or in their subsequent judgments about perceptual experience. Because modularity-based models of perception are successful at capturing certain features of perceptual experience (e.g., perception of object contours and motion) and still dominate many research agendas, the authors argue that we should abandon the cognitive penetration hypothesis, or at least curb our optimism, and return to modularity-based models. They conclude that there is no robust empirical evidence for cognitive penetration, while there is much evidence for perceptual modularity.

Their rejection of cognitive penetration in favor of conservative modular theories has been hailed as authoritative by some in philosophy and cognitive science (Gross et al. 2014; Teufel & Nanay 2017). If this response is correct, my project would start off on the wrong foot: while I claim that we perceive a meaningful world, according to these philosophers this premise must be based on a naïve phenomenological observation, which is challenged by empirical evidence. But this is not the case. I am interested in very different questions than the ones pursued in the cognitive penetration debate.

*The Problem of the Very Notion of Perception*

My project begins with the observation that we perceive high-level, *existential properties*—the conceptual meaning that objects have relative to our abilities and activities, which are tied to our personal, sociocultural, and evolutionary history. I often use the terms *existential properties* and *perceived meaning* roughly synonymously. I consider the former as a technical term; it is perceived meaning defined as meaning determined by our embodied skills and ways of life, and I will argue in chapter 4, is developmentally

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3 The authors fail to note that the modularity-based models that are successful capture only low-level aspects of perceptual experience, like shape, motion, and color. Of course, once one is committed to extreme modularity of mind, these low-level aspects exhaust perceptual experience; but this justification is circular. If one commits to cognitive penetration, one might point out that perception involves more than these low-level aspects, and modularity-based models fail to capture perception as a whole and so are lacking.

4 I often use the terms *existential properties* and *perceived meaning* roughly synonymously. I consider the former as a technical term; it is perceived meaning defined as meaning determined by our embodied skills and ways of life, and I will argue in chapter 4, is developmentally
tempting to take my project as a defense of a kind of extreme position regarding the extent of cognitive penetration. But I do not make any claim about the degree of modularity or penetration between domains at a processing level, as as some philosophers who promote cognitive penetration do. Instead, I presume that these properties are present in ordinary perception, and they are part of the world we experience as persons. I am deliberately silent on issues of sub-personal processing and instead will argue for the broader transcendental conditions that are necessary to account for these phenomenological properties. My analysis is at the person-level, not at the sub-personal level. My method of argument, most generally, is transcendental reasoning that draws heavily on empirical findings (e.g., in developmental psychology and evolutionary biology) that are usually irrelevant to the cognitive penetration debate.

Most empirical findings regarding perceptual processing, including Firestone’s and Scholl’s review, therefore are simply irrelevant to the truth or falsity of my theory. Theories of processing do not have direct consequences for theories about phenomenology, and vice-versa. For example, evidence at a processing level in support of modularity of mind, which shows that conceptual meaning and sensory properties are processed by distinct modules, does not necessarily imply that, phenomenologically, conceptual meaning cannot be integrated with sensory properties. We very well might perceive, first-hand, that objects are conceptually meaningful, due to the involvement of processes that account for the integration between streams of information produced by distinct modules, for example. So, philosophers who promote cognitive penetration should not fear that empirical models that support modularity might count as evidence against phenomenological claims of penetration; but these philosophers should also refrain

continuous with minimal affective values. Because many philosophers recognize perceived meaning, but do not understand it in this narrow sense, I also use the latter term, especially in the context of their theories.

Nanay criticizes the methods employed by philosophers who argue for cognitive penetration. A common method is the method of phenomenal contrast, which some philosophers have used to argue for conclusions about features of cognitive processing (2010). But this oversteps the boundaries of the scope of the conclusions to which this method is entitled. This method starts from phenomenological premises and does not enlist experimental evidence. Thus its conclusions should pertain only to features of phenomenological experience.
from drawing inferences about processing structures on the basis of phenomenological observations. It is therefore important to distinguish between processing and phenomenological theories of the perception of high-level properties.

I also note that many thinkers do not question their definitions of perception and cognition (or other non-perceptual processes). This is problematic. The empirical question of penetration depends on these definitions, which are largely contingent on historical usages and are loaded with metaphysical assumptions that are not as empirically grounded as their proponents take them to be. For example, the idea of modularity of mind inherits assumptions of “faculty psychology” (viz., the view that the mind has isolable faculties like sensation, imagination, or reason), which originate in theologically-based medieval philosophy (Lakoff & Johnson 2010). This idea frames much empirical research by predetermining features of methodology.

Moreover, neurobiological and neuroimaging techniques can yield immense quantities of data, but researchers still lack consensus on interpretative methods, and any conclusion is highly influenced by theoretical assumptions; this fact is reflected in that researchers can examine similar data and still draw opposite conclusions. In the research domains of cognition and perception, it is possible for systematic empirical evidence to apparently support some position, but in fact the position remains questionable. I will show that my theory relies on assumptions that are more naturalistic than those of conservative views that presuppose historical distinctions between “faculties.”

The only phenomenological premise on which my theory hangs is that we pre-reflectively or absorbedly experience objects as meaningful, and this meaning can be so mandatory that even if we try not to perceive it, it nonetheless persists. I do not think any

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6 J.J. Gibson’s theory of ecological perception is motivated by his criticism that many empirical theories of perception presume that perception consists of snapshot or photograph-like representations that are exhausted by visual sensory properties (1979/2012, xiii). His theory challenges this traditional definition of perception. Alva Noë, drawing on Gibson, presents a similar criticism (2004, 58).

7 For example, some scientists in neurodynamics and cognitive neuroscience promote respectively anti-modular and modular theories, while they are both look at similar neurobiological data (Freeman 2000; Dehaene & Naccache 2001). Or some scientists look at similar neurobiological data but draw opposite conclusions on the role of emotions in reasoning (Damasio 2005).
philosopher or scientist would dispute the fact that the child and the churchgoers have distinct experiences during the *absorbed* moment of the eucharist ritual, which precedes and is independent of voluntary reasoning or other non-perceptual activities. The child does not taste Christ’s blood, and the child does not choose to perceive this absence. Even if the child tries to taste Christ’s blood, she would be unable to force this meaning into the absorbed moment of experience.

The churchgoers, likewise, do not voluntarily infer or imagine that the wine is Christ’s blood; when they lift the cup to their lips, the liquid is charged in this spiritual meaning, before they have any second thought. Moreover, aesthetic experiences affirm that we perceive meaning; when we listen to an epic drum solo, for instance, we do not infer or imagine the aesthetic properties of the perceptual experience. Cognitive sciences also distinguish between a fast, intuitive mode and a slow, deliberate mode of thinking or experiencing the world (Evans & Stanovich 2013; Kahneman 2011). Moral psychology has verified that everyday moral judgments are driven by automatic, affective intuitions of the significance of moral situations (Greene 2001; Haidt et al. 199; Prinz 2007). I only emphasize that the deliverances of fast cognition are already conceptually meaningful, which is presumed in these empirical findings.

My wonder at this phenomenological premise launches my search for the *a priori* conditions of perceived meaning. For my purposes, I define perception as including any feature of phenomenal experience, manifested by an object or event, that shows up in a mandatory, spontaneous, or pre-reflective manner. This includes sensory and conceptual features alike, as long as they are not products of voluntary or controlled activity.

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8 Over time, the child or the churchgoers could self-consciously attempt to change their habitual practices, until they convinced themselves that the wine is or is not Christ’s blood. But this self-cultivation is not easy; ask any atheist who wistfully yearns to find God, or any theist who attempts to reject God but still feels God’s wrathful eye monitoring her. Or, take a more commonplace example: when we are lovesick or homesick, many objects manifest significance in relation to the beloved or to our home, and attempts to rationalize away these significances seem futile. My theory will explain the stubbornness of existential properties and the possibility of changing them; I will address this in chapters 4 and 6.

9 There seem to be counterintuitive consequences of this definition: some cases of daydreaming and imagination turn out to be perceptual. But this intuition is based on the acceptance of the
Why do I base my definition of perception on the contentious grounds of phenomenology rather than the concrete foundation of scientific research on cognitive processing? Besides the aforementioned reasons that the scientific definition of perception preserves aspects of ancient, non-empirical assumptions, I add that the impulse to base our understanding of perception on processing-level accounts is reductive in nature and unwarranted.\(^\text{10}\) I take integrative pluralism and emergentism to be more naturalistic than varieties of reductionism, particularly in the domains of cognition and perception (Baker 1987; Garfield 1988; Mitchell 2003; Neisser 1976; Tolman 1938). It follows from these positions that the given theoretical interests at hand should dictate which definition of perception ought to be presumed, and definitions based in processing should not be considered as *ultimately* more fundamental than those based in phenomenology.\(^\text{11}\)

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\(^{10}\) Some scientists and philosophers understand that these categories are so historically loaded that they aim to suspend them and start anew in the project of categorizing aspects of experience; only with this reframing can they make genuine progress (Teufel & Nanay 2017).

\(^{11}\) The drive to reduce phenomenological-level definitions of perception to processing-level definitions reflects a cultural drive for the *disenchantment* of the world. The promotion of a purely causal and material understanding of the world (in which all phenomena are ultimately reducible to low levels of analysis) lends itself to the valuation of nature as utility, and this worldview has buttressed capitalist and colonialist schemes (Bilgrami 2006, 2014; Taylor 2007). When phenomena do not have intrinsic meaning and value, they are free for us to manipulate for our personal interests, and we face fewer barriers to rationalizing the moral acceptability of our exploitative practices.

Contemporary philosophical and scientific accounts of perception reflect this disenchantment. They reduce features of cognition and perception to processing- and neurobiological-level entities. They exclude *meaning* from the domain of perception, dismiss it as “merely psychological” or based on contingent dispositions, and preclude meaning from having an objective standing (e.g., Beck 2011; Churchland 2006; Fodor 1983). I agree that meaning is indeed contingent on conditions provided by the subject. But I will argue that these conditions are ultimately grounded in further transcendental conditions based in biological and cultural evolutionary history—which are “objective” in the sense of being independent of any given subject who stands in relation to these conditions. This means the values and meanings of objects are objective, in this special sense, and cannot be dismissed as insubstantial in comparison to the traditional insulation of perception from reason and imagination. This is a cultural decision that is far from universal. Many Buddhist, Chinese, and Indian philosophical traditions draw the distinction between perception and inference differently; they would regard dreaming or imagining as perceptual (Coseru 2018; Garfield 2015; Raphals 2017; Zhang 2007). To be sure, these Eastern definitions are culturally contingent as well. The point, however, is that Western definitions are as well.
To identify the full range of processes that underpin phenomenal experience, we first need to recognize its key features, which will influence the methodology of investigating higher-level processes (e.g., those of ecological interactions and cultural history) and lower-level processes (e.g., those of neural activity and cognitive functions) that are necessary conditions of phenomenal experience. Studying low-level processing alone cannot yield evidence about these higher-level conditions and hinders research on these very low-level processes.¹²

Moreover, I will show that my phenomenological definition of perception can be used to powerfully explain a range of phenomena, including but not limited to mental illness, practical reasoning, problems of justification, and everyday observations of behavior. I will briefly explore these applications later in this chapter and devote chapter 5 to examining mental illness.

A Transcendental Methodology

I will offer transcendental arguments, asking what are the necessary conditions for the possibility of perceived meaning. While I draw on Kant’s First Critique for this method, I situate his approach in a naturalistic context and use this methodology in a different way. Like Kant, I start by identifying certain universal features of perceptual experience.¹³ Like Kant, I then ask which transcendental conditions are necessary to

¹² The theoretical significance of any processing-level finding depends on our understanding of the manner by which this structure is integrated into high-level processes that span relevant levels of analysis. For example, we can only have recognized that mirror neurons are responsive to paradigmatic actions of community members by identifying this higher-level, behavioral phenomenon and then tracking that the neural phenomena corresponds to it. Research about different levels of analysis, methodologically, should rely on each other in a dialectic manner. Thus we should not reject the phenomenological definition of perception, or relegate it to an inferior position.

¹³ Kant identifies the necessary a priori conditions of perceptual experience for the sake of his greater project of showing that synthetic a priori knowledge is possible; because there are universal and necessary features of perceptual experience, knowledge about these features has an a priori standing. I do not intend to pursue any such project of defending the possibility of absolute
accounting for these features. Kant understood transcendental conditions to be based in the cognitive architecture of the subject and prior to space and time. He never mentions embodiment, society, or ecology.

I part company from him here. I take transcendental conditions to be stable conditions that appear at different levels of description. These might be neural structures, biological processes distributed in our organism, patterns of ecological interaction, or even features of sociocultural and evolutionary history. I will identify transcendental conditions of perceptual experience at each of these levels, and will show that all are necessary to accounting for the meaningful dimension of perception.

Thus, I also part company with Kant on his attitude towards empirical evidence. Contemporary readers of the first Critique often take Kant’s transcendental conditions to be restricted to features of cognitive processing (e.g., Kitcher 1990). But Kant would have rejected such a view. According to Kant, any empirical finding of the underlying processes of consciousness is a perceptual or cognitive achievement and is thus already determined by transcendental conditions. It cannot fulfill the role of determining all aspects of consciousness, to which transcendental conditions are privileged (A87/B119). So, Kant argued that only his transcendental method can arrive at such _a priori_ truths.

But we cannot do metaphysics without drawing on empirically-influenced intuitions, which are sometimes best informed by experimental science, just as we cannot do science without metaphysical commitments. So, while I agree with Kant’s point that empirical findings are constrained by the limits of our cognition, I disagree with his conclusion that empirical findings should be eschewed from the search for the transcendental conditions of perceptual experience. On the contrary, metaphysical knowledge. I intend to find the transcendental conditions of perceived meaning and draw on aspects of Kant’s project that pertain to this.

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14 A common objection to Kant’s arguments in the first Critique is that his criticism of empirical methods is equally applicable to his own method. Although Kant does not deploy empirical investigation, he does rely on his own introspection and reasoning, which should also be a posteriori to any transcendental condition, by his very definition of these conditions (e.g., Schopenhauer 1813/2012). I will present this objection in further detail in chapter 2. I take this objection seriously, and it is a major reason to reject the epistemological privilege that Kant gives to methods of reasoning.
reasoning conducted with ignorance of scientific facts leads to a domination of the theorist’s personal biases and imaginative leaps. I will therefore ensure that the phenomenological structures I start with and the transcendental conditions I identify are supported by empirical evidence.15

Given that I owe so much epistemological credit to empirical evidence, why not just leave the question of transcendental conditions for the scientists to solve? Contemporary science is not equipped to address such questions; its methods are constrained to analyzing low-level phenomena. Science relies on controlling variables of the environment of a phenomenon and on manipulating the components that compose the phenomenon. High-level phenomena, such as aspects of conscious experience, implicate many high-level variables that current methods cannot identify and control.

But how can we be so sure that the problems of conscious experience that I pursue are experimentally intractable? Embodied cognitive science offers a naturalistic position that the mind is an extended system that is distributed through the body and embedded in the environment (e.g., Chemero 2009; Clark 1997; Gallagher and Zahavi 2010; Gibson 1979; Noë 2004; Thompson 2007; Varela et al. 1991; von Uexkull 1934). On this view, we cannot understand the significance of neural findings independently of identifying the principles of the dynamical interactions between the embodied cognitive system and the distal environment. But these interactions defy mechanistic explanation and depend on many high-level variables; as a consequence, current experimental methods cannot analyze them.

15 One might believe there is a contradiction in my attitudes towards empirical findings for understanding perception. I have given reasons for my disregard of empirical studies of perceptual processing; and now I emphasize the importance of respecting empirical studies. But there is no contradiction. I am open to these studies about processing as complementing my theory of perception; I argued only that the explananda they deal with is, in crucial ways, epistemically independent of those of my project. Moreover, there are many scientific fields, which deal with different explananda; I will mostly draw on fields that do not target perceptual processing. For example, I will draw on studies in developmental psychology and in developmental systems theory as applied to evolutionary biology. Such empirical evidence will support my key premises about intersubjectivity and sociocultural conditions, respectively, from which I draw conclusions about the contents and conditions of perception. Generally, this is the manner by which I utilize empirical evidence in my arguments, and I ensure that my arguments do not violate relevant empirical facts.
Many of the transcendental conditions I seek to understand are very high-level phenomena (e.g., ways of life; sociocultural niches; social norms), which cannot be reduced to neurobiological or computational processes. These conditions arise from interactions between innumerable human and ecological circumstances over large scales of history and geography. So, phenomenological investigation and metaphysical reasoning—which draw on empirical evidence across biological, psychological, and social domains—is the best starting place to investigate such high-level explananda. Although people are notoriously inconsistent in reporting their phenomenological experiences (Nisbett & Wilson 1977; Schwitzgebel 2011; Spener & Bayne 2010), these methods are sometimes the only option and are even reliable, when used in the right way.

I will argue that conditions of our embodiment, environment, and sociocultural history are necessary a priori conditions of perceived meaning. Examining the particular conditions that hold for a given person can explain the particular meaning that she perceives. I will defend the necessity of these three domains of conditions and the particular roles that each domain plays in constituting perceived meaning. In particular, ways of life (based in sociocultural and environmental conditions) constrain the development of embodied skills (based in embodiment). Embodied skills mediate access to the environment and determine the perceived meaning or existential properties of a given object. These transcendental conditions are dynamically interdependent. Perceptions of existential properties shape the development of embodied skills, and acquisition of embodied skills constrains the ways of life to which we can commit. I call the thesis of the necessity of these conditions and the dynamical interdependence between them the Transcendental View.

I will argue that our capacity for practical reflection—by which we assess our first-order experiences in terms of social norms—plays a crucial function in permitting ways of life, embodied skills, and existential properties to mutually influence each other. I call this thesis the Reflection View. We care about whether our activities, behavior, attitudes, and ways of life conform to relevant social norms. We also care about ensuring that the existential properties that structure our perceptual world are conducive to the ways of life
we adopt. So, when we reflect on experiences, we evaluate them in accordance with relevant norms for the sake of satisfying such ends. Episodes of reflection influence future experiences to manifest new existential properties that increasingly satisfy demands of social norms. In turn, these experiences shape the development of our embodied skills and ways of life.

I will apply the Reflection View to argue that that our biologically primitive affective capacities develop into the capacity to respond to existential properties. This development occurs over an infant’s enculturation and cognitive maturation. So, objects manifest existential properties as necessarily as they manifest the minimal affective values that are determined by our biological organization. This developmental process supports my most controversial and important claim, *viz.*, that vastly complex perceived meaning is possible. This solves the problem with which we began: How complex can perceived meaning be? Do the churchgoers perceive a cup and infer that it is Christ’s blood, God’s forgiveness, and so on? No. They *perceive* the blood and all its religious significance. The *Unbounded View* is the thesis that there is no principled upper bound of the complexity of existential properties.

These three theses constitute the view I call *existential enactivism*. This theory explains that people who differ in ways of life necessarily perceive worlds whose immanent meaning is systematically different. So the same physical structure can amount to distinct objects in the perceptual experiences of different people. This theory also explains that perceived meaning is not “merely psychological” or up to our whims. Rather, it is rather grounded in the conditions of our sociocultural and biological evolutionary history, which are enduring and transcendent of any given person’s life.

*Is Existential Enactivism Worth It?*

What difference does existential enactivism make? After all, conservative views of perception and existential enactivism ultimately both account for the same overall phenomena: we encounter objects and their meaning. Does it matter whether the
meaning turn out to be perceptual in nature, rather than constructed by inference or imagination?

It matters a lot. Let me briefly explore the implications of existential enactivism. What I call the conservative view—the dominant view in contemporary cognitive science and philosophy of mind—portrays us as agents who voluntarily construct meaning through inferences or other non-perceptual activities. This construction might be tightly constrained by beliefs, habits, and dispositions. Nonetheless, we construct meaning. It follows that if we want to change the meaning that accompanies perceptual experience, we should try to rationally respond to perception and change our habits.

In contrast, existential enactivism entails that complex meaning or existential properties are sometimes perceived. Like all perceived things, whether colors or sounds, existential properties show up in the world beyond our choice. We can only respond to these properties; we cannot change the fact that they entered our perceptual world, and we cannot control many of the factors that contributed to their entrance. Meaning is not based in mere mental or representational states, but it is part of the physical world that surrounds us.

This, I will show, has direct implications for the ways we cultivate compassion for others. Many people seem to behave and think in bizarre, morally dubious, or self-destructive ways. If we assume, following the conservative view, that they do so on the basis of beliefs and habits, which are voluntarily modifiable, we might demand them to be thoughtful and take responsibility for their destructive ways. But if existential enactivism is correct, their behaviors and thoughts are rational, relative to their perceptual world. Although I will show in chapter 4 that we have some agency in the development of existential properties, sociocultural conditions largely constrain this development, and the properties a person perceives at any moment are mandatory and influence her behaviors. By understanding that people inhabit perceptual worlds full of complex meaning that might differ radically from our own, it might be easier to have compassion and to find effective ways to interact with them.
Existential enactivism has implications for cultural relativism. Because existential properties show up as mandatorily as colors, it is implausible that some objects can have ultimate essences, or that some terms can have singular referents. These properties are based in sociocultural ways of life, which have an “objective” existence, are closely tied to our biological evolution, stand independently of any particular person, and determine the perceptual worlds across many people. Because there are many ways of life, there can be many equally “objective” meanings of some objects.

This re-evaluation of cultural relativism has implications for a variety issues, including our folk conceptions of rationality. It is difficult to judge whether a person is rational since she might act in rational conformity to her perceptual world, but her actions might seem irrational with respect to our perceptual world, if our world manifests very different existential properties than hers. This has further implications for rationality-based accounts of moral responsibility, which hold that people must be rational as a criterion of their being morally responsible for their actions. If this criterion is not objectively definable, it might be tricky to tell whether a person is responsible.

Existential enactivism has theoretical implications, in addition to these practical implications. It has implications for theories of perceptual justification. If we perceive meaning, we must reconsider the role that perceptual experience plays in the formation and evaluation of beliefs (Siegel 2012, 2017). For example, the perceptual experience that an object is an instance of some category might not have inherent justificatory value for beliefs that represent this, regardless of the incontrovertibility of the perception. The causal precedents of the perception (e.g., the development of embodied skills) must be examined in order to determine its justificatory value.

There are also implications for the identification of neural correlates of consciousness, a research agenda that occupies much of contemporary neuroscience. If existential properties can be very complex, the phenomenal states that neuroscientists regard as perceptual and non-perceptual must be newly categorized (Siegel 2010, 11). For

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16 Some of these ideas are inspired by Siegel’s discussion in The Contents of Visual Experience (2010) and are cited accordingly. Others are my own.
instance, certain conceptual activities might be regarded as perceptual in nature, and searches for neural correlates would adjust accordingly. Effective neuroscientific research requires an accurate metaphysics of cognition and perception.

Existential enactivism also has implications for research in empirical psychology, especially for methodologies that utilize participant self-reports. For example, the influential Kohlberg studies arrange for children to read descriptions of moral dilemmas and analyze their moral evaluations of characters in these dilemmas (Crain 1985). These studies assume, in accordance with the conservative view, that the children’s responses are products of inferential reasoning. Kohlberg drew the conclusion that children deploy increasingly sophisticated schemata of moral reasoning as they mature. But if existential enactivism is true, we must analyze the existential properties that different children perceive; such properties precede their judgments. Systematic differences in moral reasoning between participants might indicate differences in the existential properties they perceive, which are in turn indicative of differences in their ways of life.

Existential enactivism has implications for psychiatry. The question of existential properties is foundational to the clinical treatment of delusions and hallucinations (Siegel 2010, 12). Treatment must respect the location among the causal stages between perception, cognition, and behavior to which we assign the source of pathology. For example, the competing hypotheses that Capgras delusions are disturbances in perception vs. in subsequent inferences would each yield a different approach to clinical treatment.

Moreover, existential enactivism shows that our very concept of mental illness requires rethinking. Mental illness is typically understood as based in disturbances in emotion, judgment, or behavior. Against this, I will argue that it is more fundamentally based in the perceptual world, and the transcendental conditions that give rise to this world, such as social norms and ways of life. This entails that medical psychiatry—which establishes many social norms regarding mental illness—can increase people’s vulnerability to developing the particular symptoms that psychiatry establishes as characteristic of mental illnesses. I will argue for this in chapter 5.
Why Have Existential Properties Been Neglected?

I am not the first to argue that meaning is perceived, or to explore the transcendental conditions that account for the possibility of such perception. In chapter 2, I will present a history of philosophers of transcendental idealism, embodiment, existential phenomenology, and enactivism who have done this work. None of these philosophers, however, addressed how complex perceived meaning can be, or how many varieties they include. Nor did any of them provided an adequate account of their metaphysical basis. Why did these philosophers overlook these issues? Why did they fail to pursue a systematic account of perceived meaning?

If these philosophers carefully studied perceived meaning, they would have to face up to the inadequacy of their metaphysical systems to define it and account for its varieties. Their metaphysical systems are equipped to account for the perception of only motor affordances and simple conceptual properties. Nonetheless, because some complex conceptual properties—which I call existential properties—are phenomenologically obvious, some of these philosophers drop examples that presuppose we perceive existential properties. But they fail to examine these presuppositions. As consequence, they avoid the metaphysical implications of those examples and the inadequacy of their theories to account for them. This lack of systematicity gives reason to abandon the possibility of perceived meaning and return to the conservative view. This is a problem.

17 In addition to these philosophers I will present in chapter 2, there are philosophers who argue we directly perceive ethical properties (e.g., Audi 2017; Mcdowell 1985; Murdoch 1970/2006). I do not examine their accounts because their arguments are situated in debates in ethics, and their inclusion of claims about perception is peripheral.

18 I have some additional speculations on reasons why these philosophers overlooked existential properties. They fought an uphill battle against conservative theories of perception. They had to be cautious of extreme claims, like those of existential enactivism, which would stir even more trouble with conservative theorists than the trouble they already faced. Moreover, the philosophers who promoted perceived meaning might have retained implicit assumptions from the conservative view. It is virtually a consensus in the history of philosophy that very complex meaning is based in subjective, mental phenomena and has no basis in the “external” world. Influenced by this assumption, these philosophers failed to examine the possibility of complex perceived meaning.
Heidegger, for example, affirms the existence of existential properties in his discussion of *Mitdasein.* Heidegger argues that we perceive objects as manifesting the presence of other people (*Mitdasein*). This is possible by virtue of the object’s use in sociocultural activities; the meaning of the object is based on the practices of community members, and we can perceive this meaning. “The boat anchored to the shore… points to others… ‘Things’ are encountered from the world in which they are at hand for the others” (Heidegger 1927/2010, 111). When we perceive a boat, it manifests meaning that other people use this boat for their typical activities.

But Heidegger’s claim that we can perceive such complex meaning is primarily based in phenomenology. In chapter 2, I will show that he also argues that *Dasein,* or sociocultural ways of life, determines our uses of objects, and these uses are constitutive of perceptual experience. But he does not provide any empirically plausible explanation of these points. Moreover, he does not specify how complex perceived meaning can be. Could we, for example, perceive the meaning that a boat houses a particular crew? And if we befriended this crew, could we even perceive the boat as manifesting the personalities of the crew members? In the lack of an adequate explanation of perceived meaning, there is no way Heidegger can address the question of the ceiling of the complexity of such meaning.

Noë, drawing on Merleau-Ponty, argues for a empirically plausible account of perceived meaning, but he identifies only features of our embodiment as the transcendental conditions of such meaning. Noë argues for a variety of “thought-based” skills, including “descriptive, conceptual, and linguistic skills” (Noë 2012, 26). Noë claims that thought-based skills can enable us to perceive meaning as complex as the personality of a friend or the religious significance of a Moses icon (Noë 2012, 111). These skills are

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19 Heidegger also drops examples of other varieties of existential properties in his discussions of mood (*attunement*), language, and tradition. Each of the philosophers I mention in this introduction give more examples than the ones I mention. I do not discuss more examples here for brevity; the ones I do present exemplify the overall explanatory approach these philosophers take towards the perception of meaning.
supposedly analogous to *sensorimotor skills*, which enable us to perceive visual properties of objects.\textsuperscript{20} I will present Noë's argument in chapter 2.

But the cases are disanalogous. When we exercise sensorimotor skills (e.g., to crane our necks, walk around, or perform other motions that optimize our perceptual vantage point), the resulting perceptual experience depends on *both* the sensorimotor skill and the physical properties of the object on which we apply the skill (Noë 2012, 51). In contrast, no physical properties ground existential properties, on Noë's account. For instance, religious significance, which a Moses icon purportedly manifests in perceptual experience, is nowhere to be found in the distal environment. Because, according to Noë, existential properties are not grounded in physical properties, his account entails that strictly top-down processes determine existential properties. It is far from intuitive, however, that top-down processes can do all the work required for presenting conceptually rich meaning, without the aid of inferential activity. Among other challenges, which I will argue for in chapter 3, cognitive sciences do not admit of any evidence that can support such radical top-down processes.

Gibson alone recognizes that there must always be an environmental component of the transcendental conditions that determine perceptual experience. Embodied skills can be developed only in relation to environmental structures, and perceptual experience necessarily depends on the interaction between the embodied perceiver and environment. Gibson, however, does not specify whether different environmental components are necessary to account for different kinds of properties; it is clear that surface textures underpin the visual properties of objects, but which environmental features underpin existential properties?

Moreover, Gibson accounts for all kinds of properties with the same explanation: the cognitive system is sensitized to informational covariations between perceptual features and behavioral opportunities *via* a sort of classical conditioning mechanism.

\textsuperscript{20} Noë argues that the properties determined between thought-based and sensorimotor skills differ not in kind but only in degree. Particularly, they differ in degrees of "intensity" or "quality," and he leaves these measures underspecified (Noë 2012, 34). See chapter 2 for a further discussion of this.
(Gibson 1979/2015, 154)—in chapter 2, I will explain this in detail. Gibson wrongly assumes that his theory of perception, which is designed for the domains of visual perception and of motor or vital affordances, can be extended to the domains of socioculturally and linguistically dependent meaning of objects.

In particular, Gibson goes so far as to argue that “sexual, nurturing, fighting, cooperative, economic, political behaviors” are perceptually immanent on the basis of classical conditioning (Gibson 1979/2015, 158). But this leaves Gibson in the deadlock of the metaphysical problems that empiricist and rationalist traditions, which he criticizes, faced. There are virtually infinitely many combinations of socioculturally relevant cues that are logically possible. Which transcendental conditions account for the cues that are ultimately selected? This “frame problem” does not arise for visual perception and motor and vital affordances because our biological organization is phylogenetically attuned to only certain cues.

Hutto overcomes this problem in Gibson’s account. Hutto argues that the addition of language practices and sociocultural narratives to the ecological conditions posited by Gibson amounts to a set of transcendental conditions that sufficiently account for perception of people’s intentional states—a kind of existential property. Discursive structures of language enable us to embed multiple units of meaning, and this structural complexity facilitates our representation of other people’s representations (Hutto 2014, 132). Hutto argues that “folk psychological narratives,” or schematic stories about characters who act for certain reasons under certain circumstances, entrain us to grasp particular covariances between behaviors, intentions, and reasons (Hutto 2014, 27). These narratives constrain the infinitely many possible combinations of sociocultural cues to which we become sensitized.

Hutto is on the right track. He recognizes that there are sociocultural conditions, such as folk psychological narratives, of the development of the embodied skills necessary

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21 In computer science, this is called the “frame problem.” See Dennett (1984) for an overview of this problem and his argument that all major proposed solutions fail. See Dreyfus (1992) for another diagnosis of the problem and analysis of the inherent inability of empiricist or rationalist approaches to overcome it.
for perceiving existential properties. These conditions map out the relevant covariances, for which we develop sensitivities or skills. Hutto is also correct that language is a tool that radically amplifies our power to develop sensitivity to nuanced covariances and to track them.

But the conditions Hutto adds are still not enough to amount to a systematic account of perceived meaning. Arguing solely for the perception of others’ intentional states, Hutto overlooks that there might be a broader range of kinds of existential properties. Similarly, Hutto does not take the next step to generalize from the scaffolding function of folk psychological narratives to a broader scaffolding function that other kinds of sociocultural conditions might play. That is, he does not explore the transcendental conditions that make existential properties, in general, possible. In chapter 3, I will start with the insights from these philosophers and argue for further transcendental conditions that provide a systematic account of perceived meaning.

Chapter Overview

In chapter 2, I will present the philosophical theories that form the theoretical background in which existential enactivism is situated. These come from the traditions of transcendental idealism, embodiment, existential phenomenology, and enactivism. I interpret the historical unfolding of these traditions as driven by philosophers building on Kant’s transcendental idealism. Kant was first to argue that there are transcendental conditions of experience. Each subsequent philosopher, in the narrative I will present, notices the incompleteness of the sets of transcendental conditions that previous philosophers proposed and adds further conditions. These philosophers further naturalize Kant’s project, as they discover that features of our biological organism, natural environment, and cultural history are necessary for perception.

In chapter 3, I will begin arguing for existential enactivism. This chapter defends the first two theses, the Unbounded View and the Transcendental View. On the latter, existential properties are dynamically interdependent with the transcendental conditions
of embodied skills and ways of life. Embodied skill is an umbrella term for any skillful way by which we deal with objects relevant to ways of life. Background knowledge, recognitional capacities, habits, know-how, and the like are varieties of embodied skills. These skills necessarily mediate our perceptual access to the world, and they determine the existential properties that objects manifest.

I will argue that our embeddedness in sociocultural traditions is a necessary condition of embodied skills; this historicity offers us social roles that structure our subjectivity, shape our embodied skills, and determine the existential properties of the perceptual world. Ways of life are related to these roles. We are existentially committed to ways of life in this sense: because our subjectivity and world depend on our ways of life, we are driven to satisfy the perceptions and practices that are normative to our ways of life. If we slacked on this, the embodied skills that enable us to embody our ways of life would deteriorate. This would alter our subjectivity and world that have carried us forward all along; we are innately repulsed by such alienation. So, we are motivated to conform to ways of life.

I will argue that ways of life are instantiated in sociocultural niches, the interconnected networks of tools, infrastructure, and institutions that govern the normative practices that structure ways of life. The human world is always based in sociocultural niches, which are non-reducible to physical and chemical processes. Material aspects of these niches scaffold the development of our embodied skills. By interacting with these materials—which have been intergenerationally designed by previous participants in the ways of life that we inherit—we develop socio-normative embodied skills. Sociocultural norms exert the normative pressures that drive our interactions with these materials, and their normative force is derived from our existential commitments. I will conclude this chapter by arguing that these transcendental conditions of perception can account for the perception of vastly complex existential properties, whose complexity has no principled upper limit—or the Unbounded View.

In chapter 4, I will argue that every perceptual experience necessarily manifests existential properties, just as it necessarily manifests sensory properties. This, in effect,
supplies the transcendental arguments for the Transcendental View in chapter 3 with additional empirically-grounded arguments. I will argue that existential properties are developmentally continuous with *minimal affective value*, which we necessarily perceive by virtue of our biological organization. We have homeostatic needs, and *affect* regulates the procedures by which we satisfy them.

We are also biologically determined to be *intersubjective* creatures and to potentially develop *language* capacities. The conditions of intersubjectivity and language determine that we are driven to act for social norms, rather than for strictly biological homeostasis. This drive permits affective values to develop into existential properties. I will argue for the *Reflection View* to account for this developmental process: we regularly engage in practical reflection, in which we evaluate our experiences in accordance with the social norms of our ways of life. This yields resolutions to achieve experiences that further satisfy social norms, and over such experiences we hone our embodied skills. Changes in skills do not only shift the possible existential properties we perceive, but also shift the possible ways of life to which we commit. In turn, changes in ways of life furnish new norms that guide reflection. This dynamical feedback between reflection and experience explains how ways of life come to organize our embodied skills and perceptual world (and vice-versa: how our perceptual experiences alter the development of embodied skills and shapes our ways of life).

*Existential enactivism consists of these three theses:* (1) the Unbounded View: we perceive vastly complex existential properties, and there is no principled upper boundary to the degree of their complexity, (2) the Transcendental View: embodied skills and ways of life are transcendental conditions of existential properties, and all levels are dynamically interdependent with each other, and (3) the Reflection View: dynamical feedback between practical reflection and perceptual experience makes possible the dynamical interdependence between the levels of the Transcendental View, and the developmental process it facilitates entails that all perceptual experience necessarily manifests existential properties.
In chapter 5, I will deploy existential enactivism to examine the etiology of mental illness. I will show that existential enactivism is more explanatorily powerful in this domain than alternative theories. Current dominant models of mental illness are based in neurobiological, cognitivist, and biopsychosocial approaches. Although these models capture crucial factors implicated in the development of mental illness, they pay insufficient attention to person- and social-level factors. Either the models neglect these factors altogether, or they underspecify their ontology and causal principles in attempts to account for them. I will propose a new etiological model based in existential enactivism that can account for the significance of biological, cognitive, personal, and social factors alike and integrate them in a manner that is more powerful than other integrationist approaches in the literature. This model will show that contemporary psychiatric practices proliferate mental disorders as ways of life that can transform a person’s embodiment, subjectivity, and perceptual world. Psychiatric sciences, in effect, obscure the highly contingent nature of existential suffering to the general public, and especially to people who are diagnosed, regardless of whether this is enabling or disabling.

In chapter 6, I will return to my earlier point that we are distinguished in the animal kingdom by our capacity to suffer in many ways. I will explain this in light of existential enactivism. Our variegated suffering is based in disruptions to the normative states of our subjectivity and perceptual world, or our failure to satisfy our existential commitments. But these circumstances that underlie suffering also provide a unique opportunity for existential freedom, if we rally an appropriate response. This freedom is the freedom to be conscious of our ways of life, to possibly change these ways, and thereby to play a role in determining the perceptual world that constrains the possibilities of our conscious thoughts, feelings, and actions. I will propose that engagement with the arts and humanities is one way to make use of the existential freedom afforded by circumstances that induce suffering.
Some believe that in order for a theory of perception or cognition to be naturalistic, it must take experience to consist in representations of an external world, and those representations must be instantiated in intracranial processes (e.g., Churchland 2006; Dennett 1991; Fodor 1983; Smart 1959). This is a grave misunderstanding of naturalism. Computationalism is one such internalist theory, but so are various forms of neurobiological reductionism. There are a number of motivations for internalism, and that history is not mine to tell here; others have told it (e.g., Dreyfus 1992; Haugeland 1993). I have another history to tell, one that will lead us inexorably to externalism, although it does not begin there.

The idea that perception is mediated by representations has a long history, during which representations have been understood in ways that are inconsistent with or do not necessary imply internalism. I will begin the story in medias res, with Immanuel Kant, who introduces the first theory of the role of mental synthesis in perceptual experience. I organize this history into four phases. First, there is Kant’s transcendental idealism. He argues for a priori or transcendental conditions, instantiated in the architecture of our cognitive system, that determine the possible structures of objects in experience. He starts by identifying such structures and asks which a priori conditions can explain their universality. This transcendental method is the basis of methods used by other phases of this history and of the one I use in my project.
The second phase involves attention to the human body. Philosophers in this phase include Arthur Schopenhauer, K.C. Bhattacharyya, and Maurice Merleau-Ponty.\(^1\) These philosophers argue that Kant started off with a limited set of phenomenological premises from which to identify transcendental conditions. Our experience is not exhausted by the representation of objective magnitudes of space and time, they argue. By expanding the premises to include things such as *perceived absences* and *perceptual constancy*, these philosophers identify further transcendental conditions of perceptual experience, which are based in embodiment. For example, the space we experience is not primarily a measurable dimension, but is rather a set of indeterminate relations between objects and the position of the perceiver's body. The body, on this view, is a special spatial object that determines the spatiality of the perceptual world. Hence, it is more than one spatial object among many, but is a transcendental condition of all objects within experience.

The insight that the body also has emotional and sociocultural aspects that determine perceptual experience is taken up by philosophers of existential phenomenology, which is the third phase of this history. These philosophers include Martin Heidegger, Hubert Dreyfus, and John Haugeland. They emphasize that previous empiricist and rationalist philosophers, including Kant, mistakenly assume that a detached, empirical mode of encountering the world is our primary mode of perception. From this empirical mode, objects appear as perceptually definitive and independent of the subject. This is the launching point for the prejudice that perception is exhausted by low-level, sensory properties and for the practice of segregating high-level, conceptual properties into non-perceptual domains of inference or knowledge.

Existential phenomenologists argue that we need to start from an engaged perspective: we are not distant observers but active participants in the world. We

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\(^1\) Although Merleau-Ponty’s work also belongs to the tradition of existential phenomenology, I will focus on his theory on embodiment, rather than the existential aspects of his work. I place him here because the existential aspects that Merleau-Ponty addresses, such as intersubjectivity and affect, are very similar to those Heidegger addresses in *Being and Time* (1927). My presentation of Heidegger in the existential phenomenology section will cover most of Merleau-Ponty’s existential ideas.
encounter the world in engaged, absorbed activity, and in this mode, objects are disclosed in a fundamentally different way than from a detached empirical mode. First-person access provides us a host of new premises to drive our explanations of the nature of perception. The world is inseparable from our subjectivity, and perception is meaning-laden. Our cultural origins, theoretical backgrounds, practical abilities, and moods determine the ways by which we access objects, and they structure our perceptual experience. The boundary between subjectivity and objectivity is indeterminate and dynamic. The perceptual availability of objects and properties shifts in accordance with aspects of our subjectivity, which in turn shift in accordance with new perceptual experiences.

The fourth phase is embodied cognition, which has been shaped by the work of J.J. Gibson, Alva Noë, and Evan Thompson. This movement takes seriously the dynamical interdependence between the subject and world and proposes naturalistic theories to model this relation. We have embodied skills, or habitual resilient abilities to interact with objects. Embodied skills mediate our access to objects, determine their perceptual profiles, and constrain the opportunities of action they afford. Perception and action are constitutively interdependent. Perception does not primarily consist in materially present environmental structures, but rather in potential embodied experiences that are accessible by virtue of our skillful familiarity with the situation at hand.

Enactivism criticizes computationalist theories of perception. We do not perceive a mentally constructed series of representations, which are generated by neural processes on the basis of stimulation on sensory organs. Stimulation is obviously involved, but it is not passively received by a perceiver. There are neural processes that underpin perceptual experience, but these occur at a subpersonal level, and many other processes “outside the head” also underpin perceptual experience. Moreover, these processes are not unidirectional; subpersonal processes must be dynamically organized in accordance with the fundamental architecture of organic life forms.

The narrative I present here is cumulative. Kant was first to discover that there are transcendental conditions, and later philosophers expand on this insight. They do not
subvert the metaphysics of Kant’s project but rather notice that there are structures and properties of experience beyond those that Kant recognized, and these demand further transcendental conditions to account for them. The history of representationalism is an accumulation of layers of transcendental conditions, which has an overall trend of innovation. Each additional layer further situates Kant’s initial individualistic and disembodied intellect into the body and its sociocultural and natural environment. By the end, we learn that we are not analytic cognitive systems, but living organisms that are characterized by affect, intersubjectivity, and language, and are extended in sociocultural and ecological niches.

**Phase I: Kant’s Transcendental Idealism**

In the *Critique of Pure Reason* (1781), Kant sets out to explain how synthetic *a priori* knowledge is possible. This requires investigating the metaphysics of perceptual experience and its relation to concepts and knowledge. He responds to rationalist and empiricist views of the epistemological status of absolute knowledge and of the metaphysical underpinnings of this status. Kant argues that each starts off on the wrong foot. “Without sensibility, no object would be given to us, and without understanding none would be thought. Thoughts without content are empty, intuitions without concepts are blind” (A50–51/B74–76). On the one hand, rationalists argue that knowledge is grounded in ideas that are totally independent of perceptual experience. Against rationalism, Kant argues that logical principles, without reference to experience, are objectless and contentless. Empiricists, on the other hand, argue that ideas are exhaustively constituted by sensory stimuli, which are essentially contingent. Against empiricism, Kant argues that sensory stimuli, without receiving structure from logical concepts, would also be objectless and contentless.

Kant diagnoses both errors as species of a view of the mind as a passive receiver of thoughts; he replaces them with an account of the mind as an active synthetic faculty. Kant argues for a collection of cognitive structures, or functions of our cognitive system, which serve as both the transcendental conditions of perceptual experience and the
foundations of *a priori* knowledge. These transcendental conditions guide the syntheses of sensory stimuli, of perceptual experience, and of inference and knowledge. These conditions determine that any object must conform to the structures that these conditions impose in order for the object to appear in conscious awareness.\(^2\)

Given that perception is already necessarily structured by concepts, some knowledge and ideas based in perception (e.g., geometric axioms) have the possibility of transcending contingency and attaining a status of categorical necessity. Such knowledge is based in the absolute structures of experience, which are determined by transcendental conditions and are abstracted from particular empirical contents of experience.

The *a priori* conditions *space* and *time* determine that all objects we perceptually access must be structured by magnitudes of space and time, and all mental objects must be structured by magnitudes of time (A23/B38). Every perceptual object will necessarily take up space and persist for a duration of time because our cognitive systems are predetermined to present objects as having spatiotemporal dimensions.

The *categories* are absolute structures to which all objects of experience must conform in order to be intelligible and perceptually accessible. The categories determine either the static structures of objects or the dynamical, temporally-extended structures of interactions between objects (A80/B106). The categories that are responsible for static structures include those related to *quantity* and *quality*: experiences necessarily involve continuously variable magnitudes of sensations and numerically-divisible components. For example, when I lie in a meadow, I can feel comparatively different magnitudes of heat in the sunlight and in the shade, and I can count discrete blades of grass.

The categories responsible for the dynamical structures of experience include those related to *relation* and *modality*. Perceptual objects have stable substances in relation to their fluctuating states, take on causal relations with each other, or exist simultaneously. For example, in my perceptual experience, sunlight causes trees to cast

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\(^2\) Kant originally used the term *transcendental condition* to refer to these absolute, necessary conditions of features of experience and knowledge. I preserve this language and will use it in my presentations of other philosophers’ theories in this chapter. These philosophers use their own terms but essentially refer to transcendental conditions.
shadows on the ground, and the shadows are fluctuating states of the stable ground. The categories determine that every perceptual experience can be expressed in judgments like these.

Kant argues that there are *a priori* conditions that determine how we conceive, know, and explain phenomena, which he calls *transcendental ideas* (A321/B378). There are three of them, and they are the necessary structures to which explanations must conform in order to be coherent and to amount to knowledge about perceptual phenomena. These structures enable explanations to interrelate with each other and achieve systematicity, and this makes knowledge and its accumulation possible.

Kant distinguishes between the *regulative* and *constitutive* deployment of transcendental ideas (A328/B385). These ideas can be legitimately used only in a regulative mode, although it is a temptation to believe that they might have constitutive content (Wartenberg 1976). That is, the existence of these ideas is exhausted by the lawful ways by which they govern the possible *structures* of explanation, to which any particular explanation of empirical phenomena must conform (A330/B387). These ideas neither constitute the *contents* of explanations nor are encountered in perceptual experience. To mistake these ideas for empirical claims about the world, Kant argues, lead to stubborn paradoxes, such as the problems of free will and of the original cause of the universe.

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3 The first idea is of the *absolute unconditioned condition*; it can be construed either as the first temporal cause or the most fundamental spatial unit (A323/B380). We look for preceding causal events or more basic material components that make up a phenomenon we perceptually encounter; but, necessarily, the referent of this transcendental idea can never be found in perceptual experience. By definition, the idea of an absolute unconditioned condition is paradoxical. The transcendental category of causality establishes that any cause has a preceding cause in order to be intelligible and perceivable; we cannot experience any cause that is absolute in itself. The idea has an actual existence, but only in serving as a teleology of explanations. The second transcendental idea is of *absolute subjectivity*, the inner selfhood or soul that is most fundamental, and from which any contingent, temporal state is derived (A346/B405). This idea determines that we explain psychological phenomena in terms of a more fundamental subjectivity that undergoes experiences. The third idea is of the *absolute totality of all appearances*. This transcendental condition determines that our theological explanations involve possibility and necessity (A410/B437). We explain a phenomenon as a contingent entity, whose possibility is provided by the absolute totality of all things, which is God.
Kant is right that there are teleological ideals that regulate our explanatory practices, but his account is constrained to theoretical reasoning. In chapter 4, I will apply his idea to understanding practical reasoning and argue for an account of practical reflection. We often represent and manipulate our perceptual experiences, not by following logical principles, but by arranging them in arational and associative manners, for practical ends (e.g., Hutto 2012; Goodman 1978; Kolnai 1962; Vogler 2002). I will argue that these ends, like Kant’s transcendental ideas, govern reflection and experience but are never perceptually encountered. Unlike Kant’s transcendental ideas, these ends are tied to social norms of the ways of life to which we are existentially committed; they are not theoretical in nature but rather guide our everyday interests and practices. I will develop this argument in chapters 3 and 4.

I also draw on features of Kant’s categories and pure intuitions of space and time. These transcendental conditions might be understood as “dimensions” that structure the perceptual field; all objects that appear in perception necessarily instantiate these dimensions. This is a central insight of Kant’s that I accept and will extend in existential enactivism. I will show that perceptual objects do not only necessarily manifest the dimensions Kant has specified, but they also manifest existential dimensions. Objects are necessarily meaningful. I will argue for this in chapter 4.

I also draw on Kant’s insight that distinct but interdependent sets of transcendental conditions, which determine different domains of cognitive activity, are interrelated in a hierarchical structure. The transcendental conditions that synthesize perceptual experience and knowledge are interdependent. The categories, for example, are dependent on space and time. Space and time make numerical magnitudes and divisibility of objects possible. Only when objects are divisible and discrete can the categories synthesize them as having causal relations, substances, and other structural features. Space and time, in turn, could not manifest their fundamental features—such as the succession between magnitudes and the divisibility of magnitudes—without the structures that the categories impose. Succession relies on causality, and divisibility (into increasingly basic components) relies on modality.
Similarly, the transcendental ideas depend on the categories. For example, the idea of the ultimate, unconditioned condition depends on the categories of causality and modality. In chapters 3 and 4, I will show that existential commitments to ways of life, like transcendental ideas, make embodied skills, like the categories, possible. Embodied skills, in turn, make existential properties, or the perceptual world, possible. The three levels are dynamically interdependent.

Phase II: Embodiment

Arthur Schopenhauer

In The World as Will and Representation (1819/2012b) and The Fourfold Root of the Principle of Sufficient Reason (1813/2012a), Schopenhauer builds on Kant's theory that transcendental conditions determine all experience and knowledge; but Schopenhauer extends the Kantian framework in important ways. Schopenhauer's innovations stem from his revolutionary insight that Kant's transcendental idealism neglected our embodiment. Kant, Schopenhauer argues, does not shed a Cartesian view of a mind that is perfectly rational and free from bodily constraints. Schopenhauer argues that, instead, all perceptual experience depends on the spatiotemporal location of the body. Any set of transcendental conditions must be understood as functioning in cooperation with such effects of embodiment.

Schopenhauer argues that ignoring the transcendental role of the body leads to two major problems in Kant's philosophy. Kant argues that causation is a feature of perceptual experience and is determined a priori by the categories. His theory, however, also involves the claim that perception starts with sensory stimulation as the materials from which representations are synthesized. But how, Schopenhauer asks, do stimuli achieve contact with the perceptual-cognitive system in the first place, if not through causal processes? So, although Kant must accept that causal interaction is involved in the transcendental processes that synthesize perception, causality, on Kant's account, is coherent only in the domain of perception, and processes that determine perception are
not within that domain (Schopenhauer 1813/2012a, 79). On Kant’s account, there should not be any causation prior to synthesis. It therefore seems that Kant must either posit causation as independent of transcendental conditions or throw his hands up in the air and claim that the role of stimuli is a mystery.

Schopenhauer argues that recognizing the transcendental role of the body can save Kant from this crisis. The body is the locus of the Will, which in Schopenhauer’s terminology is the ultimate substance that constitutes everything in the natural universe, of which causation is one manifestation. The Will can manifest in two primary ways for us: as phenomenal causation, the Will is represented in forms of spatiotemporal matter, and as inner bodily feeling or proprioception, the Will is directly experienced. On the latter, the Will is a precognitive feeling that does not take on any intelligible content; it is a pure sensory stimulus (Schopenhauer 1819/2012b, 99). Only after perceptual processing does the Will appear as intelligible matter and causation.

Like Kant, Schopenhauer argues that we encounter objects as representations, synthesized according to the transcendental conditions that govern cognition. Unlike Kant, Schopenhauer argues that we can encounter the most primordial forms of sensation within our own body, and such sensation is free from synthesis according to transcendental conditions (Schopenhauer 1819/2012b, 19). Hypothetically, all natural objects in the world also have pre-synthetic forms, but we can never achieve contact with them in this mode because they are not continuous with our embodiment. Given this distance, we are condemned to apprehend objects perceptually. But this gives the body pride of place as a special kind of object, given to us a priori as the condition of all experiences.4

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4 Schopenhauer’s notion of embodiment also avoids potential problems of substance dualism. Kant tries to avoid this dualism by arguing that it is only an apparent problem that results from reification of the a priori concept of substance, which exists only phenomenally rather than in the world in itself. Schopenhauer provides a different solution to dualism by showing that although we have this a priori concept, there is a more fundamental substance than our category of it—which is the Will. The seeming separation between the body and world is based in our perceptual constraints of encountering other entities only after they have been objectified by our cognitive processes. Hypothetically, if we could subvert this processing mediation, then we could directly
Kant, Schopenhauer argues, faces a second, related dilemma. Kant claims that we cannot have knowledge of the noumenal, mind-independent world. All possible knowledge must be synthesized by a priori conditions and is contingent on our finite cognitive architecture. The a priori conditions Kant identifies constitute knowledge, discovered through epistemic processes that, according to Kant, are absolutely limited by a priori conditions. Thus these a priori conditions are not absolutely objective. Kant’s account entails that knowledge of any a priori condition must be contingent on another set of a priori conditions, which have not yet been identified (Schopenhauer 1819/2012b, 33). This might even lead to a regress. Kant never addressed this problem. He positions his theory as absolute and neglects this entailment.

Schopenhauer takes the next step that Kant neglects: he identifies a priori conditions that precede and determine Kant’s a priori conditions. Schopenhauer argues that our embodiment is this preceding a priori condition: the perceptual-cognitive system is inseparable from the body, which is situated in the natural world. The body determines the ways by which we encounter sensory stimuli before it is structured by the categories. “The organic body is the starting point for the intuition of all other objects and thus is the mediation of these” (Schopenhauer 1813/2012a, 81). The body is the origin of all sensory stimuli.

Schopenhauer reduces the many a priori conditions Kant posits to a single condition the principle of sufficient reason. This principle refers to the psychological law of looking for temporally or logically preceding conditions of any particular of which we are aware (Schopenhauer 1819/2012b, 25). We look for the causes of the effects we experience, or we look for the reasons behind a given fact. Kant argues that there is a unique category for each primary kind of causal relation we perceive, such as reciprocal causation and linear causation. Kant does this to explain the difference between apprehend all perceptual experience as manifestations of the Will, which is continuous with our own bodily feeling.
perceptions of objects as simultaneously existing and perceptions of objects as moving in relation to each other, given that the appearances of both situations involve movement.\(^5\)

Schopenhauer argues that Kant needed to posit many different categories because he neglected our embodied situatedness in the world. Once we introduce the transcendental role of the body, this bodily standpoint in conjunction with the principle of sufficient reason exhaustively accounts for the synthesis of all sorts of causal relations in perceptual experience. “The alteration [of the appearances of a causal event] proceeds from the observer’s own body, the sensations of which are indeed the starting point of all the observer’s perceptions” (Schopenhauer 1813/2012a, 84). We start off with our body’s situatedness in the natural world and the sensations immediately present in the body. Then, we draw inferences from these sensations to the proximal causes of it, whether events or reasons. Principles that guide these inferences are based in past experience.

There are two levels of the application of the principle of sufficient reason. At the first level, we receive raw bodily sensations, and a cognitive faculty draws inferences from these to the perceptual reality that most likely exists (Schopenhauer 1813/2012a, 56). Schopenhauer implies that these early inferences constitute perceptual experience, rather than our voluntary inferences. On the second level, we encounter this perceptual world, constructed by early inferences, and draw subsequent inferences about further details of this world (e.g., inferences about the events and motivations that were preceding conditions for perceived world in this moment) (Schopenhauer 1813/2012a, 75). Schopenhauer does not specify, regarding this second level, whether these subsequent inferences are made at a personal-level and are thought-like, or are a continuation of the first level of the application of the principle of sufficient reason and are subpersonal and constitutive of perception.

\(^5\) Kant’s example is the comparison between cases in which we perceive a house and a boat moving down a river. In both cases, we apprehend one component of the situation at a time. We move our eyes across the parts of the house, or we gaze from the boat to the river. However, despite both cases involving changes in appearances, we perceive one case as having components of the object simultaneously existing and the other as an unified object in causal motion.
For example, I see a slug inside a rose. Every aspect of this experience is phenomenally present in the world. But if we attend only to my sensory faculties, only raw stimulation is literally present, and the additional details are constructed through the subpersonal application of the principle of sufficient reason. Without this application, I would encounter only a minimal sensation of a splotch of grey followed by a shimmery trail marked on a red background. Due to previous encounters with similar sensations within similar circumstances, my cognitive system has acquired causal schemata that guide subpersonal inferences about these sensations. This allows me to perceive that the splotch is a slug, the line is slime, and the background is a rose. On the basis of sensory input, my cognitive system generates chains of inferences that arrive at the preceding causes and conditions of my sensory experience, and these inferences are constitutive of experience.

After perceiving this state of the world, I apply the principle of sufficient reason again to draw inferences about previous events and reasons that have led to the slug’s being here. The slug might have slid its way up the plant stem, and its hunger might have motivated it to reach into the flower. The principle of sufficient reason drives me to draw inferences about such events and reasons that are not literally present at this moment. Schopenhauer leaves open the possibility that these events and reasons are constitutive of the perceptual experience, rather than are mere subsequent judgments or associations, downstream of perception.

Schopenhauer’s insight into the role of embodiment is a precursor for later ideas in philosophy of embodiment and embodied cognition. Schopenhauer argues that embodied, proprioceptive awareness discloses a pre-perceptual domain of experience; this implies that there can exist modes of awareness that are non-cognitive and are not structured by the categories or other Kantian a priori conditions. Later philosophers of existential phenomenology build on this possibility and propose accounts of alternative modes of awareness, which present objects as instantiating features that are fundamentally different than those that objects on Kant’s account manifest.
Later we will see that theories in embodied cognition are similar to Schopenhauer's philosophy of perception. These later theories affirm that through recurrent interactions with an object, we gain embodied knowledge of the typical causal patterns of the object, such as patterns that specify its behaviors in response to our manipulation of it (e.g., Noë 2004; Thompson 2007). This determines that future perceptions of the object manifest the significance of these potential behaviors. Schopenhauer, likewise, argues that previous experiences teach us causal patterns of objects, and causal schemata guide cognitive operations in synthesizing perceptual experience. The difference between these views is that Schopenhauer emphasizes that reflex inference to the best explanation is constitutive of perception, whereas enactivist theorists maintain that a dynamical relation between embodiment and perception permit that experiences change both embodiment and perception.

*K. C. Bhattacharyya*

In *The Subject as Freedom* (1930) Bhattacharyya expands on Kant's transcendental idealism and argues for approximately eight layers of transcendental conditions of experience from a phenomenological and embodied perspective. Although Bhattacharyya draws on elements from Schopenhauer's philosophy of embodiment and Husserl's phenomenology, his own theory is radically distinct. Bhattacharyya shares Schopenhauer's frustration with Kant's inconsistency in positing the transcendental conditions that Kant identifies as final and absolute, while maintaining that all knowledge we can arrive at is still necessarily conditional on further transcendental conditions. But Bhattacharyya goes beyond Schopenhauer: on Bhattacharyya's account, the Will or proprioceptive body is not the final stopping point, but there are further transcendental conditions that determine our knowledge of these.

Although Schopenhauer importantly introduces the perspectival standpoint of the body and proprioception as transcendental conditions, he nonetheless inherits Kant's objectifying perspective. Bhattacharyya escapes the grip of this perspective. He starts
from a first-person perspective, which permits reasoning to features of embodiment, and beyond, as transcendental conditions of experience.

Bhattacharyya criticizes Kant for maintaining what he calls a “persisting objective attitude”: Kant observes phenomena from a strictly observational mode (Bhattacharyya 1930, 100, §21). In this mode, Kant is able to regard the transcendental conditions that he identifies (e.g., the categories and transcendental ideas) as independent of determination by any further conditions. Bhattacharyya, however, argues that there are other modes by which we can encounter phenomena, and these reveal phenomena in totally different forms. It is possible to encounter Kant’s transcendental ideas, for example, through bodily feeling, which reveals them to be based in thoughts had by the subject who apprehends them. In other words, Kant’s transcendental conditions are “still a presentation” (Bhattacharyya 1930, 146, §97). Bhattacharyya aims to find the ultimate transcendental condition that is truly unconditioned by any further condition, which he calls pure subjectivity and is situated in our embodiment.

The phenomenological insight that guides Bhattacharyya’s project is that when we perceive objects in a mode of absorbed engagement, our subjectivity is entangled with the object. That is, the object seems to be a mind-independent entity, and we fail to become aware that it is actually our experience of the object, and its phenomenal features depend on our subjectivity. Only on reflection or “introspection” (which is a technical term for Bhattacharyya, which I will explain below) can we distance ourselves from this immersion, let our questions and thoughts occupy our awareness, and distinguish between subjective and objective poles in experience. Since introspection is deliberate and voluntary, we have greater “freedom” in this mode compared to the mode of perceptual engagement, in which objects control us.

\[\text{6} \text{ Heidegger raises a similar criticism of Kant’s objectifying attitude in Being and Time (1927), but the two philosophers were unaware of each other.}
\[\text{7} \text{ Bhattacharyya’s notion of pure subjectivity is distinct from Kant’s notions of the transcendental unity of apperception or the noumenal, absolute subject. See Garfield (2017) for an analysis of the differences between their notions.} \]
Introspection has two interrelated roles in Bhattacharyya’s system. First, introspection is a method for his transcendental philosophy. It is not the mere practice of reflecting on inner experience, but is a modified version of a Kantian transcendental method: it is “a process of abstraction from the object of its modes of relatedness to the subject” (Bhattacharyya 1930, 103, §25). This recursive method consists of describing experience, identifying the transcendental conditions of it, separating out these conditions, and then making these conditions into the new objects of experience, which we in turn question and inspect again.

Bhattacharyya’s method is not constrained to dealing with phenomena revealed by an objectifying attitude, as Kant’s is. Introspection can register diverse phenomena presented in a range of modes, such as affective or absorbed engagement, by which we encounter phenomena. In these other modes, objects can manifest very different sorts of properties than those that appear from an objectifying attitude, and such properties require transcendental conditions distinct from those Kant has identified.

This distillation of transcendental conditions from a first-person perspective is the heart of Bhattacharyya’s method. On his account, we can arrive at “higher” transcendental conditions that are closer to our pure subjectivity, the source of our perceptions, thoughts, and feelings, and are further from the perceptual world. In total, Bhattacharyya identifies about eight layers of kinds of transcendental conditions. Three are most relevant to my project: psychic fact (aspects of modes of presentation of objects), the perceived body (the subject’s body as a spatial object), and the felt body (the subject’s body as a proprioceieved object).

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8 These conditions are psychic facts (104, §26), the perceived body (124, §58), the felt body (124, §62), the image of absence (131, §72), the thought of absence (132, §74), the feeling of the thought (148, §101), the feeling of the feeling (150, §104), and absolute subjectivity (166, §127), (all citations from Bhattacharyya 1930). This list is rough, since it is sometimes unclear whether entities at a given stage Bhattacharyya describes count as a transcendental condition in the same sense that those of other stages do. See Garfield (2017) and “The Question of Subjectivity: Neo-Vedānta in Academic Philosophy” from Bhushan and Garfield (2017) for details on these conditions.
Second, Bhattacharyya’s method of introspection indirectly serves a soteriological project. Identifying further \textit{a priori} conditions not only discovers philosophical truths, but it also distances us from enmeshment with objects in the world and brings us closer to thoughts, feelings, and other elements that arise from our subjectivity. “[There is] freedom both from blindness and from error, escape from the confusion of the object with the subject and from the identification of the subject with the object” (Bhattacharyya 1930, 151, §105). When we are detached from the influence of worldly objects in perception and are occupied by inspecting transcendental conditions, we have greater freedom: that which influences us is sensitive to our own voluntary control.

This spiritual dimension of Bhattacharyya’s project does not have to be understood as religious in nature; it is also a phenomenological and psychological insight. Bhattacharyya provides an innovative way to understand freedom, which is consistent with later continental existentialist theories and reveals the contingent nature of the seemingly absolute or pregiven character of objects and perceptual experience. In chapters 4 and 6, I will focus on the subtle role of our agency and freedom in determining perceptual experience, which is consistent with Bhattacharyya’s insight.

Equipped with this method of introspection, Bhattacharyya excavates the many levels of transcendental conditions. The lowest transcendental level is \textit{psychic fact}, which refers to the \textit{quality of an experience} of an object, as opposed to \textit{qualities of the object} as experienced. We can introspect on any experience and distinguish the content of experience from its mode of presentation. Then, we can focus on the mode of presentation as the primary (non-perceptual) content of experience. This brings us into awareness that previous qualities that we had experienced as intrinsic to an object are in fact based in psychic facts that arise from our subjectivity. Some psychic facts that Bhattacharyya examines include \textit{knownness} (the quality that we are subjects who have an epistemic relation to objects of experience), \textit{beauty} (the aesthetic quality of an experience), and \textit{absence} (the quality of a perceptual field that a perceptual object is missing from it).

For example, I walk home in the diminishing light of sunset. I am absorbed in the moment and notice my shadow, like a companion that walks in step with me. My shadow
is the object of my awareness and determines my perceptions, feelings, and thoughts. Maybe this shadow makes me feel lonely; it is my companion at this time. But then I introspect, in the Bhattacharyyan sense, on this experience. I become aware that this experience is had by me. The experience of seeing my shadow, rather than the shadow itself, becomes the object of my awareness. I can now notice qualities, or psychic facts, of this experience. The experience has a quality that is dependent on my subjectivity, and I realize that the lonely feeling is not an objective fact of the world, but is contingent on my subjectivity—this psychic fact is knownness. The experience also has a quality of aesthetic beauty. Having reflective distance, I can regard the experience of seeing my shadow as a sort of poetic moment, which is beautiful and perhaps experienced by people throughout history.

Bhattacharyya remarks that psychic facts are real, although not in the same sense that perceptual objects are real. Psychic facts exist as transcendental conditions that determine objects, rather than as objects among objects. These conditions differ from Kant’s transcendental conditions, since psychic facts are not strictly rational or logical. Rather, they reflect elements of our existential being; we are affective and social creatures and have affective needs that influence psychic facts and play a constitutive role in perceptual experience.\(^9\)

Bhattacharyya’s claim that psychic facts are modes of presentation of the world, rather than of the empirically experienced world, is highly significant. There is a wide variety of qualities of experience that can count as psychic facts, and these qualities are meaningful, in a existential sense—we disclose all objects of awareness, so all objects will have significance relative to our subjectivity, which is embodied and affective in nature. This gives us a new angle on the role of meaning with respect to perceptual experience. Meaning might not be assigned by the subject after encountering perceptual objects, but

\(^9\) Bhattacharyya’s understanding of psychic facts are similar to the understanding of the constitutive role of existential aspects of subjectivity by later continent phenomenologists and existentialists. None of these continental philosophers were aware of Bhattacharyya. Similarities between their philosophies arise from coincidence or inspiration from Husserl, Schopenhauer, and Kant, whom all these philosophers read.
instead might in part constitute perceptual objects. I will expand on Bhattacharyya’s insight in chapters 3 and 4.

The next levels of transcendental conditions in Bhattacharyya’s system are the perceived body and the felt body. The perceived body is the body as seen by a hypothetical third person or as sensed in perceptual experience (Bhattacharyya 1930, 123, 58§). I can imagine another person looking at my body, or I can look at my own hands, shoulders, and protrusion of my nose. The body, however, does not have an ontological status as any perceptual object. Although the body is an object, the body, as the spatial origin of our perceptual field, also determines all spatial features of perceptual experience; no other object has this transcendental role. The perceived body is categorically distinct.

The felt body, in contrast, is the body as given by inner feeling or proprioception. While anyone can perceive my body, only I can feel the inner sensations of my body. I can visually perceive my own body too, but these perceptions are distinct from the felt body. The felt body is the sort of proprioceptive awareness that I am the origin of perceptual space and the surrounding world. While I lift my hand to my face, inspect it, and perceive my own body, these perceptual forms are distinct from and seem to originate at my felt body.10

There is another difference between the perceived and the felt body: the felt body grounds a sort of intentional attitude, more closely tied to my sense of subjectivity, whereas the perceived body is a special sort of spatial object that determines the spatiality of the world (Bhattacharyya 1930). When I introspect on a psychic fact, a second-order quality of experience, I dissociate the psychic fact as a content of non-perceptual experience from the mode of presentation that delivers this content. This mode is my felt

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10 J.J. Gibson, who I discuss later in this chapter, provides a similar empirical account of selfhood based on interoceptive sense, which is inseparably connected to the spatiality of the external world determined by the physical standpoint of our body (1979/2015). On Gibson’s account, the analogue of the perceived body is the underlying invariant structures of patterns of light waves and other modes of oscillation in the atmosphere of the environment that are due to the dimensions of the animal’s physical body, and the analogue of the felt body is the animal’s perceptual sense that its body is the origin of these invariant structures and the perceptual world (Gibson 1979/2015, 108). Perception of the world is inseparably coupled to perception of this minimal bodily sense of self.
body. For example, after I have introspected the experience of seeing my shadow, taken the experience (rather than the shadow itself) as my object of awareness, and arrived at the psychic fact of the aesthetic quality to this experience, I can now take this aesthetic quality as the object of my awareness. When I introspect on this psychic fact, I realize that it is constituted by a feeling that arises from my bodily feeling and subjective orientation (Bhattacharyya 1930, 125). My bodily feeling is the transcendental condition that makes psychic facts, such as beauty, possible, and psychic facts in turn determine particular experiences of objects.

The felt body determines absence. In perceptual experience, the meaning of an object is sometimes dependent on counterfactuals of related objects that are absent. For example, when I look at my shadow walking beside me, the lonely quality of this object depends on the absence of another human being. The absent object plays a constitutive role in perceptual experience. However, the absent object is not present in the way that objects in my perceptual field are. Instead, it is present as a quality of the experience itself, which might involve any number of particular objects. In turn, all qualities of experience originate in the felt body, which is the “higher” transcendental condition, from which any particular psychic fact arises.11

Bhattacharyya distinguishes between absences, presented by the felt body, from imagined or remembered objects. When we imagine or remember an object, it is presented in awareness in a quasi-perceptual form (Bhattacharyya 1930). If I imagined a friend from my youth, with whom I have lost contact, I visually recall his face and hands; he comes in a determinate form, as an object among objects. But my sense of loneliness is not an object among objects; rather it is a quality of my experience of looking at my shadow, and does not depend on my voluntary imaginative recall of any absent person. It depends on the psychic fact of absence, which arises from the felt body, which mediates

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11 Bhattacharyya continues subsuming the felt body as a content of experience, to be distinguished from a further mode of presentation, or transcendental condition. These successive stages become increasingly detached from any influence of empirical experience, according to Bhattacharyya, and are increasingly exhausted by conditions within subjectivity. I will not present these later stages because they seem more speculative and are irrelevant to my thesis.
perceptual access to the world and enables psychic facts, like absence, to alter the quality of an experience. So absence cannot be based in visual recall or imagination, but it arises from the felt body.\textsuperscript{12}

Bhattacharyya’s emphasis on the body as the transcendental determiner of the spatiality and existential meaning of the perceptual world is a unique contribution. He writes before Merleau-Ponty, who is often recognized as the first philosopher of radical embodiment. Bhattacharyya argues that meaning can precede and determine experience, rather than be consciously apprehended after we perceive objects. But his theory does not readily translate into any naturalistic theory. It is not within Bhattacharyya’s scope to explain the causal processes that underpin the transcendental conditions he identifies and their capacity to determine aspects of perception. Nonetheless, his ideas are consistent with those of later philosophers of embodiment and enactivism who provide such details.

Bhattacharyya’s account, while revolutionary, continues the tradition initiated by Kant and continued by Schopenhauer. Kant first discovers that transcendental conditions exist. Schopenhauer identifies Kant’s shortcomings and introduces the role of the body. Schopenhauer, however, does not get very far in understanding that perceptual experience can acquire fundamentally different structures when apprehended from non-objectifying modes of engagement. Bhattacharyya starts from a phenomenological perspective that enables him to notice that the perceptual world is inherently meaningful and presented by modes that are influenced by the emotional and conceptual capacities of our embodied subjectivity. For example, he argues that qualities of experience, like beauty and absence, are not mere sensations on par with perceptual objects but are sorts of modes through which we encounter the world. As we will see, Merleau-Ponty, also in response to Kant and Schopenhauer, independently discovers transcendental conditions similar to Bhattacharyya’s.

\textsuperscript{12} Sarte in \textit{Being and Nothingness} (1943/2012) also provides an account of perceiving absences. When we expect to meet Pierre at a café, but he is not there, we perceive Pierre’s absence (Sartre 1943, 63). Because there is not any physical feature of the environment that could indicate Pierre’s absence to us, our perception of absence must depend on features of our subjectivity rather than on features of the environment.
Merleau-Ponty, in the *Phenomenology of Perception* (1945), argues that a range of features of embodiment are transcendental conditions of a range of aspects of perceptual experience, including spatiality, temporality, intersubjectivity, and even obsessions and affective distortions that underlie mental illness. Merleau-Ponty argues that Kant’s explanation that perceptual experience is structured by rational concepts confuses between perception and judgment; it is better suited to explaining judgment, while it cannot explain a range of perceptual phenomena (Merleau-Ponty 1945/2012).

Drawing on gestalt psychology and Heidegger’s existential phenomenology, Merleau-Ponty argues that the contents of perception are structured holistically by their dynamic interdependence with motor, social, and existential features of embodiment. Although Merleau-Ponty’s project ultimately picks up on Kant’s transcendental method, as other philosophers of embodiment do, his theory distinctively breaks from those of Kant and previous philosophers of embodiment. Merleau-Ponty proposes that the particular transcendental conditions of a given person’s experiences are features of embodiment and are dynamically interdependent with her experiences. Features of embodiment determine the disclosure of perceptual experience, and these experiences shape these features, at levels of synchronic perception and of diachronic development of embodiment and possibilities of perception.

Merleau-Ponty adopts Heidegger’s distinction between existential and empirical modes of being. Modes of being are distinct phenomenological profiles of objects that correspond to different modes in which we encounter these objects. When we interact with objects in an absorbed, pre-reflective manner, we disclose them in their existential mode. In this mode, objects manifest significance relative to the roles they play in our activities and lives (Merleau-Ponty 1945/2012, 92). In contrast, when we observe objects in a detached manner and break from our absorbed relationship to the world, objects appear in an empirical mode; they are physically measurable or quantifiable, and they are stripped from their everyday significance.
The empirical mode of being is derivative of the existential mode. We are primarily driven by practical goals and activities. Theoretical interests that require a detached, observational perspective are a subset of practical goals; and once we satisfy theoretical interests, we ultimately come to return to an absorbed relationship to the world. It is our nature to be absorbed in activities and to break from this absorption only in special cases (e.g., in which objects are dysfunctional, or we are trained in a theoretical discipline that relies on detached observation).

This distinction between modes requires us to rethink the very idea of transcendental conditions. Since the existential mode is more fundamental, transcendental conditions need to account for the practical and personal significances of objects, rather than solely the quantifiable aspects of objects. Kant theorized from an exclusively empirical mode, in which objects have quantifiable features. Because Kant presumed that the empirical manifestations of objects exhaust the possibilities of perceptual reality, he formulated logical transcendental conditions. According to Merleau-Ponty, these conditions cannot account for the fundamental meaningful features of the perceptual world. By acknowledging objects in their existential modes, Merleau-Ponty can overcome Kant’s limitations and find a more complete set of transcendental conditions.

This distinction shows that perception and action might be distinguished only in the empirical mode; but in the existential mode, they are unified.

“Each voluntary movement takes place in a setting, against a [perceptual] background which is determined by the movement itself... movement and background are, in fact, only artificially separated stages of a unique totality... Motility, then, is not... a handmaid of consciousness, transporting the body to that point in space of which we have formed a representation beforehand. In order that we may be able to move our body towards an object, the object must first exist for it, our body” (Merleau-Ponty 1945/2012, 160).

Previous philosophers (e.g., Aristotle, Hume) hold that we form representations about a situation first, and act in response to them. Merleau-Ponty argues that is not the case.
The perceptual world is not a domain of determinate representations but rather an indeterminate lived space, originating from our bodily engagement. This space or “background” is structured by affordances for action, which depend on our embodied skills, bodily schemata, and expertise in sociocultural practices. These features of embodiment, in order to determine such affordances, must be reciprocally solicited by these affordances. Action and perception, on this view, are interdependent.

For example, I watch my nimble brother climb a tree, in pursuit of a squirrel. If I observe his behavior from an empirical mode, I take it that he represents the squirrel racing up the tree and his own position relative to the squirrel. His actions are responses to these perceptions; if he perceives that the squirrel swivels at three o’clock, he will adjust his bodily trajectory and pursue the squirrel accordingly. But if I empathize with his first-hand experience and imagine the world he experiences from an existential mode, my analysis of this situation is entirely different. I realize that the tree branches, from the perspective of my brother in the heat of the pursuit, are not determinate, picture-like perceptions—these would be possible only if my brother stepped back from the situation and scrutinized the squirrel chase. Instead, his attention is fixed on getting his hands on the squirrel. Since he is skilled at doing this, his embodied skills enable him to perceive aspects of the situation as potentials for action. A tree branch, for instance, is an opportunity to grab this structure and pull his body up.

The phenomenal distinction between the existential and empirical modes of being helps us understand the functional distinction between form and content, which Merleau-Ponty takes from gestalt psychology and uses in his treatment of the processing structure of perception (Merleau-Ponty 1945/2012, 66). In Kantian terms, forms are roughly a priori conditions and contents are roughly a posteriori phenomena. Kant holds that a priori conditions are immutable features of the cognitive system, and they lawfully determine perceptions. But this conceptualization of transcendental conditions follows only from the premise that perceptual experience is exhausted by its appearance in empirical modes.

Merleau-Ponty argues that when we acknowledge phenomena in their existential modes, their features indicate that transcendental conditions, or forms, are malleable and
reciprocally depend on contents. In the existential mode, a potentiality for action is a *content* of perceptual experience and an embodied skill (or other schematic feature of embodiment) is a *form* of the experience. Having a skill allows for some action to be available for our potential performance of it, and this availability is necessary for the solicitation of the skill and for its determining the perceptual experience of the available action. Moreover, the interdependence holds at a diachronic level. Embodied skills are learned, revisable, and shaped by the experiences we have, and the possible experiences we have are constrained by our skills.

For example, while my brother usually catches squirrels by their tails, this time he finally manages to grab one by its abdomen. He discovers that it is more delightful to snag the squirrel in this manner. He had engaged in new sensorimotor patterns to achieve this event, and these new patterns update his embodied skill. In the future, when my brother chases squirrels, the squirrel now expresses potentialities of actions involving abdomen snatching. This is a new perception, made possible by the newly adjusted embodied skill. So, the habit body can be altered by new experiences over a longer periods of time in an individual’s life. The habit body is largely determined by biological, sociocultural, and individual developmental factors, and it can alter over time while maintaining continuity and dynamic stability.

Merleau-Ponty emphasizes that the development of skills can change our bodily schemata and sense of bodily boundaries. On his memorable example, a blind man uses a cane to gain access to a perceptual world; the cane figures in so prominently as his means of perceptual access that it functionally becomes an extension of his body (Merleau-Ponty 1945/2012, 165). Touching objects with the tip of the cane discloses the world just as touching an object with fingertips, or visually scanning an object, do. The blind man has modified his bodily schemata to incorporate the cane.

In another one of Merleau-Ponty’s examples, a person’s ability to play an organ transforms the perceived organ into an opportunity to which she can join her body. The organ manifests information that guides her body to act on the keys and pedals; each motion, in turn, opens further perceptual opportunities that provide new information to
guide further movements. Our intimacy with environmental structures is accompanied by developments in our bodily schemata or capacities, which inseparably establishes an “atmosphere of meaning” or new information that these environmental structures manifest when perceptually encountered (Merleau-Ponty 1945/2012, 138).

Although Merleau-Ponty does not provide any detailed causal explanation of how objects as behavioral opportunities can be perceptually encountered, he takes these opportunities as determined by transcendental conditions of embodiment, which already has important theoretical consequences. We do not need to infer the meaning of objects, but this information is already present in the world, just as space and time are already present in the world. Merleau-Ponty compares the functional role of embodied skills in perceptual experience to that of sensory organs.

“It cannot be said that the factual situation thus created [from the alteration of an embodied skill] is the mere consciousness of a situation... what collapses is the whole field of possibilities... as [the effects of] the acquisition or loss of a sense organ” (Merleau-Ponty 1945/2012, 188).

Embodied skills are transcendental conditions of perceptual experience. They do not merely change how we judge or interpret a situation; they transform what is perceptually available, as sensory systems do, which grounds our judgments. The visual system presents objects visually, the nose and olfactory system presents objects olfactorily, and so on. Similarly, an embodied skill, say the grasp of a natural language, is stable in our embodiment and presents certain auditory patterns as meaningful speech.

Merleau-Ponty argues that intersubjectivity, or reciprocally constraining interactions between people, has a crucial role in the development of our embodiment and perceptual world. Just as we find ourselves in a natural world (of physical laws,
environmental structures, seasons, etc.) that we did not choose, we also find ourselves in a cultural world (of cultural norms, infrastructure, technology, etc.) that we did not choose. This cultural world shapes the history of our embodied experiences in the world and the development of the habit body.

“Now, although it may not be surprising that the sensory and perceptual functions should lay down a natural world… since they are pre-personal, it may well seem strange that the spontaneous acts through which human has patterned his life should be deposited, like some sediment, outside himself and lead an anonymous existence as things” (Merleau-Ponty 1945/2012, 405).

The “pre-personal” character of the physical world is intuitive; that is, we experience the perceptual world as “outside” and independent of us. In contrast, our subjectivity, behavior, values, and decisions seems to be voluntary and internally located. But Merleau-Ponty argues that the possible activities and decisions available to us are like objects found in the world, which we do not voluntarily determine, since they are solicited by our perceptual world that has been shaped by intersubjectivity and cultural traditions.

Merleau-Ponty argues that the perceptual world that each of us encounters is a public world. Because we are intersubjective creatures, and shaped by social influences, our bodies are conjoined in an extended system, described at a high level of analysis.

“As the parts of my body together compromise a system, so my body and the other’s are one whole, two sides of one and the same phenomenon, and the anonymous existence of which my body is the ever-renewed trace henceforth inhabits both bodies simultaneously” (Merleau-Ponty 1945/2012, 419).

All people in a community mutually constrain the possibilities of each other’s development. Explaining any given person’s dispositions and embodied skills requires identifying the dynamics of the community in which she is situated. Any person’s subjectivity is determined by intersubjectivity.
Kant started the research project of discovering the transcendental conditions of perceptual experience, but he did not bring his project to its completion. Schopenhauer, Bhattacharyya, and Merleau-Ponty discovered further transcendental conditions that Kant missed, and their additions to Kant's project have developed transcendental idealism into an increasingly naturalistic metaphysics of cognition and perception. Schopenhauer identified the body as a transcendental condition of the spatiotemporal dimension of experience, and Bhattacharyya identified the *felt body* as a further transcendental condition of meaningful features of experience, such as aesthetic and conceptual features.

None of these philosophers, however, questioned the objective, immutable, and uni-directional functional role of transcendental conditions. Merleau-Ponty introduces the revolutionary idea that the relation is *two-way* and *dynamical* in nature; experiences shape the configuration of transcendental conditions, while the possible range of experiences are determined by these conditions. This in turn introduces a dynamical interdependence between the subject and environment; one implication is that we can contribute to the conditions that constrain the possibilities of the perceptual world, which might seem totally objective and external. I will explore this freedom in chapters 4 and 6.

Merleau-Ponty also offers a naturalistic account of perception that can supplement the phenomenological and transcendental theories that precede him. He carefully studied the sciences of mind available at his time and integrated insights of gestalt psychology in his metaphysical system. The different modes by which we encounter the world are based in bodily features such as embodied skills and bodily schemata, and these are coupled with the distal environment.

Merleau-Ponty rightly identifies intersubjectivity and affect as transcendental conditions, but he does not analyze these conditions in detail. He only makes the general point that cultural traditions predetermine the possibilities of our development. He, similarly, only briefly argues that emotional conditions can alter bodily capacities and perceptual possibilities. Heidegger provides phenomenological accounts of these intersubjective and affective conditions in greater detail, as we will see in the next section.
Phase III: Existential Phenomenology

Martin Heidegger

In *Being and Time* (1927), Heidegger argues for the constitutive interdependence between subjectivity and world: the experienced world necessarily depends on existential transcendental conditions, such as mood, intersubjectivity, language, and ways of life (*Dasein*), and these conditions necessarily depend on the experienced world.\(^\text{14}\) Heidegger’s project is to analyze the core transcendental conditions that constitute *being-in-the-world* and to identify the primary ontic expressions of each condition. There are three domains of conditions: *being-in*, *being*, and *world*. *Being-in* refers to the relationship between subject and object. *Being* refers to *Dasein*, or the way of life of a creature that is self-conscious and concerned about its ways of life. *World* refers to the perceptual environment of a *Dasein*.

The examination of *being-in* begins with the premise that an object manifests different phenomenal profiles depending on how we encounter the object. Phenomenological study reveals that there is a range of modes of being: an object can be perceptually transparent (constitutive of the background of experience) when we are absorbed in our interaction with it, or opaque (a discrete thing in the perceptual field) when we no longer use it for its practical functions. Previous empirical and rationalist philosophers have neglected such multiplicity of modes of being and prioritized the empirical mode as the exclusive nature of being. The empirical mode corresponds to our taking up a third-person attitude towards the world (Heidegger 1927/2010, 65). This objectifying position limits the phenomenal profiles of an object to which we have access and distorts our understanding of the relation between subjectivity and world.

“The perception of what is known does not take place as a return with one’s booty to the ‘cabinet’ of consciousness after one has gone out and grasped it. Rather, in

\(^{14}\) In Heidegger’s vocabulary, elements with a transcendental status are “ontological” and those with a phenomenal status are “ontic.” I will refrain from this shift in language and stick with Kant’s formulation of transcendental conditions and phenomenal experiences.
perceiving, preserving, and retaining, the *Dasein* that knows *remains outside as Dasein*” (Heidegger 1927/2010, 58).

Many empirical and philosophical accounts of perception assume that perception is based on receiving sensory stimulation, “gathering” this input into a brain-bound cognitive system, subjecting it to stages of processing, and producing representations of the external world. On this view, we also “store” these representations as memory and knowledge for future use. Such accounts presume a division between mental interiority and the external world. Heidegger argues that there is no such divide. There is no third variable of sensory stimulation that we gather and transform into representations, but the world is already realized and meaningful as we encounter it. Information is not primarily stored in our heads as much as it is manifested by the world around us.

Heidegger’s term *being-in-the-world* reflects this metaphysical inseparability between subjectivity and world. Different modes of *being-in* (ways of relating to objects) transform both subject and world inseparably. In chapters 3 and 4, I will expand on Heidegger’s insight into the varieties of being-in; this relation allows objects to show up as having a range of complex significances—particularly, significances relative to our experiences and enculturation.

Heidegger argues that the empirical mode is not the mode in which objects show up in our everyday world. The most common modes are *handiness* and its related varieties of *unhandiness*. In the mode of handiness, we skillfully manipulate objects, and this determines the object’s phenomenal appearance.\(^{15}\) Such skills include practical abilities; when we have these abilities, a task does not require reflective thought. For example, if I am skillful at origami and fold a piece a paper, the paper appears in my perceptual field as seamlessly connected to my actions and as a potential origami creation, rather than a square sheet. I can fold it automatically while carrying on a conversation about the philosophical antecedents of embodied cognition; even if I fold it deliberately in absorbed

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\(^{15}\) Heidegger uses the term *understanding* to refer to our skillful uses of objects, but for the sake of clarity and for connecting the philosophies to my own project, I have called it embodied skill.
activity, I need not represent the paper, or my fingers, in so doing. I focus instead on the object I am creating.

We become skillful specifically at the tasks that are commonplace to our ways of life, or Dasein. For this reason, Heidegger characterizes embodied skills as projecting the inner potentialities of Dasein onto the world (Heidegger 1927/2010, 136). Dasein consists in the traditions, institutions, activities, and tools that constitute our practical environment, and a person’s skills are her potentialities to deal with these. These potentialities are constitutive of the perceptual world by virtue of the skill’s role of mediating access to objects.

Intersubjectivity, by determining the contexts for which we develop skills, is a sort of transcendental condition of skills and perceptual experience. Although Dasein depends on the people who embody Dasein and practice its constitutive activities, the possibility of personhood and the acquisition of skills, which define a person’s identity and perceptual world, depends on Dasein. So any person’s realization of Dasein depends on all other people who also realize this Dasein. “This being-there-too with ['the others'] does not have the ontological character of being objectively present ‘with’ them within a world… ‘with’ is to be understood existentially” (Heidegger 1927/2010, 111). There is a fundamental sense of intersubjectivity other than our observable social interactions. Previous generations have transmitted the ways of life that make possible our identities and worlds.\(^\text{16}\) Dasein, a transcendental condition of subjectivity and perceptual world, is maintained by intersubjective processes.

Moreover, the identities of objects depend on intersubjectivity. An entity becomes an object for us when it can be used for some socio-normative purpose, not in virtue of its physical composition. So, for us to perceive an entity as an object, we must have developed socially normative skills to use it. This implies that objects are sociocultural in nature; their normative functions are constitutive of perceptual experience and are foundation of their conceptual meaning.

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\(^{16}\) Heidegger does not lay out his definition of Dasein this explicitly. I draw on Haugeland (2013) and Dreyfus (1991) in my explanations of Dasein.
Objects are organized in interrelated networks that constitute *worlds*. “The referential totality [is] in some sense constitutive of worldliness itself” (Heidegger 1927/2010, 72). The normative values of objects are embedded in ways of life and are interdependent with the values of related objects. So any object refers to the totality, or interconnected network of all these items. Folding paper into an origami crane, for example, is connected to all the contexts in which origami cranes are to be made; they are elegant and can decorate a space; they are handmade and can make valuable gifts; and so on. We develop interconnected skills in accordance with such interconnected objects. Given that skillfulness is constitutive of perception, these networks of instrumentality structure the meaning of our perceptual world.

Moods are also constitutive of perception; they are a sort of transcendental condition of the modes in which we engage with objects (Heidegger 1927/2010, 172). To perceive objects for their typical meaning, we need to incorporate them in our sociocultural practices and ways of life. Moods alter our capacities to do this. Negative moods might hinder our capacities, and positive moods might enhance our capacities in some way. According to Heidegger, we are always in a mood, although most moods are neutral and correspond to perception of an ordinary world. Only in strong moods do we perceive differences in the objects around us.

The subject who embodies *Dasein* is another primary domain of transcendental conditions, along with *being-in* and *world*. The subject is modulated by transcendental elements such as intersubjectivity, mood, skillful capacities, and self-understanding. *Dasein* might be understood as a collection of sociocultural traditions that define us.17 We inherit these traditions, and we maintain them by developing skills to deal with the objects and activities that compose them.

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17 Heidegger does not use the language of existential commitments in any of his works. I take this term from John Haugeland (1998, 2013). I use this term here because I find it more illuminating than Heidegger's term *care*, which Heidegger uses in the sense of Haugeland's existential commitment in some contexts but uses in other senses elsewhere. I will introduce Haugeland later in this chapter and expand on this notion of existential commitment in chapters 3 and 6.
Heidegger picks up on Kant’s project of transcendental idealism and contributes important phenomenological and existential innovations. Kant presumes that the human being is an isolated intellect, detached from any emotional, social, or existential influences. Schopenhauer reconnects this Kantian disembodied intellect to the body, but he neglects the body’s situatedness in a sociocultural world. Although Heidegger does not discuss embodiment, he reconnects the subject to the social-cultural-historical world, involving emotion, care for people, commitments to projects, and other existential aspects of our humanity. Heidegger shows that a multiplicity of modes of being mark out distinct phenomenal profiles of objects and are reactive to changes in our moods, embodied skills, and concerns. He contextualizes these existential elements under our ways of life.

Heidegger’s project has the implication that ways of life are transcendental conditions of embodied skills, which in turn are transcendental conditions of the perceptual forms and significances of objects.18 We are born into sociocultural traditions, which determine our social roles and ways of life. Ways of life are composed of normative domains of activities and objects. We develop skills, habits, and practices to satisfy these norms. This hierarchical organization between ways of life, embodied skills, and perceptual experience is central to my thesis.

Later, Merleau-Ponty takes Heidegger’s insights and situates them in a naturalistic metaphysics of embodiment. Even later, philosophers of embodied cognition and enactivism continue with Merleau-Ponty’s project and argue for its consistency with evolutionary biology and computational modeling based in complex dynamical systems theory. Many of these enactivist philosophers, however, overlook the importance of the existential nature of perception, which is Heidegger’s original focus, and which Merleau-

18 Heidegger argues for interconnected networks of objects and practices (the “referential totality”); any given object is used in interaction with others, and they are related to each other and designed for greater sociocultural activities. Heidegger also argues for interpretation as our socio-normatively driven reflection on our understanding, or embodied skills that we have for engaging in the activities that define our ways of life (Heidegger 2010). Heidegger, however, does not make the connection that Dasein unifies the networks of tools, networks of tools are always tied with embodied skills that pertain to using these tools, and the maintenance of these skills is determined by social norms that constitute Dasein.
Ponty also regards as essential. I aim to reconnect enactivism to its roots in the existentialism of Heidegger and the systematicity of Kantian transcendental idealism.

_Hubert Dreyfus_

In *Being-in-the-World: A Commentary on Heidegger’s Being and Time, Division I* (1991) Hubert Dreyfus explicates Heidegger’s phenomenology in a style that lets it compare to and challenge theories in contemporary analytic philosophy of mind. In *What Computers Still Can’t Do* (1992), he criticizes the cogency of research agendas in computer science and artificial intelligence that propose to model human cognition; in doing so, he sheds new light on Heideggerian phenomenology. I will focus on two key aspects of his interpretation of Heidegger.

First, Dreyfus emphasizes that Heidegger’s revolutionary break from Husserl, Brentano, and, in fact, almost all philosophers throughout Western history consists in his insight that our access to the perceptual world is not based on mental representations—as understood as subjective states isolable from the objective world (Dreyfus 1991, 46). Dreyfus, drawing on Heidegger, argues that perceptual access is based in _skillful coping_ or pre-reflective capacities to deal with everyday situations (Dreyfus 1992, 160). I call this _embodied skill_. Embodied skills provide us a background familiarity with the world (Heidegger’s “clearing” or _lichtung_), which is the basis of all conscious states and actions. Examining this background familiarity can let us understand the interdependence between subjectivity and objectivity, which challenges internalist metaphysics of mind.

Subjectivity, Dreyfus argues, is nowhere to be found in the majority of everyday experiences; this point, he claims, is tied to Heidegger’s break from his predecessors (Dreyfus 1991, 67). Husserl, among many Western philosophers of mind, argued that experience is necessarily reflexive. That is, the second-order experience of having awareness of first-order experience presupposes awareness of self, which is necessary for experiential accessibility. According to Dreyfus, Heidegger held that self-referentiality is requisite only for self-conscious experiences, but the majority of experiences are not
explicitly conscious in this way and so occur without the involvement of self-consciousness. Background familiarity accounts for the pre-reflective nature of the majority of perceptual experiences, in which there is a phenomenal absence of subjectivity or objectivity. A person’s embodied skills are constitutive of background familiarity, which exhausts any sense of “subjectivity” in experience.

This account of the role of embodied skills in perceptual experience also challenges traditional action theory. Many philosophers assume that action is causal result of mental states, like beliefs and desires (e.g., Aristotle 2012; Davidson 1980; Searle 1979). Dreyfus, however, argues that mental states, regarded as separate from and representative of the perceptual world, are not necessary for action (Dreyfus 1991, 60). Since there is the background familiarity, which replaces the traditional distinction between subject and world, actions are result of “solicitations” by the world. When we are equipped with adequate skills, we can fluently deal with objects and situations, without conscious intentional states (Dreyfus 1991, 68).

A dandelion puff, for example, appears to a child and offers itself to be plucked, blown, and wished upon. The child does not need to hold the conscious belief that this object is a dandelion, or form the desire to make a wish. Only when we are in unfamiliar situations, or when there are disruptions to a familiar situation, do we need to launch into conscious states to cope with breaks in our background familiarity. If the child touches the dandelion, and it is cold and plastic, she would be stunned and break from her initial pre-reflective activity. In trying to make sense of this bizarre situation, she might consciously reason that it is a fake dandelion implanted by some prankster. Nonetheless, these conscious states should not be understood as internal and independent of the objective world; conscious states that occur during a malfunctioning situation are still preconditioned by embodied skills, which are interdependent with objects and the public.

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19 Heidegger distinguishes between readiness-to-hand, un readiness-to-hand, and presence-at-hand to capture the differences between degrees of absorption in an activity, which negatively correlate with degrees to which we become self-aware, reflection, and formulate explicit beliefs and desires (Heidegger 2010, 67).
The child’s reasoning follows from her skills of recognizing the cultural phenomena of artificial flowers and pranks.

This theory of embodied skills and background familiarity has implications for cognitivist models and artificial intelligence. These models, whether connectionist or symbolist, can only deal with discrete, isolable data (Dreyfus 1992, 206). Data on computationalist levels of binary digits, functional levels of scripts, or abstract objects are all determinate and could persist on their own, independently of their being manipulated by a computer program. But we humans never “process” data of this kind; there is only the physical universe and the contents of perception. Matter and energy constitute both the environment in which we are situated and our biological organism. But we do not perceptually encounter subatomic particles, or other fundamental forms of energy, and cognition does not take particles as data to be processed (Dreyfus 1992, 287). Instead, the organization of our biological organism permits direct access to culturally meaningful objects, emergent from the physical universe.

Second, Dreyfus elucidates Heidegger’s point that embodied skills are determined by intersubjectivity and culture. We are conditioned by sociocultural traditions, practices, and norms that permeate the environment into which we are born. This point challenges representationalist views for their individualistic prejudices; they take individual subjectivity as their starting point and conceptualize intersubjectivity as merely derivative interactions between individuals. Dreyfus argues that intersubjectivity comes first and makes subjectivity possible. Every person’s perceptual world is shaped by sociocultural conditions; since subjectivity is inseparable from and constitutive of the perceptual world, it, too, is sociocultural in nature. This intersubjectivity makes a public world possible. Because embodied skills influence background familiarity, and sociocultural conditions shape the development of skills, all members of a society develop similar skills and perceive common objects.

Dignāga, an Indian Buddhist philosopher, makes a strikingly similar point in *Investigation of the Percept* (c. 480–540): “Even if sensory cognition were caused by fundamental particles, it would not have particles as its object because they do not appear to cognition, any more than the sense faculties do.” (Duckworth et al. 2016). I thank Jay Garfield for bringing this to my attention.
Dreyfus’s work illuminates Heidegger’s notion of embodied skill. Heidegger, despite all his innovations that point toward the role of embodiment, never pursues this idea. A consequence of this neglect is the unnaturalistic bent to Heidegger’s theory. Heidegger’s argument that we do not rely on mental representations as constitutive of perception is enriched by understanding that embodied skill is the basis of the pre-reflective mode of accessing the world. Dreyfus’s work also allows Heidegger’s philosophy to be understood as foundational to Merleau-Ponty’s philosophy of embodiment, a connection that is natural but often obscured by Heidegger’s silence on the body. Dreyfus’s explication of Heidegger’s Dasein as constituted by sociocultural conditions is also helpful.

Although Dreyfus clarifies Heidegger’s philosophy and stirs in the ingredient of embodiment, his own theory of embodied skills and sociocultural conditions is insufficient. Dreyfus does not propose any fine-grained explanation of how embodied skills can lead to this background familiarity and make pre-reflective action possible. Dreyfus’s theory can be supplemented by Gibson’s theory of affordances, which I will present later in this chapter. Gibson, however, does not focus on the existential and sociocultural dimensions of perception, and he can be supplemented by Dreyfus’s insights. In subsequent chapters, I will explore a synthesis between these enactivist and existential phenomenological traditions, which leads to a novel account of perception.

Moreover, Dreyfus does not clarify the phenomenology of absorbed experience. Sometimes, he implies that it is simply unconscious, as if phenomenally, experience is comparable to that of zombies. I will argue that this absorbed mode is, in fact, perceptual. While in the mode of skillful coping, we perceive the objects we encounter, I will argue for this in chapter 3. I agree with Dreyfus that there is no self-referentiality relation at play in most experiences, but I disagree with the implication that it is seemingly unconscious.
John Haugeland is well-known for criticizing computationalism, proposing proto-embodied and embedded theories of mind, and interpreting Heidegger’s existential phenomenology. In “Truth and Rule-Following” (1998), Haugeland proposes an account of objectivity, or the possibility that objects can be objects in the first place, grounded in intersubjectivity. Haugeland argues that existential commitment, an analogue to Heidegger’s Dasein, is necessary for the possibility of objectivity. Haugeland’s notion of existential commitment is central to my thesis. I will show that existential commitment, much like Kant’s transcendental conditions of space and time or the categories, is a transcendental condition of experience that grounds the perception of existential properties, or the meaning of an object relative to the perceiver’s concerns and activities tied to her ways of life.

Haugeland proposes existential commitment as part of his response to the problem of identifying the conditions that make objecthood possible. Rules and rule-following, Haugeland argues, are the necessary conditions and practices that constitute objects. In particular, constitutive rules, rather than regulative rules, make objecthood possible. The latter govern phenomena that could exist intelligible apart from the rules, whereas the former determine the very intelligibility of the phenomena (Haugeland 1998, 318). For example, the regulative rule do not slurp soup loudly involves phenomena such as soup-slurping and social etiquette that are coherent apart from this rule. In contrast, the constitutive rule slurping soup loudly is obnoxious constitutes the meaning of loud soup-slurping itself. A constitutive rule creates the very phenomena that it simultaneously governs.

Haugeland argues that there are four distinct and interrelating components of constitutive rules: constitutive regulations, constitutive standards, constitutive and mundane skills, and existential commitments. Haugeland searches for the origin of the normative authority of these components (Haugeland 1998, 308).

First, constitutive regulations are rules that govern the behavior of practitioners. These rules determine what practitioners must and must not do in order to enact a given
normative practice (Haugeland 1998, 321). For example, constitutive regulations of etiquette at a formal dinner include rules that prohibit practitioners from slurping soup loudly. Second, constitutive standards govern the objects and paraphernalia involved in a given practice (Haugeland 1998, 320). For example, constitutive standards of soup include that soup is an edible liquid that can be eaten with a spoon. Both kinds of rules derive their normative force from social conventions and are enforced by the threat of failing to participate in an activity or of being reprimanded by other practitioners.

Third are constitutive skills and mundane skills. These are kinds of know-how to follow constitutive regulations and standards accurately. These skills have qualities of perseverance and adaptability: the practitioner can exercise the skill across a range of varying situations, trust her expertise in the face of challenges, and adeptly overcome challenges (Haugeland 1998, 322). Constitutive skills are used to evaluate a phenomenon or behavior in accordance to the constitutive rule that constitutes it. For example, I evaluate that my neighbor’s behavior of slurping loudly with rebellious relish is a violation of the constitutive regulation of soup etiquette.

Mundane skills are used to recognize a phenomenon or behavior as one that is constituted by its corresponding constitutive rule and to manipulate it in the ways specified by the rule. For example, I recognize that my neighbor’s loud slurping is a behavior that is subject to etiquette, and I frown at him to discourage this behavior. Constitutive and mundane skills are interdependent. We can evaluate a phenomenon only if we have first recognized it, and we can recognize it only if we have the ability to evaluate it, since this ability demonstrates our grasp of its identity, contrasts it to what it is not, and endows it with a particular meaning.

I understand constitutive and mundane skills as varieties of socioculturally dependent embodied skills, which in turn are transcendental conditions of perceptual experience. Haugeland does not specify that the exercise of skills has perceptual effects, but it is implicit; given that skillful activity is precognitive and embodied, the significances of objects and behaviors that we use these skills access are not represented in explicit, conscious states but are pre-reflectively apprehended—which I identify as
perceptual. Heidegger argues that sociocultural ways of life determine the perceptual world and our possibilities of thought and action, but he is silent on the particular processes that underpin this determination relation. Haugeland provides these processes: we, as creatures of conformity, have skills to pick out objects and behaviors that belong to ways of life, and skills to evaluate them according to the rules that constitute our ways of life. These skills are transcendental conditions that determine the perceived meanings of objects and ground them in sociocultural normativity.

Haugeland argues that although on his account, objectivity depends on social practices, it differs from extreme social constructivist accounts of truth or meaning holism. Different types of objects manifest *world-to-rule* or *rule-to-world* “directions of fit” (Haugeland 1998, 306). For an object that manifest world-to-rule fit, if there is a difference between the actual object and the object predicted by the rule, we take the former as flawed and try to make it conform to the rule. In these cases, it is impossible for the majority of people in a community to systematically deal with the object inaccurately. The community’s attitudes and practices exhaustively constitute the object. Haugeland calls such objects “merely instituted phenomena” (Haugeland 1998, 338). Extreme social constructivism and meaning holism can only account for these.

For example, soup-slurping etiquette is a merely instituted phenomenon and manifests a world-to-rule fit. We evaluate cases of soup-slurping according to socially normative rules that define this activity, even though we might not be explicitly aware of these rules. These rules will be based in the majority’s systematic practices concerning soup-slurping. If my neighbor slurps soup loudly, we evaluate this as inappropriate, which presupposes that we take the rules of this behavior as authoritative. We do not regard his behavior as a *discovery* that loud slurping is actually a splendid accomplishment that people ought to catch up on, and our rules of etiquette have been wrong all along. Moreover, it is impossible for the majority to practice an etiquette incorrectly. If everyone consistently and systematically slurped soup like my neighbor, then this new act would normatively define the rules that constitute soup-slurping and determine future occasions of this behavior.
In contrast, when objects manifest a rule-to-world fit, if there are differences between outcomes of the world and specifications of the rule, we regard the rule as flawed and revise it to reflect the happenings in the world. In this case, it is possible for the majority within a community to collectively mistaken an object’s meaning or use. Haugeland calls this sort of object “constituted phenomena” (Haugeland 1998, 338). Extreme social constructivism and meaning holism do not account for this.

For example, practices designed to increase intelligence manifest rule-to-world fit. Let us imagine that people used to eat walnuts to increase intelligence. Because walnuts look like brains, they believed that eating walnuts would enhance their brain power. Over time, people noticed that there was a difference between the predicted outcomes of the rules and the actual outcomes of the world. People who ate loads of walnuts were not smarter. People regarded the outcomes of the world as normative and modified their rules in accordance with the world. Today, we have rules that constitute practices of public education for increasing intelligence. So enhancement of intelligence is a constituted phenomenon; rules that direct this phenomena are modified in accordance with outcomes in the world, rather than the other way around. Even when everyone in a community ate walnuts to improve intelligence, they were wrong about their practice. It is possible for the majority of practitioners to use an object in some way and to be wrong.

It might seem that the difference between merely instituted phenomena and constituted phenomena is that only the latter are constrained by mind-independent natural laws and conditions. But this is not the difference, Haugeland argues. Even merely instituted phenomena are constrained by natural laws. This fact challenges social constructivist and meaning holism approaches to truth, which hold truth to depend on only social practices or the meanings of other things (Haugeland 1998, 345).

Haugeland argues that constitutive and mundane skills are always open to revision or repair. Revision occurs when we identify the performance of a skill (whether constitutive or mundane), which abides by a constitutive rule, as flawed (Haugeland 1998, 333). We try to improve our performance so we can satisfy the rule. Repair occurs when we identify the constitutive rule, which motivates the skill, as flawed (Haugeland
We realize that, regardless of our efforts, we will never achieve the results that the rule specifies. We discard the rule and look for new ones.

Revision, especially, takes a heavy toll on the practitioners involved. Changing constitutive standards alters the very nature of the practice at hand, annihilates familiar objects, and erects totally new objects—even if the material composition of the object remains the same (Haugeland 1998, 335). Aspects of the world, as we have known them, can collapse when constitutive skills are modified; we can no longer recognize the identities of previously familiar objects or know how to interact with them. For example, rejecting the standards that specify walnuts as having the function of enhancing intelligence makes this practice unintelligible. Previous practitioners are forced to seek new practices to fill the void and to find new ways to relate to walnuts. In contrast, repair is not as disruptive. If people kept the standards that specified the intelligence-enhancing function of walnuts, they might simply reject the skill of eating a handful of walnuts a day and adjust it to eating a bucketful of walnuts a day.

From here, we can understand existential commitment as the fourth kind of rule following. Existential commitment is formulated in contrast to deontic commitment. Deontic commitments are obligations or duties imposed by social circumstances. Existential commitment is intrinsically motivated; it is the personal resolution to carry on a practice or way of life (Haugeland 1998, 341). For example, a person might be existentially committed to having pristine etiquette, as a way of life. This entails commitments to practicing various skills involved in this way of life. She might be committed to ensuring that she never slurps soup loudly. She is also committed to policing her own and other people’s soup-slurping according to constitutive standards that specifies etiquette. These commitments are existential not simply because she takes pleasure in exercising these skills, but rather because if she turned an indifferent eye to

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21 Jonathan Lear, drawing on existential phenomenology and psychoanalytic theory, focuses on the Crow people, a Native American culture, as a case study from which he examines what it feels like to lose a way of life—a network of many constitutive rules that exhausts our sociocultural traditions and everyday practices (2008). His existential and phenomenological descriptions enrich Haugeland’s arguments.
these skills and their related phenomena, she would lose her identity as a polite person and the corresponding sociocultural world of politeness.

Luckily, for the polite person, the phenomena involved are primarily socially-instituted, rather than dependent on natural constraints. If she lost her way of life, this way of life remains in the community as a possibility for anyone to embody, or for her revive at some future time. In contrast, practices involving constituted phenomena are susceptible to a more fundamental loss; they can lose the status as a possible way of life altogether (Haugeland 1998, 355).

For example, a scientist-alchemist hundreds of years ago has dedicated her life to studying the correlation between walnut eating and intelligence. Her identity and reputation depend on this practice. But over time, she cannot deny systematic violations to this correlation. When everyone accepts that it is nonsensical, her identity of being a scientist of walnut-eating is no longer viable, and her corresponding world is rendered incoherent. She cannot simply adjust her skills involved in studying walnut-eating; it has no place in the social and natural world anymore.

When the practices with which we identify are based in constitutive phenomena, rather than merely instituted ones, revisions made to constitutive skills might undercut the very possibility of this way of life altogether. Of course over long periods of time, the sociocultural conditions that that found merely instituted phenomena might also disappear. But there remains a categorical difference objects and practices that are more dependent on sociocultural conditions and those more dependent on natural conditions.

Rules and skills derive their normative authority from sociocultural and natural conditions. In contrast, existential commitment to a way of life is the foundation of all normative force, which accounts for the normative statuses of sociocultural and natural conditions (Haugeland 1998, 342). For some sociocultural or natural fact to count as a normative constraint in the first place, we must first have an existential commitment to a way of life that takes this fact as normative. The natural fact that intelligence does not increase as result of walnut-eating, for example, is not a constraint on our social practices, unless we had the prior existential commitment to the practice of eating walnuts to
increase intelligence. Existential commitment is the ultimate transcendental condition of the normative status of natural constraints and social norms, which shape skills and the phenomena these skills constitute.

Haugeland’s analysis shows that ways of life and social normativity are grounded in the natural world; this can naturalize Heideggerian metaphysics. Haugeland explains the processes in virtue of which ways of life come to shape our embodiment; ways of life consist in normative or rule-based practices to which we conform, due to our existential commitments. These are details that previous philosophers of embodiment and existential phenomenology failed to provide. I will expand on these details and connect them with biological and evolutionary arguments in chapters 3 and 4.

Haugeland also implies that the transcendental conditions of sociocultural ways of life, embodied skills, and particular objects and situations relate to each other in a hierarchical manner. This transcendental structure is also implicit in Heidegger’s existential phenomenology: Heidegger explains that *Dasein* determines interconnected networks of objects, and these objects can have their identity due to the practices of the people who embody *Dasein*. Neither Haugeland nor Heidegger, however, makes this transcendental structure explicit. I will do so in chapters 3 and 4.

Phase IV: Enactivism

*J. J. Gibson*

In *The Ecological Approach to Visual Perception* (1979), J. J. Gibson argues for his theory of ecological affordances. He theorizes that visual perception consists of *affordances*, which are opportunities for action that result from the interaction between an animal’s sensorimotor and bodily skills and the material or physical possibilities offered by the environment (Gibson 1979/2015, 119). His theory entails that the potential experiences afforded by manipulation of an object are perceived during visual contact with the object, without our actually manipulating the object.
One primary activity afforded by the environment is low-level visual perception, which depends on the *ambient array*, a material structure in the environment, and an animal’s perceptual system (Gibson 1979/2015, 58). Gibson shows that perceptual processing begins in the environment, rather than in the brain. Any sensory stimulation is necessarily structured by the interaction between light and environmental structures in accordance with laws of atmospheric refraction, before it hits the animal’s sensory organs (Gibson 1979/2015, 66). Objects have surfaces that reflect light waves, sound waves, and other types of oscillations that occur in transmission mediums; textural features and spatial locations of these surfaces cause particular diffraction patterns in the array. Gibson calls these patterns that fill an animal’s ecological niche the *ambient array*.

Features of the array and features of objects lawfully correspond with each other, and this correspondence relation can be exploited by the animal for gaining perceptual access to the environment (Gibson 1979/2015, 243). Animals are equipped with bodily skills and physiological systems that enable them to manipulate ambient arrays and perceive the unique compositional qualities and spatial position of objects (Gibson 1979/2015, 4). These skills and physiological features are result of an animal species’ evolutionary adaptation in accordance with its ecological niche (Gibson 1979/2015, 14).

Every perception of the environment entails perception of an “ecological self,” and vice-versa: “to perceive the world is to co-perceive oneself” (Gibson 1979/2015, 133). The animal’s own physiology is a transcendental condition that modulates its interaction with ambient arrays, the diffraction patterns it picks up, and the particular objects that it perceives. For a human, these invariant constraints that are perceived as the spatial structure of the perceptual world, which in turn reflect her own standpoint and produce a phenomenal sense of subjectivity (Gibson 1979/2015, 108). It is the most basic sense of subjectivity, according to Gibson.23

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22 The ecological view of perception is well-supported by experimental evidence and computational models (e.g., Geisler 2008; Simoncelli & Olshausen 2001; Rao & Ballard 1999).

23 Schopenhauer and Bhattacharyya also recognize that the perceiver can have a minimal sense of self due to the fact that the physical body is the original receptor of all stimulation, and so the spatiality of all objects is determined relative to the perceiver’s standpoint. The perceiver can infer
According to Gibsonian affordance theory, bodily capacities are constitutive of perception. Affordances are opportunities for action that are perceived; they depend on the interaction between bodily features of the animal and features of the environment. Affordances depend on both relevant features in the environment, with which the animal is equipped to engage, and the animal's capacities to deal with these features. For example, a flower affords pollination for a bee, whereas it affords being picked and used as a hair accessory for a child. The material properties of the flower, independent of any perceiver, and the physiological features of the perceiver give rise to these affordances. Thus, affordances are the relational properties dependent on the organism and its environment (Gibson 1979/2015, 228).24

Animals do not need to engage in voluntary or complex cognitive processes in order to figure out how to act in the world; its bodily capacities and previous familiarity with objects enable recognition and perception of objects. When an animal interacts with an object recurrently, it grasps the invariant correlations between the physical features of object’s surface (made available by its invariant correlations with diffraction patterns) and the behavioral opportunities it affords. Through a sort of quasi-conditioning process, that she is an embodied subject on the basis of the phenomenal appearance of the world, and she does so independently of any additional beliefs about her subjectivity and embodiment. But we usually do not attend to this fact of our embodiment but are simply absorbed in our interactions with the world.

Husserl, in contrast, holds that the phenomenal sense of self is present in every perceptual experience (1931/1982). Husserl bases this sense of self not in the fact of its embodied standpoint but rather in the cognitive activity of reflecting on our own experience. This self-reflexivity, according to Husserl, is necessary to make experiences phenomenally accessible, and it also entails awareness that the experience is had by the self. Husserl, thus, has a fundamentally different conception of subjectivity than Schopenhauer, Bhattacharyya, and Gibson, as well as a different conception of the relation between self-awareness and perceptual experience than these philosophers.

24 The environment-to-perception fit is purely causal, whereas the perception-to-environment fit is normative. The physical processes that give rise to ambient arrays and covariances is exhausted by causal events. But the animal's perceptual ability to recognize environmental structures as significant objects is not causal in the same way. The animal has past learning and experience and has developed bodily capacities to identify structures as particular objects. Thus, the animal could misidentify objects (Gibson 2015). There might be various different compositional features of object surfaces that all correlate with a similar diffraction pattern in the ambient array, and an animal could mistake between these features.
animals learn to pick up highly complex correspondences, which can reveal nuanced information about the object’s instrumental value in perceptual experience (Gibson 1979/2015, 132).

Gibson shows that physiological features of an organism and physical properties of its environment are both transcendental conditions of perceptual experience. This is an advancement on the accounts of the transcendental conditions of perception identified by Kant and even by philosophers of embodiment such as Merleau-Ponty, Bhattacharyya, and Schopenhauer. While these latter philosophers have identified the transcendental role of the body and embodied skills, Gibson shows that the natural environment, independent of the perceiver’s embodiment, also plays a necessary constitutive role in perception.

Gibson provides a naturalized account of perceived meaning, for which Heidegger, Merleau-Ponty, and other philosophers have argued. Gibson shows that perceived meaning is relative to the potential actions that an animal is prepared to achieve given its biological makeup and capacities. These features of embodiment result from natural selection, in accordance with constraints of the environment. This naturalism and concern for biological explanation is an innovation that builds on the work of Heidegger, Merleau-Ponty, and other previous philosophers.

Gibson, however, provides a simple classical conditioning mechanism to explain the possibility of all kinds of affordances. Although this seems adequate to capture affordances of simple motor behaviors, like grasping and walking, it cannot account for highly complex affordances, especially those of socioculturally-dependent activities. In chapters 3 and 4, I will argue for further transcendental conditions and processes whose addition to Gibson’s complete his account of highly complex affordances.

Alva Noë

In *Action in Perception* (2004), Alva Noë presents his *sensorimotor contingency theory*, which is an enactivist account of visual perception that draws on Gibson and
Merleau-Ponty. In *Varieties of Presence* (2012) he elaborates on this theory and applies it to cases that involve a broader range of phenomena, which are sometimes meaning-based (e.g., the emotional presence of a friend, or the narrative meaning of a religious icon), rather than purely visual.\(^{25}\)

On the sensorimotor contingency theory, embodied skills and embodied knowledge are necessary conditions for visual perception (Noë 2004, 75). We have learned sensorimotor skills by exploring the world, moving our bodies to gain vantage points on objects, and achieving access to a fuller range of profiles of objects, beyond the profiles they manifest from any static vantage point (Noë 2004, 100). We gain a skillful grasp of the invariant correlations between the profile of the object and the particular standpoint we have in relation to the object.\(^{26}\)

Equipped with these skills, we can visually perceive the full range of profiles of an object, even when we are constrained to a particular vantage point. Embodied skills and knowledge enable us to perceive *potential* profiles. We perceive not the visual forms of objects relayed by light stimulation but rather the “virtual” or potential forms that we could access, given the sensorimotor skills we have (Noë 2004, 117). The sensorimotor contingency theory shows that action and perception are constitutively interdependent.

Noë expands on his sensorimotor contingency theory and explores a wider variety of embodied skills and modes of presence that objects can manifest. For example, I might stand in front of a painting and experience it as flat and meaningless; but then I overhear a conversation from experienced art viewers about elements of the painting, its historical context, or other bits of useful information (Noë 2012, 1). With this knowledge in mind, I try looking at the painting again. This time, the composition and colors are salient in a

\(^{25}\) In Chapter 4, I will also draw on ideas in Noë’s *Strange Tools: Art and Human Nature* (2015). A theory Noë sketches in *Strange Tools* will serve as the mechanism that systematizes the existentially-based cases of enaction described in *Varieties of Presence*. Noë does not explicitly explain the relations between these works. Linking his theories in *Strange Tools* to his sensorimotor contingency theory, especially, is my innovation, and might not be something Noë intended.

\(^{26}\) J.J. Gibson made this point in “Theory of Affordances” in *The Ecological Approach to Visual Perception* (1979), and Merleau-Ponty has a similar theory in “The Spatiality of One’s Own Body and Motility” in *The Phenomenology of Perception* (1945).
new way, full of particular meaning. I am overcome with its beauty and feel that I understand the piece now. On another example, I learn a natural language (Noë 2012, 79). Before, the sounds of this language were random noise, but after mastering the embodied skills of this language, the sounds manifest meaningful speech. Noë argues that an extension of the sensorimotor contingency theory can account for these non-perceptual modes of presence and non-sensorimotor skills.

Noë proposes a distinction between perception- and thought-based embodied skills. Perception-based skills involve various sensorimotor skills, such as craning our necks or walking towards an optimal vantage point (Noë 2012, 26). Thought-based skills involve descriptive and conceptual skills, which enable us to access objects in special modes of presence (Noë 2012, 26). Noë leaves open the possibility that many kinds of skills exist under each category. He distinguishes between these categories on two dimensions.

First, they differ with respect to their degree of movement- and object-dependence. Movement-dependence refers to the degree of change of the appearance of an object in response to bodily movements. Noë notes that the front-side of a tomato dramatically changes in profile when I shift my bodily position; it is high in movement-dependence (Noë 2012, 22). In contrast, the back-side of the same tomato is low in movement-dependence; when I slightly shift position, the back-side was not literally visually present to begin with, so it does not change in response to my bodily position. Object-dependence is similar to movement-dependence; it refers to the degree of change of the object registered in perceptual experience in correspondence with the object’s own movements (Noë 2012, 22).

Noë argues that sensorimotor skills score high in movement- and object-dependence, whereas thought-based skills score low on these measures. For example, when I go on a stroll with my friend, my friend scores high in movement- and object-dependence. In this case, I access him with sensorimotor skills, as I crane my neck towards him and walk by his side. In another case, my friend travels abroad; he has low movement- and object-dependence. I can perceptually access him by exercising thought-
based skills while I read his texts and hear his voice over the phone, but he or I could physically move, and there would be no change in my perceptual experience of him (Noë 2012, 26).

Noë argues that these thought-based skills differ from mere imaginative visualization. He argues that experience enabled by thought-based skills is an extension of perceptual experience because it crucially requires that we are joined with the object in a relation of movement- or object-dependence. In contrast, in imaginative visualization we are not joined to an object in this manner, or so Noë argues.27 The presence of my friend abroad, presented by thought-based skills, and the presence of my friend by my side, presented by sensorimotor skills, are of the same kind; the two only differ in degree, of movement- and object-dependence.

The second dimension along which perception- and thought-based embodied skills differ is “modality or quality of presence, as opposed merely to its intensity or degree” (Noë 2012, 34). Degree of movement- and object-dependence correlate with differences in the intensity, vividness, or quality of the presence of an object. Noë argues that physically available objects, accessed by sensorimotor skills, have a concrete and definitive quality, whereas physically unavailable objects, accessed by thought-based skills, do not have this quality.

Noë also argues that objects accessed through different kinds of thought-based skills are presented in different “modalities.” For example, there is a difference in the quality of presence between people who we intimately know and historical figures who we have only read about. The former has a quality of “knowing” (which involves greater

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27 Noë does not explain this distinction in much detail. I think it is difficult to maintain because it is implausible that we could be joined in a movement- or object-dependence relation with particulars that are extremely spatially or temporally distant. I think the nature of the relation to these distant objects should not be compared to that which we have with physically available objects. I will argue for a different approach for understanding such “thought-based skills” in chapters 3 and 4 that is more plausible. The continuum between cases of perceptual experience of a friend by my side and of a friend abroad is not explained by any spatiotemporal relation, but is rather explained by the application of embodied skills developed for accessing the distal environment; these skills present similar conceptual and affective properties between the situation in which they were originally developed and a new situation.
intimacy and a more vivid perceptual presence) and the latter of “thinking about” (which involves a vagueness and sense of distance) (Noë 2012, 111). But Noë defines these “modalities” ambiguously and does not explain how they come about. I will provide an alternative account of embodied skills that is principled and specific in the next chapters.

Noë also presents another way to draw a distinction between sensorimotor and thought-based embodied skills. Some skills require sociocultural conditions for their development, and others are universal among humans, and their development is independent on such conditions. For example, reading is not an embodied skill with which are born; it requires effort and sociocultural scaffolding (Noë 2012, 2). Only under these sociocultural conditions can reading become an embodied skill, which transforms previous black squiggles into meaningful words.

Noë argues that we are also biologically predisposed to seek out and develop socioculturally contingent skills. “There is a presence we earn, and a presence that comes for free… we show up not merely as the animals we of course are, but as persons capable of enacting the world through our own skillful exploration and self-cultivation” (Noë 2012, 14). Noë suggests that we necessarily develop sociocultural skills and enact sociocultural dimensions of meaning in our perceptual worlds.28 I will expand on this distinction and argue for a developmental continuum between biological and sociocultural skills in chapter 4.

Noë does not add transcendental conditions to those provided by Gibson and Merleau-Ponty but provides powerful explanations of the conditions they provide. He argues that potential events and profiles of objects in the environment are perceptually available due to a person’s embodied skills of dealing with these objects. Social, emotional, conceptual, aesthetic, and other varieties of presences are similarly achieved, due to the continuity between sensorimotor skills and thought-based skills. We have

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28 Noë’s idea here is reminiscent of Hume’s point that humans necessarily invent “artificial” (culturally constructed) virtues, desires, and needs: “Our sense of every kind of virtue is not natural; but that there are some virtues, that produce pleasure and approbation by means of an artifice or contrivance, which arises from the circumstances and necessity of mankind” (from “Justice, Whether a Natural or Artificial Virtue?” in A Treatise of Human Nature).
explored the world, discovered such presences, and developed the embodied skills that make these presences readily accessible; and that which is accessible is perceptually present. Noë, working with the layers of transcendental conditions laid down by his philosophical forerunners, emphasizes that conditions of embodied skills determine meaning-based significances in the same manner by which they determine spatial and visual properties. I will contend with Noë’s explanation in chapter 3 but ultimately arrive at the same conclusion that such varieties of presence perceptually exist.

Embodied skills determine the perception of affordances, affordances regulate the use of skills, but no theorist has yet determined just how complex these skills and affordances can be. How many layers of intentions and actions can be nested within a single unit of an affordance? How cognitively complex can an affordance be? Can an affordance potentially solicit thoughts, conceptual arguments, or emotionally-laden ruminations, which are perceptually available? Or, do affordances only potentially solicit motor actions and vital behaviors? In what follows, I will answer these questions, systematize the possibilities of affordances or perceived meaning, and present an account of the cognitive, social, and biological processes by which such high-level perception is possible.

Evan Thompson

In *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*, Evan Thompson argues that cognition is a natural extension of the basic function of “sense-making” that all living systems have (Thompson 2007, 221). This function emerges from the special material structure of self-organizational dynamical (*autopoietic*) systems, which is essential to living forms and distinguishes them from inanimate matter. Thompson provides a framework in which other theories in embodied cognition can be situated and newly understood; existential enactivism is also situated in this framework.

*Autopoietic systems (e.g., a single cell, a goldfish, a human) are a special variety of complex dynamical systems. Many similar units can interact in a special manner that*
forces each of their movements to be interdependent with those of others. Such interaction enables the collective units to give rise to new forms of behavior that are impossible for any individual unit to have. In such cases, units are joined as a complex dynamical system. The features of the emergent level, arising from the interdependent interaction between low-level units, depends on these units. Reciprocally, the interaction between units depends on the emergent features, which constrain the degrees of freedom of each unit’s possibilities of movement and determine that each moves in the particular way that is necessary for their collective interdependence and for giving rise to emergent features. The whole arises from the parts, and the parts arise from the whole; both aspects of the system co-emerge and reciprocally determine each other (Thompson 2007, 40).

An autopoietic system is a complex dynamical system that self-produces its semipermeable material boundary, exchanges materials with its distal environment, and actively maintains its homeostasis to preserve its unity and survival (Thompson 2007, 103). The consequence of this special organization is that the system gives rise to a minimal sense of individuality and intentionality, from the autopoietic system’s point of view, which is a sort of emergent phenomena. The autopoietic system opens onto a surrounding world of objects that have significances on the basis of their relation to the system’s homeostatic needs (Thompson 2007, 147). A bacterium, for example, will swim towards a concentrated area of sucrose molecules because these molecules have value as nourishment relative to the bacterium’s homeostatic needs. The world from the point of view of the autopoietic system is always “meaningful,” and these meanings are based in the possibilities of action that would preserve its homeostasis. In other words, the perceptual world is structured in accordance to potential patterns of action, geared towards survival. This means that the autopoietic system’s responses to the environment are never passive; every aspect of the environment is already “enacted” by the system on the basis of its active seeking.

Thompson argues that the minimal sense-making that is entailed by basic living forms is continuous with the sophisticated intentionality of organisms with nervous systems, such as humans (Thompson 2007, 157). Our biological organization makes
possible a diverse range of needs, emotions, and capacities which may or may not serve biological homeostasis (Thompson 2007, 379). Our basic openness to the world, grounded in the autopoietic organization common to all living creatures, is mediated by these complexities of our embodiment. This mediated disclosure of the world has the function of rendering the world into a constant background of pre-reflective meaning and values that are relative to our needs, abilities, and emotions.

We are fundamentally encultured; our needs, abilities, and emotions are shaped by cultural upbringing, and this allows us to perceive objects as manifesting sociocultural values, rather than strictly vital values (Thompson 2007, 383). Our personal history of transactions with the environment develops our needs, emotions, and capacities; in turn, these change the possible values of objects that show up in our world. In turn, the values of objects in the world enable new varieties of transactions and developmental trajectories of our embodiment. So dynamic feedback between embodiment and environment allows for cultural conditions (e.g., language, social norms, constructed environments) to influence the values that structure the perceptual world (Thompson 2007, 77). This amounts to not only the perception of socioculturally normative values of objects, but also to the perception of other people’s intentional states, and even perception of moral significances (Thompson 2007, 401).

Thompson offers a plethora of insights. He proposes a remarkable framework for enactivism based in complex dynamical systems theory. This can situate claims made by researchers in embodied cognition about the relations between an animal and its environment, and between action and perception. For example, on Noë’s sensorimotor contingency theory, we perceive the full spatiality of objects on the basis of our sensorimotor skills primed to manipulate these objects. On Thompson’s account, sensorimotor skills can enable us to perceive this full spatiality because these skills are aspects of our basic biological organization, which is dynamically interdependent with the perceptual world by virtue of our evolutionary history. Changes in embodiment necessarily correspond with changes in the world, and vice-versa.
By showing that consciousness is a continuation of the minimal sense-making of simple living systems, and that the two are emergent phenomena from a common autopoietic organization, Thompson illuminates an existential dimension of consciousness. That is, similarly to how simple living systems enact a meaningful world that serves its homeostasis and survival, we enact a meaningful world that serves our socially-based needs and concerns. I will argue that our needs are not tethered to satisfying homeostasis due to our cognitive complexity and intersubjective nature, but the motivational force that backs our needs is possibly continuous with that which backs homeostatic needs, had by simpler life forms. Thompson’s theory of cognition points toward this inference, although it requires further argumentation, and providing this will be central to my project.

Thompson also understands that human needs, emotions, and capacities are shaped by intersubjective influences and enculturation, and so the meanings that show up in the world are tied to cultural norms. I will explore this relation between the structure of embodiment and culture in more depth. Which particular environmental and normative conditions exert these cultural influences? By what means do these conditions come to influence features of our embodiment, such as needs and capacities? How complex can the meaning that show up in the world be, independently of our voluntary control or self-conscious awareness? In what follows, I will focus on addressing these questions.

Conclusion

In arguing for existential enactivism, I will start with the embodied, existential, and sociocultural layers of transcendental conditions that my philosophical predecessors have established. But I will show that we do not yet have a sufficient framework to understand the contents of perception. The framework that previous philosophers use to account for perceived meanings is designed to account for only simple sorts of meaning relative to our motor potentials, vital needs, and basic social needs. They take for granted that this framework can be extended to account for perception of more complex varieties
of meanings. They also do not specify the limits to the complexity of perceived meaning. I will argue that this extension requires the introduction of further transcendental conditions and a new account of the dynamical processes that relate these conditions. In doing so, I will also show that perceived meaning can be vastly complex, without any principled upper bounds.
No one disputes that low-level properties are registered in perceptual experience. We can see the whiteness and height of a wall, for example. But what about high-level properties? I will argue that we can also perceive a vast and rich array of high-level properties. If this wall is part of an elementary school, we can perceive that the wall houses eager children. If the wall is part of a prison, we can perceive that the wall encloses unfortunate men. In the previous chapter, I surveyed the tradition of theorization of the perception of high-level, meaningful properties by phenomenologists and enactivists. These philosophers argued that embodiment conditions, such as embodied skills, bodily schemata, or background knowledge, are transcendental conditions that determine perceived meaning.¹

But embodiment conditions cannot sufficiently account for the perception of complex meaning. I have given some reasons why in chapter 1 and will explain the insufficiency of that account in this chapter as well. I will propose two new kinds of transcendental conditions: those based in sociocultural niches and social norms. I will argue that the addition of these conditions to theories of perceived meaning solves the problems left unsolved by previous phenomenological theories of perception. Ecological niches and social norms play a number of necessary roles in perceptual experience. They provide

¹ Most of these philosophers would not use the terminology of transcendental conditions. But, in essence, they take on transcendental projects in the sense of identifying conditions prior to our phenomenal experience that explain the contents of experience—this kind of project was initiated by Kant. Because Kant’s idea of transcendental conditions is the preserved throughout these various theories of perception, from computationalist to enactivist theories, I choose to use this term.
scaffolding for the development of the kinds of embodied skills required for perceiving existential properties. They also facilitate the patterns of sociocultural activity that, when exploited by perceptual systems, underlie existential properties. Following these arguments, I will reply to a number of objections.

Finally, I will argue for the *Unbounded View*: the thesis that there is no principled upper bound of the degree of complexity of existential properties. I will argue that the rapid performance of seemingly cognitively demanding activities (e.g., speech perception and ball sports) is best explained by the perception of highly complex properties, which inform the performer and relieve her from cognitive demands. I will argue that the perception of such complex properties is not tied to extra-perceptual features of these unique cases but is a possibility built into perceptual experience itself. I will finally propose that there is no principled limit to the complexity of existential properties, by virtue of the temporally extended nature of and interdependence between perception and action.

*Ecological Niches*

Two kinds of transcendental conditions—*ecological niche* and *normative conditions*—are missing from the metaphysical systems of previous philosophers. Briefly put, ecological niche conditions are environmental structures that, by virtue of our interactions with them, are constitutive of the objects of perceptual experience. Normative conditions are social norms of practices that structure the *ways of life* to which we *existentially commit*. Importantly, both ecological niche and normative conditions are *mind-independent* in the sense that they persist independently of any given person’s interactions with them. This allows for mind-independent processes to contribute to the synthesis of existential properties, so they can be very complex and nonetheless perceived, without the aid of voluntary or controlled cognitive activity.

In chapter 2, I showed that philosophers across phenomenological and enactivist traditions agree that there are transcendental conditions of perceptual experience based in
our embodiment. These include embodied skills, background knowledge, bodily schemata, and moods. I call these *embodiment conditions*, and they mediate our interactions with objects and perceptual access to them. By virtue of this mediation, they determine the existential properties that objects manifest.

For example, frustration or infatuation with a friend (which are two mood-based, embodiment conditions) will determine different perceptual experiences of this friend. The same relaxed, neutral face can be menacing or flirtatious, depending on the perceiver’s mood. Or, expertise in cosmology or astrology (which are two sets of background knowledge) will determine different perceptual experiences of a night sky. A cosmologist perceives the bewilderingly old age of the starlight that reaches her retina, while an astrologer perceives that the alignment of the stars demands her to revive a previous romance.

J.J. Gibson and philosophers who draw on him, including John Haugeland and Daniel Hutto, are the exceptional thinkers who understand that embodiment conditions are not enough to account for perceptual experience. Gibson places equal emphasis on *ecological niche conditions*, and he argues that these and embodiment conditions are interdependent with each other (Gibson 1979/2015, 14). The biological evolution of all organisms is determined by their interactions with the natural world. Selection pressures have shaped our embodiment conditions (e.g., perceptual systems and motor abilities), and these enable the possible ways by which organisms perceive and manipulate their ecological niches. Ecological niche conditions do not only shape the embodiment conditions of organisms, but some of them also serve as the material basis of objects that are perceived.

Perhaps other phenomenologists and enactivists take ecological conditions for granted and never mention their necessity because this necessity is obvious in the domains of visual properties (e.g., color, size, shape, volume, illumination) and motor affordances (e.g., walking, craning our necks, picking things up). For example, it is obvious that a tomato has a mind-independent existence in space and time (Noë 2005,
It might seem superfluous to insist on ecological niche conditions, in addition to sensorimotor skills, as necessary for our perception of the tomato.

In contrast, the silence on the role of ecological niche conditions in the domain of perceiving existential properties leads to ambiguities that prevent philosophers from pursuing a systematic account of these properties. It is ambiguous whether existential properties depend on some aspect of the environment; and if they do, it is ambiguous which aspects serve this role. Take the tomato example again, but this time attend to its existential properties. Svetlana, a young grungy drummer, relies on pizza as a staple, and she has developed embodied skills (among other kinds of embodiment conditions) that spur her to seek pizza whenever she is hungry. When she encounters a tomato, she perceives it as manifesting existential properties of being used in pizza and tasting like pizza. Sylvester, a disciple of health food trends, also looks at this tomato. He perceives the tomato as manifesting existential properties of being a carcinogenic GMO, demonstrative of the horrors of US consumerism.

The difference between the existential properties of the tomato that Svetlana and Sylvester perceive is, at least, due to embodiment conditions: Svetlana and Sylvester have different embodied skills and background knowledge. But are there differences in the ecological niche conditions of their perceptual situations? Obviously, there is a single physical tomato and environment. It might, therefore, seem that given that there is no difference in the ecological niche conditions between Svetlana’s and Sylvester’s situations, the difference in the existential properties they perceive must be based in differences in only their embodiment conditions.

But the explanation that embodiment conditions alone determine existential properties is inadequate. First, we tend to think that when we perceive something, it is based in the environment; the environmental component of perception distinguishes perception from other cognitive activities, like imagination and memory. So, if we fail to specify an environmental component of the perception of existential properties, these
properties seem non-perceptual.\(^2\) Second, this explanation entails that existential properties are determined by exclusively top-down processes. But it is far from clear that top-down processes can do all the work that is required for the perception of conceptually rich meaning, without the aid of voluntary inferential activity.

Third, if we eschew the necessity of ecological niche conditions among the transcendental conditions of perceptual experience, we end up with a theory of perception that is susceptible to some of the theoretical failings of representationalism, which enactivism was formulated to overcome. On representationalism, we passively receive stimulation, which intracranial cognitive processes synthesize into mental representations. We ultimately perceive these representations, and we can act in response to them. This view is somewhat unnaturalistic. It is inconsistent with the fact that we are biological organisms that actively engage with the environment to perceive it, and we are evolutionary products of this interaction (e.g., Maturana & Varela 1992; Thompson 2007; Varela et al. 2000). Maintaining consistency with these natural facts, enactivism holds that the synthesis of perception involves ongoing, coupled interactions between the perceiver and her environment (Gibson 1979/2012; Noë 2004). Action and perception are constitutively interdependent. This is difficult to reconcile with the metaphysics of representationalism.

If existential properties have no environmental basis, processing that is coupled with the environment could not underpin them. This would force these properties to be determined exclusively by top-down processes and to be based in representational states. Thus, we would have to adopt metaphysical principles of representationalism, a position we have already abandoned as empirically and phenomenologically implausible. On an enactivist view, the perception of existential properties should involve a dynamical interaction between the perceiver and environmental conditions. But once we grant that

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\(^2\) I have defined perception as the awareness of any object or property at all that is not created by voluntary or deliberate cognitive activity (see chapter 1). My special definition does not require that there must be an environmental, mind-independent basis of the items we can perceive. But the criterion of an environmental basis of perceptual items is an intuition that most people hold and that is implied in traditional definitions of perception, and so I respond to this intuition in my argument.
there is an environmental condition that underpins existential properties, it remains unclear which elements of the ecological niche occupy this role. After all, Svetlana and Sylvester access different existential properties, although they inhabit the same ecological niche and interact with the same physical tomato.

To identify the ecological niche conditions that constitute existential properties, we must first examine the concept of ecological niches. Each species inhabits its distinct ecological niche, and a niche and its species have co-evolved and are constitutively interdependent. Organisms, of all levels of biological complexity, manipulate and design niches that afford opportunities for behaviors required for homeostasis (Dewey 1925/1994; Griffiths & Gray 1994; Laland et al. 2004; Maturana & Varela 1992; Odling-Smee et al. 2003). By constructing a niche, an organism modifies the selection pressures that will constrain the adaptive trajectories of future generations. An individual’s development and survival depend on its utilizing the affordances of its ecological niche. Thus, organisms do not only reproduce their genome to future generations to preserve their species; they must also pass down the ecological niches that they have maintained and inherited from previous generations if future generations are to survive.

Thus, there is a dynamical interdependence between organisms and niches, at both ontogenetic and phylogenetic levels. Each species has evolved to have bodily capacities that are adaptive to the affordances of its niche, and these capacities also enable individuals to maintain these affordances and safe-keep the survival of the species. Given this evolutionary history and individual development, members of a given species will perceive a distinct niche, which members from other species do not perceive, even if the niches between species overlap in the same physical space. A mosquito, crocodile, and swamp-loving hermit each perceives its own niche, composed of distinct affordances, despite the fact that they all stand in the identical space of a swamp.

Humans are radical niche designers (Dijk & Rietveld 2017; Fabry 2018; Malafouris 2016; Maturana & Varela 1992; Rietveld & Kiverstein 2014; Simon 1968/1996; Stotz 2010). Equipped with language and situated in a sociocultural history
(among other conditions distinct to our species), we can access a wealth of knowledge that lets us innovatively construct our niches. While constrained by biological and social variables, we have also modified adaptive constraints and shaped our biological and social evolution. Thus, our niches are better characterized as sociocultural niches, which consist in nested levels of sociocultural structures, such as tools, technologies, infrastructures, and institutions, among other material affordances of sociocultural activities. I call the structures that compose a sociocultural niche niche conditions, which result from a long history of co-evolution with human practitioners. We design niche conditions, and these conditions offer the possible activities in which we can participate and thus constrain the ways in which we design niche conditions. There are distinguishable sociocultural niches for different ways of life, which are similar to the social roles we perform. I will explicate this notion later in this section.

There are two kinds of ecological niche conditions: those based in sociomateriality are niche conditions and those based in the natural world, independent of sociocultural influence, are nature conditions. Niche conditions necessarily conform to nature conditions. Institutions, practices, and tools constructed over cultural evolutionary history must conform to physical laws and biological constraints of our species. For example, dietary dispositions towards compounds high in lipids and carbohydrates are evolutionary products; these dispositions hold regardless of cultural context and are adaptive. Mammalian milk contains casein phosphoproteins, independently of any sociocultural influence. These compounds let milk curdle and be made into cheese, which is high in lipids and desirable given our dietary dispositions.

The niche conditions of pizza culture depend on these nature conditions. Our disposition to seek out nutrition afforded by pizza is a prerequisite for pizza to become a culturally prevalent food. Nature conditions also discourage the possibility of a

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3 Sociocultural niches do not only influence cultural development. They also establish adaptive constraints that shape our biological evolution. Certain anatomical features, for example, underpin capacities necessary for performing sociocultural activities crucial for the survival of human communities. The phylogensis of a supralaryngeal vocal tract (approx. Upper Paleolithic period) is a good example of this (Lieberman 2007). Only the human species possesses this anatomical structure that enables fine-tuned distinctions in phonetic production.
sociocultural niche that exhibits limp lettuce as a popular fast food, with limp lettuce parlors, frequented by ravenous late night goers.\footnote{Some freaky health trends teeter towards this possibility (e.g., the “Paleo diet”). These trends indicate that sociocultural norms can be very powerful, rather than that sociocultural norms can systematically violate biological constraints. This notion of “power of mind over matter” will make another appearance in my analysis of mental illness in chapter 5.} Thus, nature conditions constrain the possible niche conditions that are constructed, which in turn constrain the possible embodied skills we develop and the sets of existential properties we perceive.

Niche conditions, such as tools and technologies, shape human development at phylogenetic and ontogenetic levels. Technologies are specially designed to enable us to achieve complex tasks, which either could not be performed by us alone, or would demand more cognitive effort if we had to devise the means to complete these tasks “from scratch” (Rowlands 2010). Reading, writing, and arithmetic are some technologies that have dramatically enhanced human cognition (Donald 1993; Malafouris 2016). For example, once ancient humans developed writing systems (c. 3100-3400 BCE), they could preserve semantic information, consult it, and expand their cognitive capacities (Donald 1993). Writing removed cognitive burdens of memory, enabled ancient humans to sophisticated forms of metacognition, and expanded the possible technologies and institutions (among other niche conditions) that they could construct, which in turn enabled future generations to even further cognitive capacities. Some of our distinctively human cognitive capacities, which depend on certain genomes and nature conditions, also depend on these technologies and niche conditions of ancient humans.

The evolutionary role of technology implies that we are not only able to perform distinctively human feats when we occurrently use technologies; frequent use can \textit{scaffold} or restructure our cognitive functions and entrain new \textit{embodied skills}.\footnote{The concept of “scaffolding” was originally formulated by psychologist Lev Vygotsky (1924/1987). Vygotsky argued that attainments of the skills that are regarded as milestones of childhood development (e.g., walking and language acquisition) are not autonomously attained by the child but depend on the help of a caretaker. Caretakers interact with the child and provide conditions necessary for the development of these skills. When the child is a novice and faces insurmountable difficulties, the caretaker increases her degree of involvement; and when the child improves and faces manageable difficulties, the caretaker can withdraw and encourage the child to master the skill autonomously (Vygotsky 1924/1987). Although \textit{scaffolding} was initially used to()}
background knowledge, habits, or capacities that are developed to deal with the sociocultural activities that structure our everyday lives. They determine the affordances or existential properties we perceive—more of this later in this chapter. Embodied skills are enduring and transferable across other domains of activity in which the technological artifact is absent. For example, there is excellent evidence that the development of *theory of mind*—the capacity to understand the experiences of other people and distinguish them from our own experiences—coincides with the mastery of syntactical features of language (de Villiers & de Villiers 2014).

Representing other people’s intentional states requires discursive thinking (e.g., “I think *that* she thinks…”). Once a person learns to read and write, her thoughts can conform to syntactic structures of written language; this increases the discursivity and complexity of thought. Furthermore, there is experimental evidence that people who have acquired tonal-based languages, such as Chinese, have enhanced auditory capacities; they more often have perfect-pitch than speakers of non-tonal languages (Bidelman et al. 2013). The acquisition of embodied skills, scaffolded by niche conditions, can be cognitively fundamental and has potential to enhance perceptual experience.⁶

A wide range of technologies can scaffold a wide range of skills and cognitive changes. Neuroimaging studies show that the acquisition of skills required in taxi-driving and professional musicianship can have enduring effects on neural substrate. Taxi-drivers have significantly larger hippocampi, which is purported to facilitate enhanced spatial conceptualization and memory (Maguire et al. 2000). Cityscapes, infrastructure of taxi driving, and tasks of navigation are niche conditions that structure the drivers’ refer to the role of the caretaker in the domain of child development, the concept is now broadly used across theoretical domains and is interpreted in different ways. In the embodied cognition literature, theorists propose that we all consistently used tools and technologies that “scaffold” the development of our cognitive capacities in some ways, and scaffolding is important for and available to adults and children alike (Clark 2005, 2015; Malafouris 2016; Rowlands 2010). My understanding of scaffolding is based on these theories in embodied cognition.

⁶ Not all embodied skills are as fundamental and encompassing of diverse domains of life as the skills of language, writing, and reading. In section 5 “Unbounded Perception” of this chapter, I will analyze the issue of the principles that explain which skills are more fundamental and widely applicable and which are circumscribed to particular tasks and domains.
environments, scaffold their use of cognitive and bodily capacities, and let them develop embodied skills that are distinct to those who are members of the taxi-driving niche. Musicians have augmented sections of their somatosensory cortex that correspond to finger and hand regions, and these differences are purported to enable them to greater motor sensitivity and control (Ragert et al. 2000; Watanabe et al. 2007). The acquisition of embodied skills, scaffolded by technologies and niche, can restructure neural anatomy, which indicates enduring and potential cross-domain effects of a skill initially learned in one domain.

The technologies, infrastructure, and other niche conditions that scaffold the development of embodied skills and modify our embodiment are neither randomly dispersed throughout populations nor picked up at our disposal. Niche conditions are interconnected as “clusters,” which afford particular sociocultural activities and structure particular ways of life (a term that will be discussed below). The use of one technology often depends on the uses of other related technologies; the use of a violin immediately depends on a bar of resin, a chin rest, and sheet music, and is distally dependent on further technologies and niche conditions, such as factories and infrastructures of international commerce (Heidegger 1927/2010, 72). We design and use technologies, and groups of them are interconnected to serve sociocultural activities and ways of life. The technologies we use depend on the ways of life to which we are committed and the tasks these ways of life demand from us. Svetlana, for example, is committed to the grungy drummer way of life, so she does not receive scaffolding from the technologies that cluster around the orchestral timpani player way of life.

Niche conditions are the environmental component that underpin the perception of existential properties. These conditions are mind-independent in the sense that they exist independently of any given person’s cognition and behaviors—although they depend on the history of cultural and biological evolution of humans. Let us return to Svetlana and Sylvester and examine the role of niche conditions in their perceptual experiences. There are niche conditions that facilitate Svetlana’s way of life of pizza eating. Pizza parlors, movie scenes, and advertisements are based in artifacts, technologies, and
institutions, and these afford pizza eating and maintain patterns of sociocultural activity. Further historic, social, and economic factors maintain those niche conditions. The interconnected networks of these niche conditions that pertain to a way of life compose a sociocultural niche.

Pizza parlors and advertisements are niche conditions that scaffold the development of the embodied skills that mediate Svetlana’s perceptual access to the tomato so she perceives the tomato as affording incorporation in pizza. If pizza were expensive, or if advertisements portrayed only grandfathers eating pizza, Svetlana would not have developed her skills. She might have chosen some other food that is cheap and fitting of her demographic to eat. If pizza were made of applesauce, rather than tomato paste, Svetlana would not have developed the skill of recognizing tomatoes as pizza ingredients. If Svetlana lacked these skills, the tomato could not manifest the existential properties related to pizza. Embodiment conditions (e.g., embodied skills) and niche conditions are interdependent, and both are transcendental conditions necessary for the perception of existential properties.

Furthermore, ecological conditions, whether niche or nature conditions, are sources of potential information that we skillfully access as the particular objects in our world. Gibson argues that stable covariances between environmental cues serve as potential information (Gibson 1979/2010, 231). Subpersonal systems are sensitive to certain covariances, and over a conditioning process we become attuned to these covariances and extract information from them. These sensitivities are another way of describing embodied skills.

The constitutive role of niche conditions in the perception of existential properties follows this Gibsoian model. Many socioculturally-dependent events take place within and maintain the existence of a sociocultural niche. Because patterns of interactions between human practitioners and niche conditions are relatively stable, the sociocultural events that result from these interactions are also relatively stable, and such events can be linked as covariances and be exploited as information, by an adequately skilled perceiver. An affordance can be composed of multiple inter-nesting orders of covariances between
environmental cues, especially if the affordance solicits a complex social behavior (Gibson 1979/2010, 231). Analogously, an existential property can be composed of complex information that is extracted from multiple inter-nesting orders of covariances between sociocultural events.

Sylvester’s behaviors, for example, are driven by his informational sensitivity to covariances between certain sociocultural events that are relevant to the health freak way of life and are situated in his sociocultural niche. He is sensitive to covariances between the tomato’s visual properties of being red, round, and shiny and a tomato category; a tomato category and a GMO category; and a GMO category and a carcinogen category. These categories arise from the regular and norm-constituting activities of practitioners (e.g., board members of health food corporations; shoppers at health food stores) in relevant sociocultural niches of the cultural context in which Sylvester has developed. These covariances compose the complex existential properties that the tomato manifests in his perceptual experience.

**Social Norms**

But here, a “frame problem” might arise. There are virtually infinitely many sociocultural events and infinitely many possible covariances in our distal environments, and it seems we might attend and develop sensitivities to any of them. How do we develop sensitivities to particular covariances, which ultimately compose the existential properties we perceive? Answering this question requires us to introduce a second kind of transcendental condition, *norm conditions*. Social norms play a necessary role in regulating the activities in which we participate, the embodied skills we develop, and ultimately the existential properties we perceive. Social norms are interconnected in clusters that are determined by *ways of life*, just as tools, institutions, and other niche conditions are interconnected and unified under sociocultural niches.
Ways of life are definable at many levels, such as those based in nationalities, subcultures, families, hobbies, careers, personalities, and so on. A way of life is constituted by an interconnected network of social norms that specify the worldviews, attitudes, behaviors, and other aspects of a practitioner, on the one hand, and the functions of objects, technologies, and other niche conditions, on the other hand, reciprocally dependent on the practitioners who embody the way of life and maintain it, reciprocally dependent on the interconnected network of niche conditions, which constitutes a sociocultural niche, and the outcome of evolutionary processes by which successive generations of practitioners are shaped by and modify the way of life.

I acknowledge that there might be ontological differences between “ways of life” at these different levels. For example, ways of life might differ on their degree of dependence on particular members; in the kinds of practices that their constitutive social norms institute; and in the degree of variability between ranks of members of the group (Epstein 2017). These differences, however, do not challenge my definition, which is formulated at a level that is general enough to capture ways of life that differ on these measures.

I draw on Thomasson’s normative conception of social groups (forthcoming), Millikan’s theory of proper functions (1989), and John Haugeland’s interpretation of Heidegger’s theory of Dasein (2013) in formulating these criteria.

My concept of way of life might be confused with the concept of social groups in the social ontology literature, so let me spell out the similarities and differences between them. Social groups and ways of life are similar in that both are not an additional first-order object apart from all the first-order objects that constitute it (e.g., members who embody the way of life) (Thomasson forthcoming). Ways of life are different than social groups in that the former are more specifically defined. Social groups permit a broad range of kinds of conditions that give rise to them. For example, a particular board of trustees might originate from rules specified in a particular institution’s code, whereas a racial group originates from a set of broad historical, political, and geographical conditions (Epstein 2017).

On my definition, ways of life rule out social groups that are formed over a less broadly historical basis, such as a particular board of trustees. I require that ways of life are formed over an extensive historical lineage. This is because highly local groups, without a historical basis, tend to not to have acquired full-fledged sociocultural niches, which require inter-generational construction and evolution. The general possibility of a board of trustees (in contrast to a board of trustees of a particular institution), however, has a stronger historical basis and counts as a way of life. The criterion that ways of life be accompanied by sociocultural niches is crucial in the problem of the constitutive role ways of life play in perceptual experience. Arguably, a social role that is highly local and unaccompanied by a niche could not determine the existential properties that show up for a perceiver.

There is another difference between my approach to ways of life and that of social ontologists towards social groups. Social ontologists are generally interested in questions concerning the metaphysical makeup of social groups and the methods by which they can be
At a general cultural level, for example, Eastern and Western cultures can be distinguished. No matter how problematic and incoherent this distinction is in some contexts, there are significant differences between these cultures (e.g., Eastern cultures tend to be more communistic, while Western cultures tend to be more individualistic). Ways of life are also distinguishable at fine-grained levels. There are fandom communities, for example. These are internet-based communities surrounding fictional universes (e.g., Avatar the Last Airbender), whether based in novels, video games, or movies. Networks of social norms govern the behaviors of practitioners and functions of niche conditions. Networks of niche conditions of videos/books, merchandise, fanfictions, chat platforms, and so on scaffold the development of the embodied skills required to access the distinctive existential properties unified by this way of life.

Some behaviors and practices embedded in a given way of life can be found across many, or even all, ways of life because these are driven by normative biological functions, which are determined by nature conditions. Given that sociocultural traditions have developed in conjunction with the biological evolution of our species, some social practices are especially constrained by biological necessity. People consume food and defecate, for example, across all ways of life. People will necessarily have these practices, regardless of their ways of life.

But the feature of being driven by biological necessity does not preclude the practice from being governed by social norms and having cultural expressions. Although we all eat, different communities have unique practices and expectations concerning food consumption. Throughout this thesis, I will use the blanket terms social norms and norm adequately categorized (Epstein 2017; Gilbert 1989). In contrast, I am primarily interested in the ways by which social groups or ways of life transform a member’s perceptual world, subjectivity, and possibilities of thought and action.

When I talk about normative biological functions, I do not imply that people who deviate from these functions are dysfunctional. We can distinguish between dysfunction, as a value-laden concept, and statistical deviation, as a natural occurrence given the intrinsically variable nature of biological reproduction and evolutionary processes. The latter does not entail the political and social judgments that might be implied by dysfunction. In chapter 4 I will discuss normative biological functions in more detail (Millikan 1989, 2013).
conditions to cover norms regarding all human behaviors and practices, since even the most biologically necessitated ones are socioculturally situated.

Each person inevitably embodies overlapping ways of life. Attempts to draw clear distinctions between a person’s various ways of life are futile; there are no clear boundaries, and the concept of a distinct way of life is a heuristic. Nonetheless, it is useful to estimate the distinct ways of life to which a person commits and the manners by which these ways of life interact. The same object can manifest different sets of existential properties relative to the different combinations of ways of life people embody. Even if two people ostensibly share the same ways of life, they will occupy distinct perceptual worlds, because each person is committed to a unique constellation of ways of life, which interact in unpredictable ways.¹⁰

Norm conditions define and regulate the practices that compose a way of life. This kind of transcendental condition solves the “frame problem.” We become informationally sensitive only to the covariances between sociocultural events that are relevant to fulfilling

¹⁰ We can try to compartmentalize our ways of life and separately approach activities that belong to each, but in many cases all our ways of life have bearing on our performance of an activity under any given way of life and thus on our perceptual experiences during it. Ways of life also influence each other at a macro-level of life decisions and developmental trajectories. Actualized ways of life can set constraints on which new ways of life are viable considerations for potential commitment. Because we all have various ways of life, and the boundaries between them and their number are positively indeterministic, any stereotypical way of life is never found in an absolute form, for any given person. When a person commits to a way of life, her particular perceptions and performances are always unique.

Nonetheless, some people might more or less compartmentalize their social roles; I thank Professor Sandra Mitchell for pointing out the possibility of conflicting ways of life. Circumstantial factors might lead to a greater necessity to develop almost distinct perceptual worlds and sets of embodied skills for each particular context. For example, a person who embodies ways of life whose social norms seem to conflict with each other (e.g., in some communities, being a woman and a scientist) might experience more pressure to deny and separate out the existential properties that appear during activities of one way of life that arise from concerns and skills of another way, so that she can succeed in the former.

But even in extreme cases of compartmentalization, I think an activity of one way of life inevitably exhibits existential properties that are shaped by other ways of life. We cannot repress select sets of embodied skills, since these are preconscious in nature and determine the perceptual world whenever situations call for these skills. Furthermore, during the developmental process of becoming skillful at activities of one way of life, we cannot help but rely on our former knowledge and skills developed under the guise of other ways of life.
the normative practices and perceptions of objects that uphold our ways of life. Norm conditions determine this selection process. Norm conditions, in effect, also determine the development of embodied skills for coping with these activities and objects. By conforming to norm conditions, we become successful practitioners of a way of life, gain access to the affordances and existential properties to which only members are entitled, and ultimately pass down this way of life to future generations.

What are the means by which norm conditions have their governing force and function as transcendental conditions of perceptual experience? What is the original source of their normativity? The source is based in our existential commitments to ways of life (Haugeland 1998, 341). This commitment does not result from social obligation or responsibility to any external thing. Rather, existential commitment arises from a sociocultural extension of the biological drive for survival. Ways of life define our sense of personal identity and structure the perceptual world, into which we are “thrown.” Failure to satisfy the normative demands of our ways of life results in self-alienation and alienation from a world, which has lost its usual meaning.

Phenomenologically, this alienation is tantamount to death, the loss of self and world. Angst, as theorized by Heidegger, is related to such existential death (Heidegger 1927/2010, 134). Heidegger’s Angst is related to what we call depression, dissociation, or depersonalization. We are seized by a horrible bodily feeling that impedes us from accessing the usual meaning of objects and from immersing ourselves in the usual activities of our lives. Or, we lack feeling altogether, and this lack also paralyzes us and throws us in an alien world.

Failure to satisfy social norms and fulfill existential commitments induces this sort of suffering. It is similar to the sorts of pain induced by threats to biological survival. A consequence of our distinctively human sociocultural embeddedness is that our phenomenological sense of survival is tied not only to biological needs but also to social
needs based in our ways of life. Each person is a biological life form and also has her own life. Endangerment of either sense of “life” is accompanied by pain and suffering.

The avoidance of suffering is instinctual and mostly unconscious. Biological subsystems automatically maintain our breathing, perspiration, circadian rhythms, etc. Similarly, we automatically perceive existential properties that satisfy normative values of objects and automatically monitor our own and others’ performances according to social norms. This drives the development and maintenance of our embodied skills, which determine that objects manifest existential properties relevant to our performance of sociocultural activities and fulfillment of commitments. With the constant threat of existential death, our commitments are backed with an instinctual urgency, which is self-arising and does not require external obligations. Our commitments, in effect, motivate us to conform to norm conditions.

I have argued that niche conditions and norm conditions are transcendental conditions of the possibility of existential properties; when added to the embodiment conditions understood by previous philosophers, we end up with a sufficient account for the perception of existential properties.

I have argued that the existential properties an object manifests depend on the perceiver’s situatedness in a sociocultural niche and on her submission to social norms, which are independent of any given perceiver. The contents of these properties are based in the object’s uses in sociocultural contexts (e.g., conversations, tasks, activities), the object’s interdependence with related objects, and covariances between the events in which these objects are used. These predictable uses are organized by ways of life, and their corresponding networks of niche and norm conditions. Reciprocally, ways of life are regulated by the occurrent uses and perceptions of these objects by practitioners of these ways of life. A person must be existentially committed to the relevant ways of life to

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11 Schopenhauer said: “Man far surpasses [animals] in power and in suffering… [Animals] are given up entirely to the impression of the moment… while he is determined by abstract concepts independent of the present moment. He therefore carries out considered plans, or acts in accordance with maxims… The animal learns to know death only when he dies, but man consciously draws every hour nearer to his death” (1819/2012b, 37).
permit its niche and norm conditions to shape her embodiment and let her perceive objects as such. This forms the basis of the *Transcendental View*, the thesis that ways of life, embodied skills, and existential properties are dynamically interdependent.

But what about the *processes* by which existential commitments let norm conditions have normative authority over our development? What are the processes by which norms come to shape our embodied skills and perceptual world? How are existential commitments, embodied skills, and existential properties dynamically interdependent? These questions are addressed in chapter 4. There I argue for the thesis the *Reflection View*, which provides a fine-grained account of the top-down and bottom-up developmental processes implied in the Transcendental View. I conclude this chapter by considering some objections and then arguing for the *Unbounded View*. Together, these three theses constitute *existential enactivism*.

*Objections*

I will address three potential objections to my view. The first objection grants the reality of existential properties but denies that niche conditions are necessary for their existence. The second objection also grants the reality of these properties but denies that norm conditions are necessary. The third objection rejects the existence of existential properties altogether.

The first objection goes as follows: the philosophers I have criticized are right to remain silent on the question of whether there is an environmental condition that is necessary for the perception of existential properties. Existential properties depend only on embodiment conditions, whether construed as embodied skills or intentional attitudes. When Sylvester perceives the tomato as manifesting the existential property that it is a carcinogenic GMO, this property depends solely on Sylvester’s skills of understanding the carcinogenic nature of GMOs, identifying GMO tomatoes, and denouncing them. No further conditions are necessary. Only sensory properties require being grounded in material features of the environment. My intuitions are driven by belief in the realism of
sociocultural niches. But this is just a metaphor, and only purely material, ecological niches exist.

This objection misses the mark. My opponent might be motivated by concerns for parsimony; embodiment conditions are enough, and a sociocultural niche is a spooky theoretical entity. But to neglect the latter amounts to incompleteness, rather than parsimony. Niche conditions play a scaffolding role that is necessary for a perceiver to develop embodiment conditions. For example, the way of life of the health freak is defined by the embodied skills for interpreting bodily signs in light of health news, and the development of these skills requires the perceiver’s interactions with niche conditions such as health food stores, corporate advertising, gossip with fellow health freaks, and the like. If these niche conditions did not exist, a person could never develop these skills or perceive corresponding existential properties.

There is no way to bypass the necessity of the scaffolding by niche conditions. A person might have the capacity to imagine a fictional universe in which she has embodied skills and perceives certain existential properties which are novel relative to her actual sociocultural context, but imagination alone could never amount to the actual development of skills. To return to the experimental evidence of taxi drivers: they could develop embodied skills that changed their hippocampi sizes because they regularly drove taxis and engaged in navigation skills. A person who merely imagines driving a taxi around a city all day would be unable to develop such skills, which are instantiated in neurophysiological changes.

But what about norm conditions? Are these necessary for the development of embodied skills? The second objection argues that social norms, and the ways of life that unify them, are superfluous or fictional entities. The only relevant feature of these theoretical entities to accounting for existential properties is collective intentionality, or the replication of embodied skills across individuals of a community. Collective intentionality only requires that people are predisposed to conformity and they engage in behaviors that induce conformity (e.g., reward and punishment behaviors). Social norms and ways of life do not exist above and beyond such behaviors of individuals.
This objection, too, is mistaken: the situation it depicts presupposes the effects and reality of social norms. A mere aggregate of people, which is not unified by the governing effects of social norms, would be not be synchronized, and so would be unable to institute coordinated action or a systematic replication of embodied skills. In an aggregate, individuals do not depend on each other in order to manifest the behaviors they do. As consequence, individuals either manifest independent and different behaviors or, if they somehow, miraculously, displayed similar behaviors, each behavior would be accidentally acquired by some means other than conformity to each other. But in such a case, individuals could not coordinate, even if they displayed similar behaviors; they would not be interdependent and joined in the ways necessary for social coordination and conformity. If they could not coordinate, they also could not construct and co-inhabit the sociocultural niches that provide the niche conditions necessary for the development of embodied skills and the perception of existential properties.

Conformity presupposes an interdependence between members that entails that the members amount to a whole, rather than an aggregate, and a whole is an emergent entity. In a whole (e.g., a way of life, social norms), individuals can perform the behaviors they do only by virtue of their interactions with and influences on each other. Individuals notice that others behave in some way and feel pressured to behave similarly. Any given person could not acquire a behavior without others already displaying the behavior. So, an adequate explanation of a behavior requires reference to the whole (Tolman 1938).

Moreover, on the argument from multiple realizability, a whole has high-level properties that can be instantiated by different sets of low-level properties, so there are cases in which a given set of low-level properties cannot entail some high-level property. There must be some distinct relations or configuration between level-level properties that enable them to give rise to the whole, and the necessary addition of these relations prevents the whole and the parts from having an identity relationship. Thus, my

12 See Sober (1999) and Fodor (1975) for arguments from multiple realizability. There are also other arguments that refute reductionism: see Baker (1987) for an argument from the distinct modal properties between parts and wholes; and Tolman (1938) and Putnam (1975) for
opponent does not achieve greater parsimony by eschewing norm conditions and ways of life, but cuts the explanation short. Because a way of life and an aggregate of individuals lack an identity relation, reducing the former to the latter is a mistake.

The third objection is that the existential meaning that a person notices in a situation are dependent on non-perceptual cognitive activity, such as inference and imagination. In Sylvester’s experience, the meaning that the tomato is carcinogenic might seem to be perceptual, in the sense I have defined (in chapter 1): the meaning spontaneously and mandatorily shows up in experience, independently of the perceiver’s voluntary responses. But this meaning is actually not perceptual in this sense; rather, Sylvester perceives the round, red object and then infers it is a tomato, a GMO, a carcinogen, and so on. Even if Sylvester believes that he perceives this meaning, he is mistaken and conflates the contents of perception with the contents of inference and imagination.

There are two variations of this objection. On the first variation, Sylvester perceives only a round, red surface. The identification of this perception with the concept of a tomato kind, let alone the multiple concepts required for the identification of this tomato as a carcinogenic GMO, is inferred downstream of perception. On this view, no meaning, including kind-properties, are perceptually available. On the second variation, Sylvester does not perceive low-level properties, but directly perceives a tomato, a thing of a kind. Very high-level properties, however, like complex existential properties, are inferentially constructed downstream of perception.

arguments from the explanatory necessity of high-level properties to account for features of wholes.

Thomasson has applied arguments for the ontological realism of ordinary objects to arguing for the realism of social groups. The metaphysical concerns that lead to the denial of ordinary objects and social groups alike are founded on a “scientific conceptualization” of metaphysics (viz., a trend in metaphysics to take Sellars’ “scientific image” as ontologically privileged), in which philosophers try to explain phenomena in line with eliminativist approaches to natural science. Thomasson argues that this eliminativist approach is untenable. Its proponents often rely on false assumptions about the casual capacities of fundamental particles or other scientific entities that are stipulated as the ultimate units of explanation (Thomasson 2010, forthcoming).

I draw on Siegel’s defense of causation, class/kind, and subject/object dependency properties as a template for framing objections of this third opponent (Siegel 2010).
I first respond to the first variant: it is phenomenologically counterintuitive that we perceive sensory bits of color, shape, or size, and then draw inferences that these provide evidence that there is a tomato. Sylvester would only notice low-level properties in exceptional cases in which he relates to the tomato with detached observation, rather than with ordinary perceptual engagement. For example, when he tries to paint the tomato, he might notice visual properties. But when ordinarily perceived, the tomato is not a conglomeration of sensory properties.15

And indeed, this objection is undermined by a host of studies in cognitive science and psychophysics. Human behavior and neuroimaging evidence supports that we perceive at least kind-properties and do not normally perceive low-level properties (Hegdé & Kersten 2010; Hsieh et al. 2010; Humphreys & Riddoch 2001; Kok et al. 2014; Moore & Cavanagh 1998; Neri 2014; Summerfield & de Lange 2014). Moreover, it is implausible that the cognitive system engages in perceptual discrimination at this fine-grained level, which requires constant inferential processes; this would be inefficient energy expenditure.

This leads to my reply to the second variant. I take kind-properties to be a subset of existential properties; the recognition of particulars as belonging to kinds is a conceptual achievement, presupposes the use of embodied skills, and is situated in sociocultural niches. The concept of a tomato includes the various ways that tomatoes are used in our daily lives. Existential properties are those that depend on our existential commitments to ways of life; so kind-properties are a subset of existential properties. If my opponent accepts the perception of kind-properties, they must also accept the perception of the entire range of existential properties.

Blocking this inference requires a further argument. One might appeal to the fact that kind-properties are simpler than other varieties of existential properties and argue

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15 Heidegger’s analysis of the difference between presence-at-hand and readiness-at-hand, two modes of being, is a useful supplement (Heidegger 1927/2010, 111). Heidegger argues that the phenomenology of experience depends on the mode by which we encounter objects in the world. We usually encounter the world not as scientific or artistic observers of things but as engaged participants.
that perception can accommodate only simple existential properties. The concept of a tomato is simpler than the combination of concepts deployed to understand that the tomato is a carcinogenic GMO that exemplifies the lamentable effects of US capitalism on food practices, for example. The latter requires the use of language-mediated inferences, which are non-perceptual. Hence, the embodied skills that determine complex existential properties are not transcendental conditions of perception; but perhaps they are cognitive skills that guide inferences and generate knowledge.

One might defend this view by using the method of phenomenal contrast (Siegel 2007, 2010). This method tests whether an element is perceptual or non-perceptual and based in doxastic states. It starts with a pair of cases that are similar on all respects except for a targeted phenomenal feature. It then asks whether this phenomenal contrast is due to a difference in the perceptual phenomenology or in non-perceptual states (e.g., beliefs). If the former is the better explanation, then we have evidence that this phenomenal feature is perceived, rather than based in non-perceptual states. I will not deploy the method in this traditional manner, which is designed to test a series of competing hypotheses that explain the phenomenal contrast. Instead I will provide contrast cases that differ in the doxastic states of the perceiver, because I am primarily interested in showing that existential properties are not based in belief states.

16 There has been pushback against the validity of this method (e.g., Nanay 2012). This method is based on a combination of phenomenological intuition and reasoning to the best explanation. Given the notorious fallibility of phenomenological and introspective methods, we have strong reason to doubt the outcomes of applications of the method. This critique, however, primarily discredits the method’s ability to draw conclusions regarding the details of processing that underpins perceptual and non-perceptual activities. For instance, introspection cannot shed light on neurobiological facts. Introspection can, however, shed light on how we experience the world, or what seems to be the case in our first-person experience. Existential enactivism, on the other hand, concerns not subpersonal neurobiological or cognitive processes, but first-person experience and higher-level phenomena, and any arguments about facts at subpersonal processing levels are secondary and utilize non-introspective, empirical evidence. So, this method has validity in the domain with which I am concerned.

17 Other hypotheses could be raised to explain the phenomenal contrast, but I my use of the method presupposes that the relevant hypotheses are only that the phenomenal contrast in based in perceptual experience, or that it is based in inferential activity. These additional hypotheses include the denial of any phenomenal contrast, that schemata or gestalts of low-level properties explain the contrast, or qualia explains the contrast (Siegel 2010, 111, 132, 137). I take additional
Suppose, for instance, that Sylvester has a change of heart and now believes that GMO products are safe. According to my objector, this change in doxastic states leads to a change in the meaning of the tomato. Sylvester now experiences the tomato as simply a GMO product, and not as a carcinogen. Contrast this mutability of complex meaning with the stability of kind-properties. Sylvester could adopt the belief that this tomato is not a real tomato, but rather an otherworldly entity that God placed before him to test his responses. But in this case, Sylvester would nonetheless perceive the object as a tomato. Because toggling doxastic states causes changes in complex meaning but not in kind-properties, the complex varieties of meaning that I have argued for must depend on doxastic states; they are not perceived. To determine the upper bounds of the complexity of existential properties that are perceived, we can apply this method to properties across a range of complexity and identify a threshold in which properties do not change when doxastic states do.

Although this conclusion might seem plausible, the objection ignores an essential distinction between occurent doxastic states and enduring background knowledge, a sort of embodiment condition. Although doxastic states and background knowledge are related, there is functional difference between them. By determining the contents of perceptual experience, embodiment conditions have a processing role. Embodiment condition are not ordinarily objects of awareness; instead, they determine the contents of awareness, particularly of perceptual experience. Doxastic states, in contrast, are just objects of awareness, which lack the processing role that embodiment conditions and other cognitive functions have (Stitch 1979, 502). This functional difference between embodiment conditions and occurent doxastic states is also born out in our everyday experiences of hypocrisy, or of inner conflicts, in which we “know” something, but our “feelings” are in opposition to it.

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hypotheses that are evaluated by applications of phenomenal contrast in the literature as irrelevant. I assume that there is a phenomenal contrast in these cases. Hypotheses that posit gestalts of low-level properties or qualia entail the same conclusion that k-properties are present in perceptual experience qua my definition of perceptual experience. So my defense that the phenomenal contrast is based in perceptual experience is consistent with any hypothesis that does not explain the contrast on the basis of doxastic or inferential activity.
On my account, only embodiment conditions, including background knowledge, are transcendental conditions of perception. Occurrent doxastic states, which are potentially inconsistent with background knowledge, cannot serve this role. The objection we are considering equivocates on the term *belief*. In formulating the contrast cases that test the kind-property, my opponent presumes that Sylvester’s belief is rooted in *background knowledge* that this object is a tomato; hence, the kind property is perceptually stable in spite of changes in doxastic states. But in constructing the contrast cases that test the complex existential property, my opponent presumes that Sylvester’s belief is rooted in a *occurrent doxastic state* that GMOs are carcinogenic; hence, the existential property would vanish from Sylvester’s perceptual experience when he changes his doxastic states.

This is a mistake. Given that Sylvester is a committed health freak, his doxastic states that GMOs are carcinogenic are rooted in enduring background knowledge. It is very difficult for him to change this background knowledge, and it is a stable feature of his embodiment. If Svetlana convinced him to entertain the doxastic state that GMOs are not carcinogenic, and Sylvester took another look at the tomato, he would still perceive it as a harbinger of cancer, because his background knowledge about the tomato determines this perceptual experience. Embodiment conditions run deeper than doxastic states, and only the former determine existential properties.

If Svetlana took a couple years (or however long it takes) to substantively restructure Sylvester’s embodiment conditions, Sylvester would no longer perceive the tomato as carcinogenic. However, this requires sociocultural scaffolding and long-term practice. Svetlana would have to situate Sylvester in anti-health freak sociocultural conditions; for example, she could constantly show him articles that disprove that GMOs are carcinogenic, or even better, force Sylvester to join a community in which all members share grungy pro-GMOs beliefs, and this community could recondition Sylvester. In effect, Sylvester must uproot himself from his former sociocultural niche, commit himself to a new one, and develop the embodied skills his new community members have. Only once he has developed the embodied skills of this new niche can he form a genuine
existential commitment to this new way of life and no longer perceive tomatoes as harbingers of cancer.\footnote{I draw on Haugeland’s idea of \textit{existential commitment} (1998). We are existentially committed to satisfying normative practices of the communities in which we have developed and with which we identify ourselves.} Similarly, the kind-property of the tomato could even be eliminated from perception, given adequate scaffolding, time, and effort.

I have argued that complex existential properties and their transcendental conditions exist. I still have not specified the threshold of the complexity of existential properties. This question requires a section of its own.

\textbf{The Unbounded View}

\textit{Expert Performance}

Philosophers who have argued for the perception of complex meaning do not specify the upper bounds of this complexity (e.g., Clark 2005; Gallagher 2005; Gibson 1979/2015; Heidegger 1927/2010; Hutto 2014; Merleau-Ponty 1945/2012; Noë 2012; Siegel 2010; Thompson 2007). In this section, I will argue that, in principle, there is no upper bound of this complexity; I call this thesis the \textit{Unbounded View}.

In this section, I will first define \textit{complexity}. Second, I will argue that perception is, in principle, sensitive to very complex properties. I will present cases of remarkably skillful activity (e.g., speech perception and sports performance) and argue that the successful performance of these activities is best explained by the perception of very complex existential properties, which show up in the environment in which the activity is situated and guide action. I then argue that these cases of complex perception are not isolated; they reveal an essential feature of perception itself. Finally, I will propose an empirically plausible account of the processes that reveal that the degree of complexity of existential properties is not, in principle, bounded. This shows that existential properties can be vastly complex.
It is time to unpack what I mean by *complexity*. I have used this to describe existential properties and embodied skills. For example, a tomato kind-property is relatively simple and employs a simple embodied skill in comparison to the complex existential property that the tomato is a carcinogenic GMO product and its corresponding complex skill. Because we perceive existential properties, while embodied skills mediate perceptual experience and are not themselves perceived, *complexity* formally applies only to existential properties. But embodied skills may also be described as complex, in a loose sense, to refer to the fact that these skills are involved in the determination of complex existential properties.

I measure complexity, roughly, in terms of the number and variability of distinct *conceptual domains* involved in the content of an existential property that an embodied skill can access.\(^\text{19}\) I draw on Rosch’s theory of *basic concepts* (1975, 1999) to formulate my account of complexity. I agree with most aspects of this theory and add emphasis that concepts are based in embodied experiences, driven by practical concerns.\(^\text{20}\)

Rosch’s theory is widely influential and supported by excellent empirical evidence (e.g., Bauer & Just 2017; Mace et al. 2009; Potter & Hagmann 2015). *Basic concepts* are the dominant concepts that we are disposed to form and deploy. They are determined by our bodily capacities and relation to the environment, which are contingent on our evolutionary history and enculturation.\(^\text{21}\) We form concepts that are relatively more fine-

\(^{19}\) The role of concepts in cognition is a widely researched and rich topic, and a variety of theoretical approaches can be taken to understanding concepts (see, e.g., Prinz 2004). It is beyond my scope to do justice to this topic, and I will instead provide a sketch of what I take concepts to be and how they are deployed.

\(^{20}\) Here is a way to understand concepts as based in embodied action. Take kinds as an example. We can recognize an object as a tomato because we have been exposed to sociocultural activities related to tomatoes (e.g., holding tomatoes, tasting them, growing them from a vine, cooking with them), and from these embodied experiences, we derive our understanding of tomatoes as a kind. Activities that are not directly experienced can also contribute to our understanding (e.g., activities we learn about through conversations, reading, images), as long as we have had relevant direct experiences that let us make sense of these activities second-hand.

\(^{21}\) In further detail, optimizing energy expenditure also guides the formation of concepts (Rosch 1999). This entails that we form concepts that (1) capture the ordinary objects that we spontaneously access, given our body size, capacities, and enculturation (this point aligns with Gibsonian affordance theory), and (2) are as non-overlapping as possible, so the individuals
and rough-grained, but these extra-basic concepts are not as readily deployable in everyday activities. For example, for most people the concept *tomato* is basic, whereas *baby Roma tomato* is subordinate, and *object* is superordinate; the latter two are not as easily accessible and deployable by an average person in everyday contexts. Since enculturation plays a major role in determining our basic concepts, *baby Roma tomato* might be a basic concept for an culinary expert, or *object* for a philosopher.

Rosch’s theory explains that our concepts are hierarchical, and that in each domain, there is a basic level, which is most readily accessible. Although she does not propose principles that govern the deployment of concepts, she mentions that concepts are likely interconnected in ways tied to “cultural contexts” in which the perceiver is situated and will be deployed in clusters according to their suitability to the particular context (Rosch 1999, 266). A cultural context is defined by sociocultural activities. These are not objective settings that any random perceiver can stumble upon, but they are accessible if a perceiver is existentially committed to ways of life to which the cultural context is relevant.

Conceptual knowledge of a cultural context (e.g., a daily task, hobby, or theoretical discipline), accompanies the mastery of embodied skills to satisfy its normative demands. Because cultural contexts are always situated in sociocultural niches and ways of life, a perceiver’s arsenal of conceptual knowledge is unified by her ways of life. That is, the particular concepts that she understands and deploys in a given context depend on her existential commitments.

Given this framework of concepts, the kind-property of the tomato is simple because it involves roughly one basic concept. In contrast, the existential property that the tomato is a GMO, carcinogenic, indicative of horrible capitalistic practices, and warranting moral disgust is complex. It implicates many and diverse concepts, some of
which are extra-basic. Is it possible for an existential property to be so complex? And how complex could a property be?

Let us examine some cases of activities that would seem to be very cognitively demanding if it were not for the rapid, absorbed manner in which we perform them. I choose cases of speech perception and ball sports because these have substantial empirical research, and they span both “intellectual” and “bodily” activities. This breadth supports that the possibility of such expert performance is not based in features unique to either intellectual or bodily activities, but is rather based in features that span these activities—which I will argue are very complex existential properties, which are perceptually available and guide performance.

Speech perception is a remarkably complex cognitive accomplishment. Speech conveys very rich conceptual content, and we comprehend it automatically, which is evident in our ability to participate in conversations. When we have a heated philosophical debate with a friend, we seem to directly perceive the conceptual contents of her speech. We do not have to sit back, remember the sonic properties of her voice, detect phonemes, and laboriously draw inferences to the meaning of her speech.

According to some cognitive scientists, speech perception relies on extremely complex, high-level processing (Ghai & Singh 2012; Miller 1987). Artificial language processing is notoriously complicated and difficult to engineer because there are a broad array of subtasks needed in language processing, and these tasks are complicated. For example, one must accurately match sonic forms and phonemes to words; one must use syntax, semantics, and general knowledge to represent the meaning of arrangements of words. Despite this seemingly extraordinary complexity of the cognitive demands of speech perception, we seem to comprehend speech effortlessly, becoming directly aware of meaning, rather than of the syntactic structure of the sentence we hear, the words spoken, or the phonemes used, let alone the sonic waveforms that impinge on our ears.

Sports performance also seems to require comparatively complex cognitive processing. A player must execute many tasks that require high motor precision, accurate monitoring of quickly changing events, and rapid decisions, and she must also coordinate
all of them. In cricket, for example, a batsman must estimate the end position of the ball’s potential trajectory within a 3 centimeter range and must predict the time of contact between the ball and bat within a 3 millisecond range. Once the ball is hit, it moves at an average speed of 160 kilometers/hour, and the fielder has less than 0.5 seconds to judge the location at which the ball will land (Land & McLeod 2000). Other ball sports, like baseball, table tennis, tennis, and golf involve similar extraordinarily accurate and quick judgments (Mann et al. 2013). These judgments do not seem to require apprehension of concepts, as speech perception does, but they are remarkably complex in other ways. Sports performance seems to require complex calculations of velocities and distances, predictions of other player’s motions, and so on, in order to achieve such rapid and highly coordinated results. Players on the field have no time to sit back and perform such calculations.

How can people succeed at such complex activities? Processing-level accounts offered by cognitive scientists tend to remain silent on the first-hand experience of the agent (Liberman & Mattingly 1985; Ingram 2007; Massaro & Simpson 2014). For example, modularity views of language processing do not make claims to the contents of a person’s first-hand experience that accompany the modular processing (Bowers & Davis 2004; Parker et al. 1989). Once again, I am not concerned with questions of processing because features at a processing-level do not have necessary theoretical consequences for features at a phenomenological level. The claim that we perceive complex existential properties is compatible with processing-level claims of extreme modularity and of extreme cognitive penetration, for example (I will soon show this). So, I do not directly engage with processing-level accounts but rather focus on explanations based in the phenomenal experience of these cognitively demanding activities.

There are, broadly, three ways to explain the possibility of the expert performance from a phenomenological perspective: (1) The inferential view: we draw inferences and calculations, and these are responsible for skillful performance, (2) The zombie view: we automatically and unthinkingly perform the activity, and (3) The perceptual view: we actively perceive complex existential properties, and these specify the information that
guides our behaviors, so we do not need to draw inferences to make such information available. I will argue that (3) is the best explanation. I will do so by showing that (1) and (2) each violate phenomenological and empirical evidence, whereas (3) effectively explains this evidence.

On the inferential view, success at understanding speech and playing sports is accounted for by the ability to draw the quick and accurate inferences needed to accomplish these tasks. Phenomenologically, we voluntarily test hypotheses and draw inferences to arrive at the complicated pieces of information that are utilized in the cognitive processes necessary for understanding speech or playing a sport. This information is not found perceptually; we perceive only low-level properties. For example, when listening to speech, we perceive only sonic properties and, on the basis of other available information (e.g., information about the pragmatic features of the speech context), draw inferences to the conceptual contents of speech.

But this over-intellectualizes our performance and violates phenomenological intuitions. Just think of how quickly we comprehend speech. There seems to be no time lapse at all between the moment at which a speaker utters words and the moment at

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22 The perceptual view is not quite yet the Unbounded View; the Unbounded View is stronger and centers on the claim that there is no principled upper bound of the complexity of existential properties, whereas the perceptual view is neutral on whether there is a ceiling to the degree of complexity of existential properties and focuses on explaining the possibility of skillful performance.

23 These three views correspond to three major positions on the phenomenology of action. The inferential view captures theories that hold that behaviors follow from previous beliefs and desires (e.g., Davidson 1980; Searle 1979). Although these philosophers do not directly examine the phenomenology of expert performance, their analyses of the conditions of action imply this view. The zombie view captures some interpretations of Hubert Dreyfus’s theory of skillful coping and J.J. Gibson’s affordance theory (Dreyfus 2002; Gibson 2015). Dreyfus, at times, implies that subjects are unconscious in the absorbed moment of behavior, and they only have awareness when they are disrupted (Bergamin 2017; Dreyfus 2002, 373). Gibson argues that affordances are available by virtue of a classical conditioning mechanism; this makes room for the interpretation that behaviors are solicited in an automatic fashion (Gibson 2015, 154). The perceptual view captures the views of philosophers of embodied cognition and phenomenology (e.g., Haugeland 1998; Merleau-Ponty 2012; Noë 2004). These philosophers argue that action and perception are constitutively interdependent; so, skill acquisition is coupled with phenomenological changes.
which we apprehend the meaning of the words. We do not sit back, ascertain particular sonic stimuli, and then infer what this stimuli might indicate.

The inferential view also violates empirical findings. Inferential reasoning deals with propositions, and this requires that we direct our attention to experiences at hand and formulate propositions to describe it. So, inferential reasoning presupposes self-conscious attentiveness to performance. Experimental evidence, however, show that when golfers are asked to analyze their performance and describe it, they are significantly hindered in sports performance; in contrast, experts who are asked to attend to an undemanding extraneous task (e.g., listening to a word list) are not hindered at all (Beilock et al. 2004; Flegal & Anderson 2008). Only the former case forces golfers to become self-consciously aware of their sports performance. Given that self-consciousness particularly hinders performance, success cannot be explained by inferential reasoning, which presupposes self-consciousness.

On the zombie view, self-consciousness, or any sort of awareness at all, does not contribute to our success at complex activities. Rather, our history of practicing has conditioned sub-personal functions so that these automatically execute the tasks needed for successful performance. The zombie view can accommodate any claim about the quality of our awareness during performance; we might be totally unconscious, have some sort of vague awareness, or be highly aware. Regardless of these possibilities, our successful performance is exhaustively driven by subpersonal processes.

But this also violates phenomenological intuitions. During our activities, we have agency and awareness of the perceptual world. This is demonstrated by the fact that successful performance requires flexibility and responsiveness to unexpected events that is incompatible with performance as automatic. For example, we listen to Svetlana ramble about her woes of lovesickness. We are attentive listeners and follow the semantic meanings she conveys. Suddenly Svetlana starts speaking in tongues. This lasts only a few seconds, and she returns to her story of woe, right where she left off. We register this change. We are bewildered at the glossolalia and continue to be baffled as she continues in normal speech; despite this disturbance, we are able to continue following the thread of
her story. If automatic processes exhaustively accounted for our performance, we would be incapable of responding to such unpredictable changes.

A proponent of the zombie view might reply that different sets of automatic processes are activated and responsible for our performance of comprehending Svetlana during the periods before, during, and after she spoke in tongues. But this no longer seems like an automated processes. This random event was truly unpredictable, and we have not experienced others like it before; automatic processes have not been conditioned to accommodate such experiences. Moreover, we would still have to explain the mechanism responsible for process-shifting, which cannot be automatic and seems to require agency.

The zombie view is also inconsistent with empirical evidence. Neural activity is different between people who perform rote, conditioned activities and people who perform cognitively demanding activities (Dai et al. 2017). This indicates that demanding activities cannot be executed in an fully automatic fashion.24

The perceptual view overcomes the problems that the inferential and zombie views both face and is the best explanation of the possibility of our performance of complicated activities. Complex existential properties show up during our performance, and these inform our actions. Consider the following analogy. We are stuck in the woods and try to find our way out. In one case, a path has been paved, and it leads us out. In another case, no path has been constructed; there are only labyrinthine ways to wiggle past tight clusters of trees, and we must guess which is the right direction. The first case is analogous to the perceptual experience of an expert who is skilled at an activity; these skills determine that complex properties show up and lead her activity, so she does not have to infer to the information needed to guide action. 25 The second case is analogous to

24 This is not to say that some component processes in complex activities are “automated”; we are not aware of every cognitive and physical motion taken during a complex activity. But we are nonetheless actively engaged in a way that the zombie view cannot accommodate.

25 I draw on Haugeland’s example of taking the highway to San Jose in “Mind Embedded and Embodied” (Haugeland 1998, 234). This highway “off-loads” the cognitive labor that the agent otherwise would need to perform in order to calculate the travel route to this destination.
an amateur without adequate skills; there are no informative properties that show up in her perceptual world, and she must draw inferences and test hypotheses in order to perform the activity at hand.

Dreyfus has argued for an account of skillful activity at length (e.g., Dreyfus 1991, 1992, 2002, 2006, 2007a, 2007b). Drawing on Heidegger and Merleau-Ponty, Dreyfus argues that by virtue of the co-constitutive relationship between embodiment and world, skillful activity determines changes in the perceptual world, which reciprocally determines changes in activity (see chapter 2). When a person has achieved expertise at some activity, her skills enable her to encounter possibilities of action in the environment, and these affordances guide activity (Dreyfus 2002). The information specified by affordances might require inferential reasoning for beginners, but it is immediately available for experts (Dreyfus 2002). Only when the expert encounters obstacles, or steps of the activity that requires special attention, does she break from the absorbed moment and reflect on the situation at hand (Dreyfus 1991, 74).

The perceptual view is supported by phenomenological and experimental evidence. Take speech perception. When we hear speech, we do not perceive sounds but rather perceive the meaning that speech conveys. This fact is illuminated by the method of phenomenal contrast (Miller 1987; O’Callaghan 2010). In one case, we hear Svetlana speak a familiar language. In another case, we hear Svetlana speak a foreign language. Generally, this insight is discussed in and supported by the cognitive off-loading literature (e.g., Chemero 2009; Clark 1997; Rowlands 2010).

Dr eyfus’s phenomenologically-based arguments are supported by empirical evidence (e.g., Beilock et al. 2004; Flegal & Anderson 2008; Land & McLeod 2000), although some of the evidence shows that Dreyfus’s account requires some expansion. In particular, there is evidence that highly skillful activity is conducted on the basis of a periodic alternation between pre-reflective, absorbed activity and reflection (Bermúdez 2017). Skillful activities involve multiple components of actions; performance of these components can be highly automated, but the coordination of these components is necessary for successful performance, and only higher-order reflective processes can execute such a coordination function. Furthermore, agents of skillful activities are at risk of being distracted, and self-conscious reflection is required for focusing and bracketing out distractions (Montero 2015). For example, in the activity of writing, an agent might need to both recall memories and follow a present line of thought; reflection is required to coordinate these components. If she write at a noisy café and is vulnerable to distractions, reflection is required to sustain focus. These theories disagree with Dreyfus’s view that reflection is only a rare occurrence during performance.
The semantic contents of speech, the pitch of her voice, the physical environment, our doxastic states, and all other variables are held constant between these cases; the only difference is the language with which Svetlana speaks.

Are there differences in the perceptual experiences between these cases? On which aspects of the experiences are these differences based? Intuitively, the cases are very different. In the former, we perceive the meaning of Svetlana’s speech. In the latter, we cannot detect any meaning and perceive only the timbre, rhythm, and other low-level, properties of the speech. Because the only variable that differs between the cases is our mastery of the language that is spoken, this phenomenal contrast indicates that such mastery has a constitutive role in phenomenological experience. Mastery of language is a sort of embodied skill, and it determines the contents of perceptual experience, which can be as conceptually complex as the semantic contents of speech can be—or so I will argue below.

The apprehension of the semantic contents of speech is not only immediate but also inevitable, to an extent. If we have mastery of the spoken language, we cannot choose to hear a person’s voice as a sequence of sonic events any more than we can choose to see a tomato as a meaningless intersection of shape and color properties; both the conceptual properties of speech and the kind-property of the tomato show up spontaneously. On my definition of perception, it is thus accurate to functionally categorize the contents of speech as perceptual in nature.

The phonemic restoration effect is highly replicated and supports the perceptual view (e.g., Warren 1970; Groppe et al. 2010). When participants listen to a sentence, and a random phoneme is replaced by a non-linguistic tone (e.g., a cough), participants report that they perceived the entire sentence, and that the cough is extraneously added. This indicates, at the least, that we do not primarily perceive low-level properties of sounds; if that were the case, then participants should perceive the absence of the phoneme and the

27 The same holds true for reading. I will not explore this case in detail. In brief, when we read, we cannot help but perceive the meanings conveyed by the text. We can try the best we can to perceive only the visual forms of text (e.g., the black squiggles) but it is extremely difficult, and we end up noticing the semantic contents of the text.
cough as its replacement. This is evidence against the inferential view, which would hold that we perceive sonic properties and infer the meaning of speech. Although the zombie view might explain this particular finding, it cannot explain speech perception generally, for the aforementioned reasons that speech perception is generally flexible and resilient. In contrast, the perceptual view can effectively explain the phonemic restoration. Participants perceived the conceptual properties of the sentence, so they perceived the complete sentence and the cough as extraneous.

Studies also show that expert and amateur cricket players differ in patterns of eye movement, which indicates differences in their perceptual experiences. Expert batsmen quickly flick or saccade their eyes twice; first towards the spatial point at which the ball will bounce on the ground, and second toward the point at which the ball will make contact with their bat (Mann et al. 2013). In contrast, amateur batsmen only make the first saccade. Moreover, the expert eye saccades are more accurate with respect to the actual points at which the ball hits; their saccades have higher predictive power than the saccades of amateurs (Mann et al. 2013).

The perceptual view effectively explains this difference in eye saccading; it is due to a difference between the perceptual worlds that show up for experts and amateurs. Experts perceive the complex properties that indicate the possible trajectories of the ball, and so they can accurately flick their eyes along this potential trajectory, before the ball actually follows it. Amateurs cannot do this, or they do it less accurately. This indicates that complex properties, or at least those that guide prediction of a highly precise trajectory of a tiny ball, are admissible in perceptual experience. The inferential view cannot explain this difference because eye saccading occurs too rapidly to be the result of recognizing low-level stimuli and formulating beliefs. The zombie view cannot explain this difference between expert batsmen are responsive and resilient to unpredictable events in gameplay.

I have argued that we perceive complex existential properties, and these guide our behavior in the performance of complicated activities, such as speech perception and ball sports. I will now argue that the perception of complex properties is not based in features
unique to these particular activities but is generalizable to perception in general. I will argue that the possibility of perceiving complex existential properties is based in our existential commitments to ways of life and could hold in any given activity or situation. This is a crucial step towards arguing for the Unbounded View, that there is no principled upper bound to the complexity of existential properties that are registered in perception.

I can imagine the following modularist objection: cognition is based in modules that automatically and mandatorily execute processing relevant to performing highly localized activities (e.g., Fodor 1983; Raftopoulos 2015). On some accounts, modularized processing systems exist for the execution of only certain activities, which are determined on the basis of selection pressures; these include language processing, visual perception, and motor coordination (Fodor 1983). I have merely shown that complex existential properties are available in perceptual experiences of language processing and sports performance. According to my opponent, extra-perceptual features of particular modules are responsible for the determination of complex existential properties and for the successful performance of these activities. So, the possibility of perceiving complex properties is based in features of these localized modules, rather than in features of processing systems of perception generally. We cannot expect to find complex existential properties in situations other than those that engage these modules.

But modularity of mind is empirically contentious. There is no evidence for modularity regarding sports. Although there is evidence for modularity of language processing, this evidence is debatable (Heiser et al. 2003; Marsden-Wilson & Tyler 1987; Saygin et al. 2003). Moreover, regarding skill-based activities, there is evidence that skills developed for one activity are applicable in other activities. I have presented evidence from studies on neural plasticity earlier in this chapter, and this might challenge the view of modularity. There are no substantial reasons to think that the admissibility of complex existential properties in the perceptual experiences of speech perception and ball sports playing should be barred from generalization on the basis of the modularity objection.
But another, non-modularist objection might be raised: the perception of complex existential properties is constrained to only a few activities, due to some distinctive extra-perceptual features that are necessary for such perception. I have argued that embodied skills are necessary for the perception of complex existential properties. Because we do not develop special skills for particular or random perceptual situations, these should not manifest such properties. So the perception of complex properties is constrained to “proper activities” for which we develop expertise-related skills. For example, we might walk through the neighborhood at night and notice a flickering light bulb in someone’s room through their window; glance at a weed growing in sidewalk cracks on which people keep on trampling; and so on. These random, highly-particular encounters do not seem comparable to the proper activities of listening to people speak or of playing sports. It makes sense to say that we develop special skills for the latter activities; but who would ever say we develop skills tailored for the former scattered moments? Existential properties are not registered in perceptual experience, generally.

This objection has a bite: it is correct that on my theory, embodied skills are necessary for the determination of existential properties, and I have not yet specified the relationship between embodied skills and general perceptual experience. So far, I have left room for the interpretation that highly complex existential properties can be determined only by special skills that are developed for special activities; this makes it seem that the possibility of perceiving complex properties is based in non-perceptual features of special activities that permit the development of the relevant skills.

But I will show that the necessary condition for an activity to permit the development of the special embodied skills that entail the possibility of perceiving complex existential properties—which I call proper skills in this section—is the relevance of the skill to our existential commitments to ways of life. On my account, existential commitments regulate perception generally; thus, the possibility of perceiving complex properties is intrinsic to perceptual experience. I will first provide a reductio case; the extreme specificity and randomness of this case might indicate that it should not permit the development of embodied skills. Then, I will provide a second case that is comparably
specific and random but nonetheless intuitively permits the development of proper skills. This shows that features unique to proper activities do not constrain the possibility of developing proper skills and of perceiving complex properties. I will argue that, rather, ways of life govern the development of proper skills. This provides the foundation for my next argument for the Unbounded View, which holds that there is no principled upper bound on the complexity of existential properties.28

I must first clarify the notion of proper embodied skills. So far, I have stipulated that embodied skills must (1) be skillful ways by which we deal with objects in our activities relevant to ways of life, and (2) serve as transcendental conditions of the perception of (potentially highly complex) existential properties. Now, it is relevant to add that they must (3) determine the existential properties of object across situations other than the one for which the skill was initially developed.29 This third criterion rules out the possibility that the occurrence of any random perceptual situation indicates that there is a proper skill tailored for it. So, highly particular and random situations prima facie do not count as situations for which we might develop proper skills.

Suppose that Svetlana takes pleasure in cutting the nail of her big toe when it is high noon. This is absurdly random and specific. Does she have proper skills that determine complex existential properties of this situation, akin to the proper skills of a cricketer that determine complex existential properties that carry forward her performance in a match? This seems silly. If there is a proper skill related to toenail cutting, it could perhaps be specific to cutting nails generally, rather than cutting the nail of a particular toe at a particular hour. For example, a skill for general nail cutting could plausibly mediate Svetlana’s perceptual access to any lengthy nail, including her own big

28 My position is even consistent with massive modularity of mind; it is possible that at a processing level, modular systems underpin embodied skills, and we develop special modules for any activity that is relevant to our ways of life.

29 The third criterion is reasonable. It is implausible that we have millions of embodied skills to deal with the millions of particular situations we encounter in lifetime. It would be a biologically untenable expenditure of energy to establish a new embodied skill for each new object or situation. Thus, there should not be a one-to-one correspondence between skills and objects or situations, and a given embodied skill should be able to determine objects across situations outside the particular situation in which it was developed.
toenail, and determine that she perceive the nail as manifesting existential properties that it should be cut. But it is highly implausible that Svetlana could have proper skills, developed for her highly particular situation, that determine that any nail manifests existential properties that it is similar to her own big toe nail and ought to be cut at high noon, for optimal pleasure. This is too particular and does not permit the development of its own distinctive proper skills.

But the intuitions that drive the denial of developing proper skills for random and specific situations need to be checked. I will provide another example of a situation that is comparably specific and random but nonetheless suffices as permitting the development of proper skills that determine complex properties. This contrast will illuminate my thesis that proper skills and complex perceptions are regulated by the ways of life to which a person is committed, rather than by any extraneous feature of kinds of activities (e.g., that the activity is describable above a certain level of generality, based in a modular system, or cognitively demanding above a certain level).

Take the common case of lovesickness. Svetlana is secretly infatuated with Sylvester. He is the most ravishing person in the world. Although she meets him only once a week at the grocery store, whenever she lays eyes on him, his face manifests existential properties that he is her soul mate, lover in previous lifetimes, and so on. Svetlana has developed proper skills to access these existential properties in this situation in which she sees him. These are proper skills because in the most unexpected of places, diverse objects manifest existential properties that relate to this situation of seeing Sylvester at the grocery store. When she makes tea in the morning, the warmth of the cup, between her hands, manifests existential properties of Sylvester’s ravishing smile nearby the tomato counter. When Svetlana practices drums, the beats manifest existential properties of her beating heart when she locks eyes with Sylvester at the store. And so on.

The situation of perceiving a particular person is highly specific. It is just as specific and random as the case of Svetlana’s big toe nail cutting at high noon. There is a particular person whom Svetlana rarely sees, and there is a particular toe that Svetlana rarely sees. There are thousands of people whom Svetlana will encounter for the same
brief period over her lifetime, and there are thousands of moments at which Svetlana will cut different nails at different times of day. Perceiving one random person, or cutting one random toe nail, are not regarded as paradigmatic activities, in the way that speech comprehension or ball sports are.

Svetlana, however, can develop proper skills for one situation, and these skills end up determining existential properties in objects across many situations, whereas she has not developed proper skills for cutting the big toe nail. At the least, this contrast shows that it is very unlikely that special features of paradigmatic activities are necessary conditions for the development of proper skills and for the determination of complex existential properties relative to this activity. Svetlana’s brief encounters with Sylvester at the grocery store do not seem to manifest any distinctive features of paradigmatic activities, such as features that the activity is plausibly based in a module.

So what accounts for the difference between the Sylvester case and the big toe case? The difference between these cases boils down to the significance of the perceptual situation for satisfying the perceiver’s existential commitments to her ways of life. Perceiving Sylvester at the grocery store permits the development of proper skills because these this situation is critical to Svetlana’s sense of existential survival. During the period of her infatuation, Svetlana is existentially committed to having Sylvester be an integral part of her life. The summation of her fantasizing about him and her perceptions of him is functionally similar to a way of life. If Svetlana stopped perceiving many sorts of objects and situations in terms of Sylvester, she could only catch a glimpse of him once a week. She cannot accept this and needs him to be a constant in her life.

In contrast, although Svetlana takes pleasure in cutting her big toenail at high noon, this activity is not relevant to fulfilling any commitments. Her abilities to accomplish this activity do not develop into proper skills. But if Svetlana somehow elaborated on and aggrandized the toenail cutting as a key activity to her ways of life (e.g., she made it into a poignant ritual that symbolizes responsibilities in her life), she might develop proper skills for it. This shows that the development of proper skills is regulated by our existential commitments to ways of life. Thus the perception of complex
existential properties, which these skills determine, is a possibility inherent to perceptual experience.\(^{30}\)

**Dynamic Coupling**

I will now argue for an account of the processes that underpin the perception of complex properties. These processes indicate that there is no principled limit to the complexity of existential properties. That is, they can consist in a hypothetically unlimited amount of interweaving concepts, and any actual limit results from constraints established by extra-perceptual variables. The vast complexity of existential properties is possible by virtue of a dynamical coupling relation that joins a perceiver with her environment. This relation allows for interdependent changes between the embodied skills, actively deployed by the perceiver, and the existential properties that show up in the environment. These dynamical changes are capable of facilitating the hypothetically unlimited flow of interweaving concepts.

Perception, in any modality, occurs temporally (e.g., Neisser 1976; Noë 2004). The degree of complexity of an existential property is not subject to the constraint that numerous conceptual components must be processed at a single moment (specified as some short duration of clock-time). The phenomenological temporality of visual perception is uncorrelated with the clock-time of the onset of neural activity; moreover, phenomenological temporality, in general, is governed by many psychological variables and is defiant of clock-time (Hegdé 2008; James 1950/1996, 605). So the concepts involved in an existential property can unfold over clock-time and be nonetheless be phenomenologically perceived as occurring at a single moment.

Enactivism is the thesis that the embodied organism and environment are coupled as a complex dynamical system and co-determine each other over time (e.g., Chemero

\(^{30}\) Not all objects and situations need be comparably central to preserving a way of life in order to permit the development of proper skills. There might be a gradation between situations on the measure of their relevance for our fulfilling our existential commitments, and this might correspond with a gradation in the complexity of existential properties that can be accessed in these situations, but this is not a serious matter of clarification for my purposes.
It entails that perception and action are dynamically coupled in a similar manner. At a processing level, actions make perceptual information available, and perceptual information elicits actions; perception and action are interdependent (Hurley 2002; O’Regan & Noë 2001). At a phenomenal level, objects manifest meaning that is relevant to our activities and interests (Gibson 1979/2015; Siegel 2010). Embodied skills are a certain level of description of actions, and existential properties are a certain level of description of the perceptual environment. So, embodied skills and existential properties are also dynamically interdependent.

Sylvester’s initial perceptual encounter with the tomato, for example, presents a simple kind-property. This perception depends on his use of the simple embodied skill of recognizing tomatoes. The achievement of this perception is coupled with the activation of another embodied skill of recognizing tomatoes as GMOs. This, in turn, determines the perception that the tomato is a GMO product. This perception, in turn, solicits another embodied skill of recognizing GMO products as carcinogenic. The use of this skill determines a highly complex perception; and this coupling interaction between perception and embodied skill continues onward.

Although in this example I describe a succession of alterations in existential properties and in embodied skills, this is a heuristic description. Complex existential

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31 Unfortunately, many theorists concerned with enactivism and embodied cognition get hung up on the metaphysical question of the “coupling-constitution fallacy” (e.g., Aizawa 2015; Rupert 2016). Do these dynamical interactions entail that the mind is constitutively extended in the environment, or are these interactions simply causal in nature, and the mind does not extend beyond the boundaries of the central nervous system? The answer to this question simply depends on the particular theoretical interest at hand, which determines the level of description that is most relevant to pursuit of this interest. This description entails that the particular definition of “mind” that corresponds to this level is most apt for defining the boundaries of mind. For some purposes, such as studying the conditions that are involved in the possibility and evolutionary development of cognition, understanding cognition as extended is apt. For other purposes, such as studying early visual processing for the sake of constructing a computational model, restricting cognition to the brain is apt. Although my work falls under the former case, I do not care about whether the conditions I identify are metaphysically constitutive or causal—it has no bearing on my arguments and conclusions.
properties are not mere strings of embodied concepts, and the transitions between the subsequent embodied skills and determinations of meaning are not discrete. Rather, the conceptual components of an existential property unfold over time and combine in an embedded or inter-nesting manner. Each successive component of an existential property depends on previous components, whose significance is indeterminate and depends on subsequent components. All components of an existential property are interdependent and give rise to an overall existential property.

Empirical evidence informs my proposal of this inter-nesting structure of perception and action. Historically, cognitive scientists have assumed that cognitive activity, generally, starts from details and successively moves towards general features (e.g., Lindsay & Norman 1972; Massaro 1975). In visual perception, for example, this would mean we first detect particular stimuli, infer whole objects on the basis of these, and gradually work towards noticing the broader scene. But contemporary evidence undermines this theory. The cognitive activity of perception and action, both, are structured by numerous inter-nesting or embedded orders of perceptual moments or sub-actions (Neisser 1976, 113; Hegdé 2008).

Perception of details depends on a perceptual sense of the whole scene, and perception of the whole scene reciprocally depends on perception of the details (Biederman 1972; Varakin & Levin 2008). Textual comprehension is similarly structured in this manner of interdependence between the particulars and the whole (Frazier & Rayner 1982; Norris 2013; Wheeler 1970). For skillful motor actions, such as serving a ball in tennis, each component movement depends on the overall serving action, which depends on an even broader intuition of the upcoming response of the opponent and further actions (Neisser 1976, 52). Analyzing perception and action as structured by inter-nesting orders of components of a perceptual experience or action is more explanatorily powerful than analyzing them as structured by a linear succession of components.

Applied to the perception of existential properties, the orders of component concepts are inter-nesting and are phenomenally perceived as unified highly complex
properties. Similarly, the orders of component inter-nesting sub-actions combine and amount to, functionally, an overall embodied skill that corresponds with the overall complex property. So the dynamical changes between embodied skills and existential properties, by virtue of the dynamical relation between embodiment and environment, allow for vastly complex meaning to be perceived—all without the aid of inferences.

There will always be some limit to the complexity of a property in an occurrent case of perception, but this limit does not derive from the coupling relation between perception and action. This limit, rather, results from the combinatory effects of a many variables, such as processing loads, energy bounds of cognitive resources, and environmental distractors. This finitude manifests phenomenologically as our limited attention span, which would put a cap to the complexity of an existential property while it unfolds in a perceptual experience. But these limitations in complexity are not principled—different perceivers in different situations will be subject to innumerable variables whose interactions result in varying limits of complexity.

**Conclusion**

In this chapter, I argued against the presumption, common to some enactivist and phenomenological theories, that the perception of complex meaning can be based solely on embodiment conditions. Niche and norm conditions are also necessary transcendental conditions of such perception. I argued that niche conditions share three crucial features with nature conditions: they are mind-independent relative to any given perceiver, necessary for scaffolding the development of embodied skills, and serve as the basis of informational covariances, which we access using our embodied skills. Embodied skills are, at a processing level, informational sensitivities to certain covariances, which, at an phenomenological level, appear as existential properties that objects manifest.

I argued that norm conditions constrain the possible sociocultural events and covariances to which we become informationally sensitized. When we are existentially committed to ways of life, we submit to their composite norm conditions, and these shape
the development of our embodied skills. These commitments are existential in nature because they essentially structure our subjectivity and perceptual world; if we failed to fulfill them, we would be overcome by self-alienation and alienation from the world. Over time, failure to satisfy our commitments is tantamount to deterioration of self and world, a sort of existential death. This threat drives our commitments and supplies the normative force of norm conditions. The *Transcendental View* is the thesis that ways of life, embodied skills, and existential properties are dynamically interdependent.

I responded to three objections to my account. According to the first two objections, the additions of niche and norm conditions, respectively, are unnecessary for accounting for the perception of existential properties; only embodiment conditions are necessary. I have argued that niche and norm conditions are real metaphysical entities, and the embodied skills necessary for perceiving existential properties are dynamically interdependent with such conditions.

According to the third objection, we do not perceive existential properties, but they are constructed by inferential activity. I argued that the intuition that complex existential properties are non-perceptual is based on a failure to distinguish between embodied background knowledge and fleeting doxastic states. Only the former can serve as a transcendental condition of perceptual experience. When this consideration is taken into account, the method of phenomenal contrast yields evidence that complex existential properties are perceptual, rather than based in inferential processes or doxastic states.

There is no principled upper bound on the degree of complexity of existential properties. I argued that empirical cases of the rapid performance of seemingly cognitively demanding activities are best explained by the perception of highly complex existential properties, which provide us information (so we do not have to derive this information ourselves) and guide performance. I then argued that these properties can be vastly complex by virtue of the dynamical coupling relation between embodied skills and existential properties. Conceptual sub-components of existential properties unfold over time and gain increasing complexity, which amounts to unified, complex existential properties. This occurs without the deployment of any voluntary cognitive activity.
In the next chapter, I will argue that all perceptual experience necessarily manifests existential properties. This requires presenting the Reflection View, which complements my arguments for the Transcendental View and completes existential enactivism.
Existential Enactivism

How do our existential commitments come to structure our embodiment, and thereby systematically unify the possible existential properties that are manifested by objects across our perceptual world? And how can all objects necessarily manifest existential properties? I have argued that existential commitments motivate us to monitor our own and others’ behaviors and perceptual experiences. Moreover, by interacting with the niche conditions in which we are situated, these environmental structures scaffold the development of embodied skills. Through these processes, we develop embodied skills that satisfy the demands of our ways of life.

But this seems circular. We are existentially committed to ways of life because these have structured our embodiment and world, and we are interested in preserving our sense of existence. So, existential commitments can explain our motivation to conform only once ways of life have already had their effects on our embodiment. Moreover, our distal environments are full of countless niche and norm conditions, and we interact with only the ones that are relevant to our ways of life; this entails that commitment to ways of life are prior to such interaction.

Even if we set aside this circularity, are the behaviors of interpersonal policing, self-monitoring, and environmental scaffolding sufficient for ways of life to substantively structure our embodiment and to determine existential properties? I do not think so. Policing behaviors and niche interactions, motivated by our existential commitments, indicate that we care that people conform to the norms of our ways of life and care that we interact with these niche structures. These facts do not actually explain how our embodiment and perceptions come to be restructured toward conformity to the norms, as
result of these behaviors. I have not yet specified the processes by which ways of life and their composite niche and norm conditions shape our embodiment and perception, once we are motivated to conform.

In this chapter I will specify these processes. I will propose that we inevitably reflect on our experiences and evaluate them in accordance with the social norms of the ways of life to which we are committed. Such evaluation generates new information about our practical situations and inspires convictions for achieving future experiences that more successfully conform to the norms. By achieving these experiences, we thereby can use these experiences as new objects on which to reflect and evaluate in accordance with norms. We also develop our embodied skills through these new experiences, and changes in skills enables our initiation into new ways of life. Then, once we embody new ways of life, the social norms derived from these can establish new normative criteria that constrain the possible information we generate through reflection. Thus, the relation between reflection and experience is dynamically interdependent, and this dynamism facilitates the development of our embodied skills and corresponding existential properties in conformity to social norms. This dynamism also makes it possible for us to break free from ways of life; reflection is a voluntary process, unlike perception.

I call this dynamical relation between reflection and experience the *Reflection View*; it is central to existential enactivism. It explains how ways of life guide the development of embodied skills and existential properties. It also explains the possibility of *freedom* from any particular ways of life into which we find ourselves “thrown.”

Moreover, the Reflection View is the keystone of my argument that all perceptual objects *necessarily* manifest existential properties. I will argue that existential properties are elaborate forms of *minimal affective values*, which all objects in perceptual experience necessarily manifest by virtue of the biological organization of our embodiment. This argument requires that we understand the relation between three primary kinds of *embodiment conditions*, which are the features of our embodiment that serve as transcendental conditions of perception.
In the first section, drawing on evidence in developmental psychology and evolutionary biology, I will distinguish between these three kinds of embodiment conditions: *physiological conditions, existential conditions, and embodied skills*. Physiological conditions, such as anatomical parts and sensory organs, are transcendental conditions of spatiotemporal, sensory, and other low-level aspects of perception. Their development is genetically predetermined and is virtually independent of cultural influences.

*Emotions, intersubjectivity, and language* are the existential conditions; I argue for these in the second section. Existential conditions are based in physiological conditions and are also transcendental conditions of perceptual experience. Unlike physiological conditions, which determine spatiotemporal and sensory properties, existential conditions determine minimal affective values. The *possible* development of existential conditions is as phylogenetically essential as the *actual* development of physiological conditions, although the actual outcomes of their development are contingent on cultural conditions.

In the third section, I will argue for the *Reflection View*, which I have introduced above. I will show that existential commitments compel us to reflect on experiences on the basis of how well these experiences conform to the social norms of ways of life, and reflections enhance or enable future performances and experiences, which in turn enable us to develop complex embodied skills and perceive complex existential properties.

In the fourth section, I focus on the implications of the Reflection View for the argument that minimal affective values develop into complex existential properties in accordance with the normative standards derived from our ways of life—this entails that all objects *necessarily* manifest existential properties. This argument also secures the top-down dependences of the components of the *Transcendental View*: ways of life, embodied skills, and existential properties. By this point, I will have completed my argument for the necessity of the three levels of conditions as *transcendentally* related to each other.
In the fifth section, I examine the process of *synthesis* from the registration of stimulation on sensory organs to the perceptual experiences of existential properties. These experiences can alter embodied skills, which in turn can modify ways of life. This account of synthesis shows that ways of life do not only determine perceptual experience but are mutually dependent on them. This complements my previous transcendental arguments for the interdependence between the levels. Together, the synthetic and transcendental sides of the story reveal the truly *dynamical* nature of these conditions of perception and the *interdependence* between ways of life, embodied skills, and existential properties. *Existential enactivism* is the theory that existential properties that can be vastly complex; the Transcendental View articulates the metaphysical conditions of the Unbounded View; and the dynamical interdependence between these metaphysical conditions is based in the processes specified by the Reflection View.

*Physiological Conditions*

There is a spectrum of embodiment conditions, and each serves as a transcendental condition of some aspect of perception. On one end of the spectrum, there are physiological embodiment conditions (which I call *physiological conditions* for brevity). Physiological conditions are phylogenetic outcomes of human evolution; they are not socioculturally learned and are relatively invariant between people, regardless of cultural differences. Because selection pressures are based in nature conditions, *viz.*, aspects of ecological niches that are independent of sociocultural factors, physiological conditions are evolved to enable our interaction with the ecological niche in highly adaptive ways.

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1 The structure of this section is inspired by Kant’s Transcendental Deductions A and B (Kant 1781/1998). In the first version, Kant presents the synthetic, bottom-up process from the sensory manifold, to structuring by the categories, to experience merging at the transcendental unity of apperception. In the second version, Kant presents the top-down transcendental structure of the unity of apperception preceding the categories, which precede the sensory manifold. I thank Jay Garfield for his recommendation to use this argumentative structure.
The replication of physiological condition is regulated by normative biofunctions, as the replication of embodied skills is regulated by sociocultural norms.\(^2\)

Physiological conditions determine spatiotemporal dimensions of perceptual experience, low-level and sensory properties, and simple motor and vital affordances. Weight and height, for example, are physiological conditions that determine the relative size of environmental structures and the potential affordances for physical manipulation of these structures, which depends on the weight of these structures relative to our own. Other physiological conditions include: the musculoskeletal system (e.g., dexterous hands determine which objects can afford manipulation); the sensory-perceptual systems (e.g., the visual system determines that objects manifest color and illumination properties); and the motor systems (e.g., the extrapyramidal system, for muscle coordination and voluntary movement, determines that objects manifest different shape properties in accordance with movement).

The fact that physiological conditions serve as transcendental conditions of experience should not be controversial. Even Galileo Galilei, knew that “if ears, tongues, and noses were removed, shapes and numbers and motions would remain, but not odors or tastes or sounds... just as tickling and titillation are nothing but names in the absence of such things as noses and armpits” (Galileo 1623/1957, 277). Low-level sensory properties are determined by our sensory systems, while things that are not sensory properties, such as numbers, are not determined by our sensory systems.

Jakob von Uexküll, a biologist who coined the ecological term umwelt (the world experienced by a given organism) argued that distinctive physiological conditions between

\(^2\) I draw on Millikan’s theory of proper functions (1984, 2002). Millikan proposes a teleological account of certain non-arbitrary functions of biological systems. A heart, for example, has a proper function of supplying the body with oxygen, and an ear has a proper function of enabling hearing—any given system can have numerous proper functions, and these are just examples. There is the risk, however, that any arbitrary or accidental function might be theorized as its proper function. Millikan avoids this by defining that proper functions are those of a system that have been essential to the reproduction of this system over evolutionary history. In the context of existential enactivism, the development of physiological conditions are determined by their proper functions in the sense that these conditions have served non-arbitrary purposes for fitness of the organism and are result of reduplication, over a lineage of these conditions across generations, made possible by their fulfilling these very non-arbitrary purposes.
species are codependent with the distinctive perceptual world that each species perceives. In a vivid example, von Uexküll describes the *umwelt* of an ant, squirrel, and fox who all interact with the same physical oak tree (von Uexküll, 1934/1975). The different anatomical size, motor capacities, and vital needs of each organism determine its perceptual experience of the tree. For an ant, tree bark is a highway of deep grooves, which afford keeping the ant hidden from predators. For a squirrel, tree branches are platforms, which afford leaping and finding nuts. For a fox, protruding roots afford warm shelters and den building.

**Existential Conditions**

For all animal species, perception is at least determined by physiological conditions, nature conditions, and normative biofunctional conditions. For humans, perception is determined by an additional set of embodiment conditions, particular to our species. We have capacities of *affect*, *intersubjectivity*, and *language*, which I call *existential conditions*.3

The roles of these existential conditions are interdependent, and collectively they determine that all objects necessary manifest at least *minimal affective values*, and, at most, vastly complex existential properties. Affect, in particular, determines minimal affective values, which are non-sensory and quasi-conceptual in a very basic way. These values inform us about the potential relevance of objects to our concerns and needs. Intersubjectivity and language, in contrast, are necessary conditions of the development of minimal affective values into existential properties, which are properly conceptual, defined by sociocultural standards, and dependent on practices of community members. In later sections, I will argue for this developmental continuity between minimal affective values and existential properties, which entails that existential properties are necessarily

3 The biological substrate of these existential conditions is not important to my thesis. Although for arguing for the phylogenetic essentiality of these conditions, here I mention that they are likely based in processes distributed through the central and peripheral nervous systems. Also, it likely that some non-human animals have similar existential conditions as ours, especially other social mammals.
manifested by all perceptual experience. For now, I will argue that the potential development of these conditions is as genetically predetermined as the actual development of physiological conditions, a premise of the later argument.

Evolutionary and comparative biological findings indicate that existential conditions are essential to the human species. Most mammals exhibit behaviors and physiological arousal that indicate that they have emotions and affect (Dixon 2008).\(^4\) Given that non-human mammals are affective creatures, affect is not dependent on sociocultural learning and is biologically elementary. Darwin argued that general human emotions are evolutionary products; they are derived from the ability of related mammalian ancestors to monitor vital needs in relation to typical situations and to communicate their internal states to others of their social groups (1872/2009). This theory is supported by contemporary evolutionary and neurobiological theories (Ekman 1992; LeDoux 2012).\(^5\)

Evan Thompson argues for the theory of *autopoiesis*, according to which *life* is defined by a special kind of self-organizational dynamical system, or autopoietic system (2007). This structure is common to all life forms, from bacteria to human beings, and it entails that even elementary life forms have some minimal “sense-making,” which is a precursor of the affect that complex organisms with nervous systems experience have (see chapter 2). Autopoietic systems are semi-permeable and require incorporation of materials from distal environments, and emission of disruptive byproducts to maintain homeostasis, to preserve the coherence between components of the system; they have homeostatic needs (Thompson 2007, 103). The significances of objects with which an organism must engage, to satisfy these needs, is precursor of the affective values of objects, in the perceptual experiences of organisms with nervous systems that permit affective experiences. So the affect we humans experience, and the corresponding

\(^4\) For example, the behavior of mammals can be modified by classical conditioning, which supports that they feel pain- and pleasure-related emotions, which motivate the conditioning process (Dixon 2008).

\(^5\) Different sociocultural niches influence the particular emotions that we develop and the types of situations that elicit these emotions, but nonetheless, all human beings, if not members of many mammalian species, are genetically predetermined to have some emotions.
affective values of perceptual experience, is determined in part by our essential biological organization, whose phylogenetic origins trace back to the beginnings of life (Thompson 2007, 97).

Heidegger also argues for the transcendental role of affect in perceptual experience, although from a phenomenological vein (see chapter 2).\(^6\) Objects show up in the perceptual world because we care about them, or because they have significance for our existence. According to Heidegger, the modes by which objects appear depend on a set of transcendental conditions, including mood (Heidegger 1927/2010, 172). Mood occupies a transcendental role because it modulates the character of our attention to and concern for objects. Since mood is often neutral, we are often unaware of the fact that perception is conditioned by mood. Only strong moods, which interfere with the usual significances of objects, sensitize us to this role.\(^7\)

Colombetti expands on Heidegger’s theory and offers an enactivist argument for the transcendental role of affect and emotions (Colombetti 2014; Thompson & Colombetti 2012). Emotions can be understood in two distinct senses: as objective sensations in the body or as transparent media through which objects in the world appear (Colombetti 2014, 116). Colombetti argues that the latter sense is more fundamental. All experiences are necessarily disclosed by our embodiment, and since emotions modulate

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\(^6\) Heidegger argues for the role of *mood*, and I extrapolate this to emotions in general. An argument could be made, however, that emotions and moods are distinct. On this argument, only specific moods that Heidegger specifies serve as transcendental conditions, while the range of emotions I mention do not. I disagree with this and refer the reader to Colombetti’s account that any affective change has consequences on the contents of perceptual experience; I will introduce her account below (Colombetti 2014).

\(^7\) For Heidegger, *Angst* is a very special mood (Heidegger 1927/2010, 178). When we are angsty, we cannot employ our everyday skills, access the usual meaning in the world, or care about objects in our usual way. Angst is tied with the sense that the world has lost its everyday significance. Objects are stripped of their familiar existential properties. For example, Svetlana usually perceives tomatoes as manifesting existential properties of incorporation into pizza. But when she is angsty, she does not even notice the tomato, or it looks like an inert blob. These existential properties reinforce her mood of angst. Emotions do not only toggle with existential properties but are also reinforced by the properties that appear. There is a dynamical coupling relation between emotional states and perceptual states.
somatic and cognitive systems, any emotional change has impact on perceptual experience (Colombetti 2014, 123).

*Intersubjectivity*, another existential condition, is based on processes of mimesis, empathy, and elementary moral sensibilities. Experimental evidence indicates that humans innately display conformity behaviors. People between different age groups and cultures will make statements that conform to those of peers, even if these statements contradict their actual beliefs (Asch 1955; Corriveau & Harris 2010). People more often conform when they are aware that peers can monitor them, whereas when they report beliefs in privacy, they often do not conform. This indicates that we are sensitive to our social relations to other people, and our behavior is determined by these relations. Mirror neuron research affirms that mimetic behavior is a cross-species phenomena; experimental evidence shows that birds, monkeys, and human neonates all have functionally similar neural areas that elicit mimesis (Rizzolatti et al. 1991). Given that other species manifest conformity behavior, conformity, as a basic consequence of intersubjectivity, is phylogenetically fundamental to humans.

Developmental psychology offers experimental evidence that neonates are distressed by hearing sounds of other humans crying, while they are not distressed by control sounds (Geangu et al. 2010). This behavior is taken as a precursor of adult empathy and supports that empathetic behavior is genetically determined (Geangu et al. 2010). Neonates also are uniquely responsive to human faces and voices in ways in which they are not to inanimate objects and non-vocal sounds (Reddy 2003). Studies in moral psychology show that 8 month old infants exhibit simple moral behavior. When they watch puppet shows in which puppets act either pro-socially or anti-socially, infants choose to hug the pro-social puppets and to punish the anti-social ones (Hamlin &

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8 Mirror neurons are a class of neurons that occupy a neural region that integrates motor and perceptual domains. These mirror neurons activate when one member of a species watches another perform some behavior, and this triggers the observer to mimic the observed. Mirror-neuron researchers hypothesize that this innate mimicking is an adaptive trait that serves social behavior and collective survival. (Rizzolatti et al. 1999).
Wynn 2011; Mahajan & Wynn 2012). This indicates that infants have moral sentiments toward agents and are sensitive to differences in moral styles of social interactions.

Capacities related to intersubjectivity, such as empathy and moral sensibility, are biologically elementary, but in what ways are they transcendental conditions of perceptual experience? Overall, intersubjectivity plays two roles in perception; one role is relatively distant, and the other is constitutive in every perceptual act, though both are necessary. Heidegger’s discussion of *Mitdasein* illuminates the first role. *Mitdasein* refers to community members who share our ways of life (Heidegger 1927/2010, 107). *Mitdasein* is an a priori condition for *Dasein*, which refers to a way of life that determines people’s perceptual and existential possibilities. *Mitdasein* and *Dasein* are interdependent; a way of life depends on the practices of community members who embody this way of life, and a community depends on the way of life, which shapes the development of each member so that they can cooperate and amount to a community (rather than an aggregate of independent individuals). So intersubjectivity is necessary for the possibility of ways of life, and thus of sociocultural niches and social norms on my account, which are necessary conditions of perception (see chapter 3).

The second role of intersubjectivity in perceptual experience is that our innate sensitivity to other people’s behaviors is necessary for us to be compelled to conform to social norms (De Jaegher & Di Paolo 2007). This compulsion is essential to interpersonal policing and *practical reflection*, which facilitate the development of embodied skills and determine the existential properties that show up perceptually. I will return to this point in the following sections.

Language is another transcendental condition of mature human perception. Monkeys have an innate ability to communicate by making gestural references to co-perceived objects, and this presupposes that they have a proto-understanding of intentions of other monkeys (Kohler et al. 2002). The gestural basis of language in humans is affirmed by other studies. Activity in speech-related neural regions is equally implicated in hand gestures (Bookheimer 2002). It is possible that simple gestural communication, found in monkeys, is the evolutionary precursor for our human cognitive

Equipped with language, we can communicate our experiences, police or cooperate with each other, and transmit knowledge to future generations. All of this makes possible the construction of sociocultural niches and the inheritance of ways of life (Donald 1993; Malafouris 2016). Language also plays a crucial role in scaffolding our perceptual and recognitional capacities so that we can discover objects for particular instrumental uses, develop corresponding embodied skills, and perceive corresponding existential properties.

Andy Clark argues that language plays three distinct and interrelating roles in determining perceptual experience. Language provides an “augmented reality overlay,” or high-level, conceptual properties that “overlay” low-level sensory properties of objects. We perceive the former rather than the latter (Clark 2005). This role is illustrated by labeling, a basic use of language. When we label objects, different objects can fit under a single label, and then we can perceptually attend to all objects under this label, rather than be restricted to attending to each object individually.\(^9\) Language hence enables design of equivalence classes that filter the perceptual environment and bring us directly to the members of these classes. This is a powerful cognitive shortcut.\(^10\) Without labeling, we would have to individually seek out each object that we care about, and such

\(^9\) Thompson et al. (1997) found that chimpanzees, without the aid of labels, are able to identify whether objects in pairs are similar or different to each other, but they are not able to identify whether the second-order pairs of objects were similar or different to other second-order pairs. But with the aid of labels that marked out whether a pair held similar or different objects, chimpanzees could succeed at this second-order task. This is experimental evidence of the cognitive powers that language enables to us. Language can reduce highly complex arrays of perceptual information into simple discrete units.

\(^10\) Hume argues that the repetition of a pattern of sensory impressions can lead to the association between these impressions, and these associative chains become functionally independent units (T. 1.1.1.12). These units are doxastic and conceptual in nature, and they can be phenomenally equivalent to basic sensory impressions (T 1.1.3.10). In effect, we end up perceiving high-level properties, and not only sensory impressions.
disorganized perceptual stimuli would overwhelm and preclude us from perceiving objects of interest. Thus, language has the power to shape perception.\textsuperscript{11}

Language also plays the transcendental role of “scaffolding action and attention” (Clark 2005). Linguistic representations can refer to temporally extended sequences of events. By deploying linguistic representations, we can present such sequences in a moment of perceptual awareness. We can use language to construct virtual environments of past or potential events that motivate behavior and helps us accomplish our plans. In effect, language expands and designs the scope of perceptual awareness, so that we, surrounded by a deliberately selective range of information, can accomplish our tasks with little cognitive effort.\textsuperscript{12} Overall, language can be used to scaffold the development of complex embodied skills so we can deal with objects in nuanced ways and establish complex existential properties. I will return to this scaffolding role of language in the next section.

Does this mean that early infants without language could not perceive the world in ways in which people with language can? Yes, it does. Infants have perceptual experience, but their perceptions are utterly different than those of language-users. Infants do not perceive the higher-order properties and conceptual significances that we

\textsuperscript{11} Clark’s arguments follow the Whorfian tradition that holds natural language can influence fundamental cognitive capacities (Whorf 1964/2007). Although this tradition of thought is controversial, there is substantial empirical evidence that supports it. Language affects color perceptions and perception of abstract concepts, like time. Russian language, for example, requires speakers to distinguish between light and dark blue (there is no word for blue in general), and this labeling distinction enables Russian speakers to more effectively distinguish between shades of blue on perceptual matching tasks, compared to English speakers who lack this labeling distinction (Winawer et al., 2007).

The Chinese language requires speakers to talk about week and month time sequences on the basis of a vertical spatial metaphor; future times are “up,” and antecedent times are “down” (Boroditsky 2001). This inherent feature of language enables Chinese speakers to do better on time ordering tasks if they were primed by a perception of vertically ordered objects, rather than a perception of horizontally ordered objects. English speakers exhibit opposite effects; since English language presents time on a horizontal spatial metaphor, English speakers perform better on time ordering tasks if primed by a horizontal array of objects (Boroditsky 2001).

\textsuperscript{12} Not only does language expand perceptual awareness, but it can also enhance “self-knowledge and mind control” (Clark 2005). Language enables us to regulate our thoughts, feelings, and behavior. By fixing phrases on these entities, we can concretize them, so that they can be objects of attention and guide future behaviors.
perceive. Experimental evidence shows that prelinguistic children (18-24 months) and adult rats orientate themselves in a previous location by recognizing only geometric cues (Hermer & Spelke 1994). In contrast, human adults can orientate themselves more effectively by recognizing higher-order properties of the location, which depends on using language to combine geometric and non-geometric information (Hermer-Vazquez et al. 1999). This indicates that language is necessary for us to label higher-order properties of a situation, monitor these properties, and reliably identify these properties across perceptual episodes.\textsuperscript{13}

But the objection might be raised that many perceptual situations are not shaped by language, intersubjectivity, or sociocultural conditions generally; and these do not manifest minimal affective significances or existential properties. My claim that these existential conditions are biologically fundamental might be right, but it does not follow that all perceptual experience is necessarily determined by these conditions. For example, it seems that when we attend to low-level properties, like color sensations and shape contours, these are exhaustively determined by physiological conditions, and there is no room for affect, language, and socioculturally-related conditions to influence such properties. These low-level properties might be incorporated in macro-objects, like a tomato, and the macro-objects might manifest existential properties, but the low-level properties themselves do not. On this objection, low-level properties are determined by physiological conditions and are not susceptible to cultural influences.

This is not the case. When we attend to a low-level property, it becomes, functionally, an object of perceptual experience. All perceived objects exhibit existential properties by virtue of the mediation of embodied skills in our perceptual access of these objects; and such skills are integrated in sociocultural practices and present the object as

\textsuperscript{13} The difference in the performances between groups is due to language, rather than general cognitive maturation. In subsequent trials, the linguistically capable adults are required to perform a secondary verbal task that precludes their ability to use language to aid their memory of the spatial locations. In these trials, there is no difference in performance between the groups (Hermer-Vazquez et al. 1999). Moreover, when adults are only required to attend to non-linguistic sounds, they retain their ability to more effectively locate objects, compared to non-linguistic children and rats. Thus, the difference in recognitional capacities in the former trial not due to constraints on attention or memory in general.
meaningful to the perceiver. Even colors and shapes are suspect to sociocultural influences and have paradigmatic depictions and roles in sociocultural activities for which we have developed embodied skills. So when we attend to low-level properties, they manifest existential properties based in the activities for which the skills used to access these properties were developed.

For example, we usually do not perceive the brown color of a friend’s eyes, but rather perceive her personhood and identity. In the rare case in which we try to attend to the color itself, as detached from her eyes and her personal identity, the color is no longer a low-level property of an object, but becomes an object in itself, relative to our perceptual field. As an object, brownness will manifest existential properties relative to our embodied skills that mediate access to it. Brownness, for example, plays dominant roles in some culturally paradigmatic depictions, such as earth, tree bark, and skin tones. When we perceive the brownness, it inevitably manifests existential properties (e.g., earthiness) related to objects from these paradigmatic depictions for which our embodied skills were originally developed. Low-level properties might be determined by physiological and nature conditions and hold invariantly across human beings. But, when attended to as objects of perception, sociocultural significances influence what is perceived.

My opponent might grant that all perceived objects must manifest high-level properties, but these properties are not necessarily existential, or related to the perceiver’s socioculturally-embedded and affective existence. People can discover unique instrumental values of objects, independently of any public portrayal or sociocultural use of these objects. For example, Svetlana discovers that when she feels shy around Sylvester, she can wiggle her toes, and this bodily motion calms her down. Svetlana comes to

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14 This is a toy example to demonstrate the involvement of embodied skills in perceptual experience. In actual situations, however, we tend to be primed by the object that manifests these low-level properties. So the particular embodied skills that mediate our access to an objectified low-level property will be influenced by the macro-object. In other words, our perceptions of an objectified property will be contextualized by the object that has the property. The example I have provided could occur, however, if we stared at the brownness long enough to let the priming effects of our friend’s presence weaken.
perceive human toes as indices of the existential properties of shyness regarding Sylvester. These existential properties are not tied to any sociocultural way of life.

I acknowledge that the particular existential properties that a given object manifests can be unique to a person’s experience. But these properties will always depend on some sociocultural conditions. Svetlana’s discovery of human toes as affording wiggling and relief from shyness is influenced by her existential commitment to overcome her shyness, which is tied to the social norms that extraversion is more valued than shyness; these norms are embedded in her ways of life. So, this discovery and her perceptions of toes manifesting such properties are tied to sociocultural norms. Although Svetlana might be unique in perceiving toes with these properties, these properties are based in sociocultural ways of life, and ones with similar functions might be manifested by different objects for other people who are committed to these ways of life. The idiosyncratic properties that Svetlana perceives are still sociocultural.

What about the perception of totally novel objects, which have no relevance in our ways of life and for which we have not developed embodied skills? Conceptual metaphor theory, and the experimental evidence that supports it, indicates that we bring our embodied skills and ways of life to the table when perceiving and understanding novel objects (Dahl & Adachi 2013; Gibbs 2011; Lakoff & Johnson 2003). On this theory, we conceptualize abstract or complicated phenomena on the basis of embodied schemata, which are embodied understandings of the structural features of concrete perceptual situations; such schemata are related to embodied skills. For example, we understand a love as a “journey” because we have undergone embodied experiences of actual journeys and utilize relevant structural features of these experiences to structure our understanding of the abstract concept (Lakoff & Johnson 2003, 44). This is necessary for abstract concepts to be intelligible.15

15 I recognize that Lakoff and Johnson’s theory does not explicitly examine transfer of embodied skills based in ways of life, but rather only skills based in basic spatial and motor experiences that all humans necessarily have in virtue of our common embodiment and environments. But the extrapolation is natural. It is common sense that we rely on previous background knowledge to make sense of novelty, and we can specify this background knowledge as either rooted in experiences given by our the interaction between our general embodiment and ecology or by the
The Reflection View

How exactly do minimal affective values develop into complex existential properties over a person’s development? In this section, I will argue for a thesis of the co-constitutive relation between perception and reflection, the Reflection View, which is the basis of a process by which social norms come to orchestrate the development of existential properties and embodied skills. This process follows from our existential conditions of intersubjectivity and language. In this section, I will first explain why we need the Reflection View to explain the perception of existential properties. Then, I will present the key components of the Reflection View and defend them. In the next section, I will argue that the Reflection View secures the developmental continuum between affective values and existential properties, and by doing so, also secures the top-down dependence between ways of life, embodied skills, and existential properties.

Why not simply draw on the ideas of existential commitments, which I presented in chapter 3, to explain this developmental process? There, I argued that existential commitment to ways of life is the source of our motivation to conform to the norms of our ways of life. Following this idea, the developmental process is simply driven by this conformity: as infants grow up and are enculturated, they are motivated to satisfy the normative behaviors and perceptual experiences that constitute the ways of life available in their environment. They develop more complicated needs, emotions, and skills over their enculturation, and this corresponds with the development of existential properties.16

interaction between our particular skills and ways of life. There is no reason to think that only knowledge given by basic embodiment can have this function.

For example, when photography was a novel invention, people in certain communities perceived it as sorcery; the photographs, capturing the likenesses of people, must also capture their souls and allow the owner of the photo conduct magic on the people at a distance by manipulation of the photo (Behrend 2003). This understanding of photography could only happen for people who have been committed to ways of life that affirm sorcery, souls, and action-at-a-distance.

16 A similar explanation of conformity is implicit in Hume’s ideas of sympathy and custom. According to Hume, we are innately social creatures and are susceptible to conform to one another. We also have innate capacities of sympathy; we cannot help but have experiential access
But this explanation is insufficient. The idea of existential commitments only accounts for the motivation to conform. It does not explain the actual development by which embodied skills and cognitive processes conform to social norms, once we are motivated. The silence on the processes of conformity makes room for the view that these processes are largely based in subpersonal conditioning in accordance to statistical frequencies of environmental cues. On this view, the ways of life that are most frequently instantiated in sociocultural events, relative to other ways of life, are most likely to be adopted by people in the environment in which these instantiations occur. Subpersonal processing systems are sensitive to these statistical frequencies and are rewired in accordance to them. These automatic procedures sufficiently account for our conformity to socially normative standards and adoption of ways of life.\footnote{Very few would argue for a totally reduction of conformity to subpersonal processing. Theorists who propose computationalist models of mind rarely claim that mental processes are totally involuntary and governed by low-level processing (e.g., Tenenbaum et al. 2011). But there has at least historically been a sentiment in some circles of sciences and philosophy that leans towards a strong reductionist view, such as very strong forms of behaviorism (e.g., Bandura et al. 1961) or epiphenomenalism about the mind (e.g., McLaughlin 1989). It is nonetheless important to argue against forms of reductionism.}

This reductive view cannot adequately explain the perception of existential properties. It is implausible that statistical conformity alone could account for the development of a minimal affective value to a complex existential property. A frown, for example, might manifest an elementary negative value in an infant’s experience, whereas Sylvester’s frown manifests complex properties of his disapproval of Svetlana’s excitement that the GMO tomato could be incorporated in pizza. Differential statistical frequencies of sociocultural events seem insufficient to account for the development of the former to the latter. Many people who live in Svetlana’s local environment and who are exposed to others’ feelings, and on the flipside, we cannot help but convey our feelings to others (T 2.1.11.8). The consequence of these features of human nature is that people within a community will replicate each other’s patterns of thought and behavior, and such collective practices give rise to custom, and so to expectations of one another that we will respect customs, as well as mechanisms for reproducing and enforcing them. Custom refers to both social conventions and the customary or normative character of certain practices (Garfield forthcoming). Customs reciprocally influence the behavioral and cognitive patterns of practitioners. So, Hume argues, normativity is grounded in our innate social nature.
similar statistical frequencies do not end up perceiving the complex property that she
does.

Second, existential commitments entail that not only do norms govern our
behavior and perception, but we also consciously will to satisfy our commitments. For
example, Svetlana desires to capture Sylvester's fancy. She is aware of her desire and of
her perceptions of random objects manifesting properties related to Sylvester, regardless
of whether she is aware that these properties are instrumental for the conformity to
norms. Although we do not choose the existential properties of an object, any more than
we choose its colors, we nonetheless have some agency in the developmental processes
that determine the existential properties that show up. This agency is existential in the
sense that it plays a role in determining the perceptual world that constrains our lives.

The reductionist view of conformity would render existential commitments
superfluous. It would also make the developmental continuum between affective values
and existential properties mysterious. I will argue for the Reflection View and show that
such reductionism is untenable. The Reflection View is grounded in the fact that we have
an innate compulsion to reflect on and evaluate the existential properties of perceptual
experiences. Ideals, norm conditions that play a regulative role, guide the evaluations and
conclusions we draw. These conclusions inform future perceptual experiences, and in
turn new experiences shape the development of embodied skills. So practical reflection
guides the development of embodied skills and existential properties towards forms that
satisfy our ways of life and conform to social norms.

This relation is reciprocal: because embodied skills constrain our existential
commitments, changes in skills also alter the possibilities of our ways of life. Ideals are
derived from our ways of life, so ultimately new experiences can alter the ideals that
regulate reflection and shape experience. Thus reflection and experience are dynamically

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18 I have defined ideals, in chapter 3, as socials norm that drive our evaluative capacities of objects
and behaviors that concern our way of life; they are distinguished from norms, which drive our
first-order activities. The term ideal connotes that this kind of norm is never found in experience.
Ideals have only a regulative role over the contents of reflection; ideals serve as the criteria that
guide our evaluations of the meaningful contents of first-order perceptual experience.
interdependent, and looping effects among them serve as the process by which minimal affective values—which all perceptual experiences necessarily manifest and early infants perceive—develop into complex existential properties that align with social norms.

The kind of practical reflection with which I am concerned is defined by three primary features. First, reflection represents first-order experiences of objects or events that are practically significant. Second, reflection involves an evaluative attitude towards the simulated object and is guided by norms based in our ways of life. Third, reflection generates new doxastic or intentional states (e.g., inferences, judgments, desires, motivations) that have potential to inform, guide, or enhance future experience.\(^{19}\)

\(^{19}\) These criteria are not pulled out of thin air. I have drawn on the philosophical literature of practical reasoning and cognitive scientific literature of simulation and imagery; I will present some theories from this literature later in this section.

I am also generally inspired by ideas from three philosophers. First, Heidegger argues in *Being and Time* that we are essentially self-conscious and self-interpreting creatures. *Dasein* is a way of life that also inherently involves awareness of this way of life. Heidegger reconceptualizes the nature of knowledge and explanation, from his philosophical framework. *Understanding* is practical in nature; when we understand an object, we are skillful at recognizing and dealing with it, relative to the activities and concerns of our ways of life (Heidegger 1927/2010, 144). *Interpretation* is a reflective attitude on our understanding (Heidegger 1927/2010, 145). When we interpret our experiences, we make sense of them in implicit accordance with some teleological ideal (“in-order-to”) or the essential “finality” of our ways of life (Heidegger 1927/2010, 146). Although Heidegger does not specify what he means by these terms, it is fair to take them as some normative standards that are central to our ways of life.

Kant’s ideas of *transcendental ideas* and the *regulative use* of pure reason can enhance Heidegger’s theory of *interpretation* (Kant 1781/1998). Kant investigates the *a priori* conditions necessary for theoretical explanations. What does it mean for a proposition to explain a phenomenon? Kant argues that explanations are possible insofar as they are situated within systems of interrelated explanations, constructed to account for some phenomenon (see chapter 2). There must be some ultimate *transcendental idea* that holds together and unifies these systems. Transcendental ideas are hypothetical ultimate explanations, which would exhaustively explain a kind of phenomena (A328/B385). We never actually formulate explanations that meet the transcendental idea, since it is inherently a hypothetical ideal that cannot be realized in experience. Moreover, Kant argues that transcendental ideas do not only regulate our formation of knowledge but also regulates our phenomenal experiences. Transcendental ideas can orchestrate relations between the categories, which direct the synthesis of phenomenal experience. Kant’s analysis of transcendental ideas show how it is possible for reflective activities to be teleologically governed, which might substantiate Heidegger’s account of *interpretation*.

Alva Noë’s idea of Levels 1 and 2 in “Art Loops and the Garden of Eden” also sets precedence to my account of practical reflection (2015). Level 1 refers to the mode of pre-reflective performance in an activity, and Level 2 refers to the mode of deliberate reflection on our
There are also different orders of practical reflection, which correspond to different orders of reflexivity of our attitudes towards occurrent contents of awareness. Lower orders of reflection are similar to first-order experience with respect to passivity, spontaneity, and minimum reflexivity. On lower orders, reflection is primarily imagistic and does not utilize linguistic representations. Even so, it can rearrange components of first-order experiences in novel ways that serve basic instrumental purposes (Bermudez 2003, 55). Higher orders of reflection are either reflexive with respect to lower orders of reflection or to perceptual experience. Higher orders are controlled, inferential, and linguistically-dependent.

Practical reflection, across its range of orders, accommodates a surprising variety of cases. We might be stunned by an event and comb through its details, in an attempt to control the effects of this event on our lives. We might anticipate an upcoming event, in an attempt to reduce uncertainty. We might mull over a recent behavior of ours, in an attempt to predict how people now perceive us. In these cases, the object of reflection has existential significance, and we evaluate it in accordance with criteria based in social norms of our ways of life. Episodes of reflection generate new information about our situations and enable us to achieve new experiences, which more closely conform to the social norms that motivated these episodes of reflection. From these experiences, we

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performance of an activity. Level 2 is not a mere meta-level of Level 1. As humans, we have an innate impulse to reflect on our performances, evaluate them, and reorganize or envision new ways of going about them, and this expands the possibilities of Level 1 activity, which in turn changes the possibilities of Level 2 activity. The two are dynamically interrelated (Noë 2015, 46).

For example, doing philosophy is a Level 2 activity; it originated, roughly, when humans began reflecting on our Level 1 activities of reasoning and explanation. By doing philosophy and systematizing reasoning, early humans established new norms of reasoning and altered our capacity of reasoning. In turn, by reasoning differently, we can do philosophy in new ways: we have new objects on which to philosophize and our abilities to philosophize have expanded by virtue of these changes in reasoning capacities. Kant and Heidegger only argued for a one-way direction of causality. Noë’s insight is that the relation to two-way and dynamical; first-hand experiences can restructure the norms that guide reflection, and over time, experience and reflection can be mutually and radically transformed.
develop new embodied skills that let us satisfy or even reassess our existential commitments.\(^\text{20}\)

I will defend each feature that I have attributed to practical reflection. We are born with the capacity for off-line, reflective forms of cognition. It is a cognitive activity central to learning and development. Some have proposed that the ability to engage in off-line cognition that simulates experience is among the milestone phylogenetic changes of hominids that set conditions for the evolution of homo sapiens (e.g., Donald 1993; Malafouris 2016; Tomasello & Rakoczy 2003). This indicates that the ability for off-line simulative cognition is biologically fundamental and has highly adaptive functions. So, simulative cognition is \textit{practical}, in the sense that it guides or enhances action, which makes the difference with regards to survival.

Daniel Hutto argues that language radically enhances the power of reflective cognition (2012). He argues that language, as a grammatical symbolic system, furnishes us with cognitive structures in which we can embed units of meaning, combine these units, and construct highly complex linguistic schemes (Hutto 2014, 182). We can “test” and simulate these combinations, and these simulations can open new ways of behaving, understanding our situation, and clarifying our desires. Without language, simulative cognition would only be able to draw on experiences and arrange them in simple, constrained ways; it would be less powerful in aiding our development and learning. I add that these functions of linguistically scaffolded reflection are motivated by our existential

\(^{20}\) There are plenty of everyday cases of off-line cognitive activity that are not evaluative in this existentially concerned manner. These can be driven by objectives set by externally-imposed circumstances or tasks, which do not arise from our existential commitments. For example, when we reflect on a recent experience for the sake of making joke out of it, this might not have any practical bearing on our lives. When our friend is in need of advice, and we reflect on a recent experience to derive a lesson from it and comfort our friend, this might not have bearing on our lives. Theoretical reflection or deliberation, in which we aim to refine our beliefs rather than to determine future actions, also do not meet my criteria of practical reflection. These cases would not immediately impact our ways of life, in the manner by which practical reflection does.

It is possible that for particular people, these cases would count as practical reflection, if the underlying objectives are relevant to their ways of life. For a person who is committed to improving her sense of humor, the first case might constitute practical reflection, since the conclusions of this reflection might impact future experiences that are highly relevant to her way of life and alter her self-understanding.
commitments. In effect, such reflection radically enables us to discover affordances and develop embodied skills.

The literature on practical reasoning demonstrates the practical importance of reflection (Milgram 2001). Practical reasoning is a form of high-order reflection, which is highly self-reflexive and linguistically scaffolded compared to associative and imagistic low-order varieties. Instrumentalism is the view that practical reasoning is structured for evaluating competing means for the sake of accomplishing some pre-established end (Vogler 2002). Specificationalism is the view that practical reasoning is concerned with evaluating competing ends, rather than with weighing between different means in light of a fixed end (Kolnai 1962; Wiggins 1975). Ends, such as goals and desires, are inherently ambiguous; we might have a general concept of an end (e.g., Sylvester’s desire to minister to his “well-being”), but there are many possible interpretations of this concept, and some will be more feasible given a particular situation (Kolnai 1962).

Instrumentalism and specificationalism capture different aspects of practical reasoning, as a type of practical reflection. I add that our capacity for linguistically scaffolded reflection is not only practical but is fundamentally existential; so while in some cases we have pre-established ends, these ends are based in the social norms of our ways of life. We cannot help but be motivated to satisfy our existential commitments (see chapter 3). We also cannot help but utilize our capacity of linguistically scaffolded reflection to serve our commitments. Commitments demand that we continue to perceive objects for their normative values and to perform activities in normative ways, relative to our ways of life. So practical ends (e.g., desires, goals, and plans) are always contextualized in sociocultural activities and ways of life.

But our pre-established ends are always indeterminate, and some cases of reflection serve to clarify these ends. Our ends are based in ideals, which are the social norms of our ways of life when they occupy a regulative role in practical reasoning and

\[\text{\textsuperscript{21}}\text{This literature is primarily occupied by questions regarding the criteria that define whether a case of practical reasoning is rational or the fundamental structures of this reasoning. I am interested in the latter set of questions.}\]
reflection. *Ideals* are open to change. In practical reflection, we evaluate, monitor, censor, or encourage aspects of objects or of each other’s behaviors for the sake of satisfying our commitments. But any changes we achieve will never meet our ideals, given that *ideals* are not absolute measures in the first place. We can always adjust and improve our performances further, in alignment with *ideals*, and new experiences can revolutionize our understanding of our *ideals*.

Our ends are not only indeterminate but also often conflict each other, and this conflict drives us to clarify our ends and to transform our ways of life. The everyday ambiguity and difficulty of making up our minds in reflection is explained by the plurality of our ways of life, which can be more or less distinct from each other. That is, some ways of life are constituted by niche and norm conditions that overlap with, or are similar to, those of other ways of life; whereas other ways of life are constituted by conditions that are distinct and non-overlapping with those of other ways of life. In some cases, one way of life might even supply social norms that demand behaviors that painfully violate the norms of another way of life, and dilemmas ensue. This explains why practical deliberation and reflection is often difficult and involves much oscillation between competing possible means or ends. But such conflict also facilitates dynamical changes in our ways of life and perceptual experience; I will examine this point in the next section, and it will be the focus of chapter 6.22

Experimental evidence, across behavioral, neurobiological, and computational levels, supports that practical reflection can enhance performance and aid cognitive and motor learning (Frank & Schack 2017). Studies show that simulative cognitive rehearsal

22 While we embody a plurality of ways of life, some of these are more “actualized” than others. That is, we have successfully developed the embodied skills of some, whereas we are in the process of developing the skills of others. Highly actualized ways of life more often supply the existential properties that show up in perceptual situations and dictate our behaviors. Low-order reflection, which is imagistic and spontaneous, more often is conducted on the basis of ideals of *actualized* ways of life. In contrast, it takes higher order reflection, which is self-conscious and linguistic, to access the normative power of ideals of non-actualized, *aspirational* ways of life. So, a person must frequently engage in high-order reflection if they want to escape the normative pull of actualized ways of life and desire to develop new habits and goals.
of a motor skill is more effective in improving actual performance than no rehearsal (Driskell et al. 1994; Frank et al. 2014). Neurobiological findings indicate that both actual practice and off-line cognitive simulation of a motor task correspond with neural activity in the same neural regions and effectuate similar neuroplastic changes (Di Rienzo et al. 2016; Pascual-Leone et al. 1995).

Although this evidence is restricted to the role of practical reflection in enhancing motor behaviors, there is good reason to generalize this role to enhancing complex sociocultural behaviors. The experimental paradigm of explaining “theory of mind” (the ability to intuit people’s intentional attitudes by observing their behaviors) by our engagement in practical reflection is empirically robust (Currie & Ravenscroft 1997; Hutto 2014). So practical reflection, by generating new information and simulating potential experiences, can improve our performance of many different activities and facilitate the development of complex embodied skills—which determine complex existential properties.

Reflection feeds back into first-order perceptual experience, which supplies new objects on which we can reflect and lets us develop our embodied skills. Since the possible ways of life to which we can commit are limited by the embodied skills we have, these effects of reflection can eventually open new ways of life as viable commitments. When we gradually actualize these commitments, social norms of these new ways of life come to regulate reflection, which, in turn, shapes experiences, embodied skills, and the existential properties of our perceptual world.

This dynamical relation between reflection and experience is central to the Reflection View. We are agents, not just patients, of conformity. Moreover, niche and norm conditions drive the development of embodied skills and existential properties. In the absorbed moment of perceptual experience, existential properties show up independently of volition. But over longer periods of time, we can substantially contribute to the development of these properties, which structure the world that constrains our lives. Thus, we can play a role in determining the world that ends up determining us.
In this section, I will argue that all existential properties are developmentally continuous with the minimal affective values that infants and some non-human animals necessarily perceive. The Reflection View accounts for the developmental process that links the two. Minimal affective value is determined by affect, which is an existential condition and is entailed by the homeostatic regulation of our biology (Thompson 2007). These values are as intrinsic and necessary to perceptual experience as low-level properties, like colors, are, since the latter are also determined by our physiology. Affective values necessarily develop into existential properties by virtue of our existential conditions of intersubjectivity and language, which are also biologically fundamental. Thus all objects we perceive necessarily manifest some existential properties.

Kant argues that the conditions that synthesize perception necessarily present objects as occupying magnitudes of space and time (A23/B38). Space and time are not merely objects among other objects. Spatiotemporal features of objects are likely based in the interaction between some physiological conditions and some nature conditions. Physiological conditions are products of our evolutionary history, defined by our interactions with the environment; physiological conditions and their patterns of interaction with the environment are highly stable and necessary to our species. So the spatiotemporal dimension of perception is also necessary and stable.

Similarly, the existential condition of affect is a result of evolutionary history and is biologically necessary and stable. Many animal species have biological organizations that entail affect. When an organism experiences affect, it is automatically attracted to materials in its ecological niche that can satisfy its homeostatic needs; it is also automatically repelled by materials that hinder such satisfaction. Affect is one of nature’s solutions to the problem of finding an efficient and virtually infallible mechanism that promotes the organism to satisfy homeostatic requirements.

Because the mediation of our embodiment in perceptual experience is necessary, and our biological organization is fundamentally regulated by affect, all objects in the perceptual world necessarily manifest affective values. Affective value is not merely an
object among other objects in the world. It is impossible for any object to lack affective value, if the perceiver has a biologically normative body. For a perceptual object to not manifest affective value would require the perceiver to have some biological dysfunction that disables her body from regulating its homeostatic needs. This is why our perceptual world is saturated with value. All objects that show up in the world will manifest a magnitude of an affective dimension; just as they all manifest magnitudes of a spatiotemporal dimension.

This affective value is the developmental basis of existential properties. Let me first focus on infant development in the first year of life to trace this development. During the infant’s initial months, its behaviors are driven by affective values. The first basic embodied skills an neonate develops will be geared toward pursuing objects that manifest positive values (e.g., milk) and avoiding objects that manifest negative values (e.g., cold temperatures).

Because intersubjectivity is another existential condition entailed by our biological organization, many affective values are not responsive to the infant’s homeostatic regulations but to the infant’s social relations to caretakers and other intentional beings. For example, neonates are more responsive to human faces and voices than they are to other objects and sounds (Reddy 2003). They express pleasure from eye contact and smiles, and they will smile back. Through these social interactions, the infant develops basic embodied skills pertaining to capturing caretakers’ attentions and having empathy and affective attunement with caretakers, among interacting with them in other important ways that allow the infant to receive social and homeostatic nourishment.

These basic skills determine that the minimal affective values infants perceive develop into values that are more sophisticated and express significances that guide the infant through simple social interactions. Both values based in metabolic and social needs are both affective values, in the sense that they are both determined by the infant’s affective responses to objects. But the former are minimal in affording attraction and repulsion behaviors relative to homeostatic needs, whereas the latter are more nuanced in affording simple social behaviors relative to a comparatively diverse set of needs. It is
likely that infants can already engage in low-order, minimal practical reflection around
this time; they can simulate imagistic representations of their experiences for the sake of
achieving future behaviors that satisfy their needs. Such reflection plays a constant role
throughout their developmental process.

Around 6 months of age, infants develop basic embodied skills of participating in
“joint attention” situations, in which an infant and caretaker both attend to an object in
the shared environment (Tomasello et al. 2005). This is recognized as a milestone in
development and accompanies the development of a range of cognitive capacities
(Tomasello et al. 2005). It indicates that the infant has developed basic embodied skills
for intuitions her caretaker’s intentional states; she understands that her caretaker
perceives her and that together they perceive a common object.

Around 9-12 months of age, infants are able to mimic the ways adults act toward
objects during joint attention situations. These situations are more nuanced, since the
infant not only perceives that her caretaker perceives her and the object, but the infant
also perceives the caretaker’s particular instrumental relationship to the object and is
motivated to mimic it (Ramstead et al. 2016; Tomasello & Rakoczy 2003). The infant’s
enculturation begins in these joint attention situations. She develops basic embodied
skills anchored in ways of life, becomes sensitized to social norms, and receives
scaffolding from niche conditions. That is, the object that she and her caretaker perceive
guides her bodily movements and behaviors in relation to it, and her caretaker teaches her
the normative uses of the object (Vygotsky 1924/1987). These basic skills mediate her
perceptual access to situations across domains of her life, and she comes to perceive
objects as manifesting nuanced affective values, particularly, sociocultural instrumental
values of objects. These values are on the borderline of being proper existential properties
because they are grounded in ways of life and express significances that are publicly
shared.

Infants from 7-9 months of age display other basic embodied skills for relatively
more sophisticated social interactions. They enjoy deliberately violating the caretaker’s
expectations of their behaviors (Rossmanith & Reddy 2016). Infants like touching
electrical sockets, throwing objects, or acting in other forbidden ways. When they do this, they keenly watch the caretaker’s responses, learn to manipulate the caretaker’s attention, and take delight in this kind of intersubjective engagement (Rossmanith & Reddy 2016). These basic embodied skills are more nuanced than the elementary ability of responding to adult smiles and looking at objects together. These skills indicate that the infant can perceive nuanced affective values that an electrical socket, for instance, affords touching and will solicit desirable responses from the caretaker. Objects across the infant’s perceptual world manifest increasingly nuanced sociocultural values, as the infant develops such embodied skills.

Once nuanced sociocultural values are perceptually achieved and maintained, the infant cannot return to previous minimal affective values that objects used to have. The acquisition of basic embodied skills fundamentally alters the topology of the value-based dimension of perceptual experience, originally made possible by our affective nature and homeostatic requirements. Objects that show up in the perceptual world necessarily manifest increasingly nuanced values.

The mastery of language heralds the development of a range of sophisticated social and conceptual cognitive capacities. For example, linguistically capable children can label objects and design a “virtual reality overlay” (Clark 2005); engage in dialogue with the self (an ability initially gained from engaging in conversations with others); use internal dialogue as a tool to regulate attention and to draw on cross-domain information, which aids the performance of tasks (Fernyhough 2010; Vygotsky 1934/1987); and attain attunement to the intentional states of others (de Villiers 2000; de Villiers & de Villiers 2014).

These changes let children perceive socioculturally valenced objects, participate in norm-governed activities, and develop sophisticated embodied skills that are rooted in ways of life. These skills, which mediate access to the world, determine that objects manifest proper existential properties, which are extremely nuanced affective values that have normative conceptual contents, grounded in ways of life. For example, a simple or a fancy toy might be indistinguishable in the minimal affective values they manifest for an
neonate. In contrast, for an older infant, toys can manifest different nuanced values, so the infant grabs one and spurns the other. A child might not only prefer one toy over another, but also might also want her toys to be more expensive or shinier than her neighbors’ toys. The child can use language to understand complicated social situations and has developed embodied skills that determine existential properties tied to social status. Existential properties that these toddlers perceive can accommodate conceptual components that precede and guide their social behaviors.

Language radically enhances the capacity for reflection. This cognitive development lets the child design linguistic representations of their experiences and manipulate them in nuanced ways to serve social norms. Since reflection enables future experiences, language expands the possibilities of developing embodied skills. This enables the child to participate in new sociocultural activities and to perceive a world structured by existential properties that are unified by ways of life, in which these activities are embedded. Over this development, the child becomes properly existentially committed to ways of life. She is driven to satisfy her commitments, and these commitments supply new social norms that govern her reflections.

Because social norms are indeterminate, they are always idealistic in nature when reflectively pursued. Ideals are inherently unstable. Episodes of reflection, structured by ideals, can generate information that encourage future performances that differ from and possibly improve on previous performances with respect to satisfying social norms. Through the dynamical looping between reflection and experience, a growing child achieves new levels of performance, through which she develops increasingly complex embodied skills and existential properties attuned to her ways of life.

The complex existential properties that are accessed by encultured perceivers thus are ultimately grounded in the minimal affective values that neonates perceive. These values develop into increasingly complex forms because neonates are genetically endowed to participate in social interactions. These interactions spur the development of simple embodied skills, which determine that previously minimal values become nuanced and serve sophisticated social needs. Once language is mastered, and linguistically scaffolded
reflection is cognitively achieved, a developing child is exponentially sensitized to social norms and can participate in a greater range of sociocultural activities. This entails that the child can embody ways of life and perceive a world that is structured by existential properties that serve these ways of life.

The Synthesis of Existential Properties

The Transcendental View holds that our ways of life orchestrate the development of embodied skills, and these skills determine the existential properties that show up; and reciprocally, perceptual experiences permit the development of embodied skills, which set constraints on viable ways of life. By arguing for the Reflection View, I have shown that ways of life can have a top-down effect by virtue of the role that their social norms play in governing reflection. Now, I will present a bottom-up account of the synthesis from (1) registration of stimulation in the distal environment to coherent perceptual experiences, from (2) perceptual experiences to the changes in embodied skills, and from (3) changes in embodied skills to shifts in viable existential commitments to ways of life. This demonstrates the reciprocity of the dependencies between ways of life, embodied skills, and existential properties and completes the Transcendental View.

Because existential enactivism is a theory of the transcendental conditions of perceptual experience, some low-level accounts of processing and neurobiological structures might enrich this synthesis account, but these are irrelevant to my purposes.\(^23\) In this section, I will primarily focus on ecological, psychological, and phenomenological evidence. Such evidence is neutral on questions of computational or neurobiological explanations; it could be compatible with many different explanations of these levels.

In chapter 2, we reviewed Gibson’s ecological account of perception. For many animals, sensory systems and motor capacities, among other physiological embodiment

\(^23\) Also, there is a lack of fine-grained neurobiological accounts that could enhance the particular features of my theory. This is partially due to the fact that neuroscientists do not know how much processing is allotted to the central nervous system or to mind-independent processes in the environment. This is an empirical question that needs to be addressed for neuroscientific accounts to achieve greater accuracy (Rowland 2010).
conditions, make sensory perception and motor affordances possible. For humans, existential conditions and embodied skills are also involved. We do not and cannot find ourselves in a purely physical world, devoid of existential significance, given our existential conditions. Affect, intersubjectivity, and language always modulate our openness to the world and determine an existential dimension of perceptual experience.

As we pursue optimal reception of information from the optic array, we are not driven to optimize our access to low-level properties as much as to optimize our access to high-level, existential properties, which make possible our satisfaction of sociocultural desires, goals, and ends. But how do existential properties come about? The physical items that co-vary and constitute potential information in the domain of existential properties are different than those in the domain of low-level properties. The items of the latter are patterns of particle activity available in the ecological niche. The items in the former are patterns of sociocultural events, stabilized by material features of sociocultural niches, at a comparable informational-level of analysis. When cognitive systems become attuned to covariances between these sociocultural events, this information can be exploited, which amounts to existential properties, at a phenomenological level.

Amodal perception provides evidence for this account (e.g., Driver et al. 2001; Nanay 2010). Amodal perception refers to the baffling but commonplace cases of perceiving objects that do not reflect any light but are nonetheless visually perceived. Given that visual perception is traditionally understood as based on sensory stimulation, this seems bizarre. For example, when a person rubs her cheeks, we still perceive that she has cheeks, although her hands block out this portion of her face. Or, if she sits on a chair, we still perceive that the chair continues beneath her bottom, although the seat is occluded. We engage in amodal perception all of the time. This challenges the mainstream view of perception, which requires that objects that appear in perception originate from sensory stimulation that interact with our sensory systems.

Neurocomputational accounts propose that amodal perception is made possible by top-down influences on early stages of visual processing (Ramachandran 1995; Driver et al. 2001; Komatsu 2006). The problem with studies at this low-level of analysis is that
interpretation of neurocomputational data is heavily dependent on theories that describe higher-level phenomena. Bence Nanay argues for an account of amodal perception at the higher, representational level of description, which might help us make sense of neurobiological studies (2010, 2017). He argues that amodal perception is based in the constitutive involvement of mental imagery in perceptual experience. Mental imagery is passive, spontaneous, non-propositional, and multimodal, whereas mental visualization is active, deliberate, and often propositional (O’Callaghan 2008; Zeman et al. 2007). We perceive mental imagery while simultaneously perceiving the distal environment. Mental imagery presents the occluded parts of objects in perceptual experience.\(^{24}\)

While Nanay (2017) argues that the contents of mental imagery are exhausted by low-level sensory properties, I propose that mental imagery can also represent existential properties. We regularly have spontaneous, embodied “imagery” of high-level properties. For example, when we receive texts from a friend, we have “imagery” of the friend’s presence, demeanor, and affect. We “imagine” her demeanor, mood, and intentional attitudes as we receive her texts. Her virtual presence is composed of properties that are not based in sensory modalities alone; these high-level properties are existential properties, which are represented in “imagery” that is constitutive of perceptual experience. Mental imagery plays a role in presenting components of existential properties during perceptual experience, and this permits the integration between high-level properties and low-level properties.

But a concern might be raised about a seeming regress. I just pushed the origination of existential properties out the domain of perception of the distal environment and into the domain of mental imagery. If perception registered only low-level properties, then mental imagery would also only register low-level properties. Then, given my theoretical commitment to the perceptual registration of high-level properties, I

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\(^{24}\) Nanay argues that multimodal mental imagery is unconscious for the most part and constitutive of most perceptual experiences. This is supported by neuroimaging findings: in the absence of relevant sensory stimulation, the early processing regions of neural systems in which sensory perception is centralized is still activated (Driver et al. 2001). Activity in these regions reliably indicate that sensory processing is still going on in the absence of stimulation. This is evidence that the subject experiences unconscious mental imagery.
would have to say that these properties are derived from an even further process of quasi-perceptual imagery, which infiltrates into mental imagery, and, in turn, trickles into perception.

But this regress problem is merely apparent. Existential properties are always found in first-order perceptual experience; existential conditions of our embodiment necessitate that objects manifest high-level properties, just as sensory systems of our embodiment necessitate that objects manifest low-level properties. By re-presenting and integrating components of past perceptual experience with new perceptual experiences, mental imagery is an auxiliary process that might aid in the perception of more complex forms of existential properties. So, a view committed to high-level, existential properties does not face the risk of regress any more than a view committed to only low-level properties does.

But another concern might be raised: it seems that I have abandoned my previous explanation of existential properties as based in the manipulation of covariances between socioculturally defined cues. Which explanation do I hold to be true? Does mental imagery present existential properties in perception, or are these properties synthesized from informational covariances?

These are not mutually exclusive alternatives; they capture processes at different levels of analysis and reinforce each other. Infants initially perceive minimal affective values. As they grow up, they become able to integrate values from past experiences into new perceptual situations, via mental imagery, and enact novel experiences of values and meaning. At a informational level of analysis, this can facilitate the process of becoming attentive to new complex covariances between sociocultural cues. By achieving novel perceptual situations, based in combinations enabled by mental imagery, we can develop more nuanced informational sensitivities, or embodied skills, and can detect correspondingly complex covariances in future situations.

As sensory stimulation and sociocultural covariences make perception possible, new perceptual experiences shape the development of embodied skills, which in turn transform our existential commitments and alter constraints on viable ways of life. But
changes in skills, commitments, and ways of life are very gradual. Correspondingly, the contents of perceptual experience are usually phenomenally stable. That is, the existential properties, achieved by the deployment of relatively stable embodied skills, usually conform to the social norms of a perceiver’s ways of life. Given that perceptual experiences are achieved in the unpredictable world, however, we are always subject to disturbances external to our particular embodiment, norm, and niche conditions.

These disturbances play constitutive roles in perceptual experience and forcibly present contents that challenge or even violate those specified by our expectations and ends, which are rooted in our ways of life. These perceptions deviate from normative perceptions relative to the activity for which we have developed embodied skills. Usually, disturbances are subtle, deviations are minimal, and the development of embodied skills is gradual. But in exceptional cases, such as disturbances that trigger traumatic upheavals or spiritual awakenings, disturbances can radically alter the configuration of our embodied skills. Examining these cases can shed light on the prevalent role of disturbances across everyday cases.

A disturbance to physiological conditions, for example, might transform the possibilities of experience and shift the viability of previous ways of life. For example, Svetlana loses her toes. Physically, she can no longer engage in her previously familiar and everyday motor activities, and she is forced to develop new embodied skills to cope with this loss. Socioculturally, distal niche and norm conditions that pertain to people who have lost body parts will constrain the possible skills Svetlana develops and the possible ways of life she comes to embody. There are conditions that promote expectations of people with disabilities, for the better or worse, and these constrain the outcomes for people like Svetlana.

Similarly, emotionally traumatic events force bottom-up changes in embodied skills. For example, Svetlana loses her innocence after witnessing a death. This disturbance forces her to have a horribly alien experience, which is followed by chronic nightmares and onsets of anxiety. She must develop new embodied skills to deal with these experiences. The possible skills she can develop are constrained by her sociocultural
environment: for instance, media depictions and psychiatric dogma (among other artifacts that fix expectations of the nature of trauma) influence her development—I will examine the role of disturbances in the development of mental illness in chapter 5, which will substantiate this explanation. A dynamical relation holds between perceptual experience, embodied skills, and ways of life; changes at any level leads to changes in the others.

Spiritual awakenings have self- and world-upturning effects similar to those of traumatic experiences. Such revelations require, however, that a person has previous existential commitments that have prepared her with appropriate embodied skills to perceptually register a disturbance as conveying mind-blowing information. For example, a certain adult I know was once a young village boy. He has never strayed from his agricultural province before and travels to a faraway desert. He climbs to the top of a towering sand dune. From there, he is stunned by the vastness of the desert. He has never before imagined that space could be this endless; and this has implications for the dimensions of the world beyond.

Previously, he had entertained the commitment to leaving his village and discovering the world beyond, and this lets the disturbance present existential properties that in turn trigger his “awakening.” Now, he must develop new embodied skills to cope with this experience, such as skills of recognizing features of his village as provincial, which motivates him to leave his home, or of recognizing avenues that afford leaving. These skills are embodied in the sense that they are developed only from acting in the sociocultural world, and they are capable of presenting relevant existential properties in perceptual situations. Distal niche and norm conditions of his society will scaffold his changes and offer the particular ways of life to which he can existentially commit over the course of this transformation.

Traumas and awakenings are rare, but they are demonstrative of processes by which everyday perceptions—which are always influenced by at least very slight disturbances—subtly shape our embodied skills and even our ways of life over long spans of time. We cannot control every event as we pursue our daily routines, and slight
disturbances (e.g., everyday conversations; traffic jams that induce contemplation; internet searches), frequently occur and might shape our perceptual experiences, embodied skills, and ways of life. These bottom-up processes are reciprocally matched by top-down processes.

**Conclusion**

I argued that existential properties are developmentally continuous with minimal affective value, and thus are necessarily manifest in perceptual experience. Affect, an *existential condition*, entails that all perceptual experiences manifest such values, and intersubjectivity and language entail that such values necessarily develop into existential properties. Similarly, *physiological conditions* entail that all perceptual experiences necessarily manifest sensory and spatiotemporal properties.

As infants develop, they become capable of a variety of social interactions and are sensitized to social norms. As they develop basic embodied skills, they can perceive nuanced values. When they later develop skills to deal with situations that require the grasp of socioculturally normative objects and behaviors, these values become proper existential properties. This development is facilitated by the capacity to reflect on experiences and draw conclusions on the basis of socially normative criteria. These contents of reflection enhance future experiences, over which we develop embodied skills that increasingly conform to our ways of life and permit the perception of new existential properties. I call this the *Reflection View*. Thus, in effect, reflection augments the power of ways of life to orchestrate the development of embodied skills and existential properties. Even highly complex existential properties are just sophisticated forms the minimal affective values necessitated by our embodiment and existential commitments.

Although subpersonal, statistically-sensitive conditioning constrains us, we are also distinct subjects who actively strive towards satisfying our desires, which are rooted in our ways of life. The Reflection View, which explains the phenomenological side of the process of conformity, supplements this subpersonal explanation and accounts for our
agency. We are not deterministically conditioned by our ways of life but are *existentially committed* to our ways of life. Although during any given moment of perception, existential properties mandatorily show up, we nonetheless have an agential role in the development of these properties. Existential properties are *existential* in two senses: they are determined relative to our existence, and we have existential freedom to transform them over efforts of reflection and self-examination.

I argued that bottom-up processes are as necessarily implicated in directing the development of existential properties as these top-down processes are. Disturbances external to our normative foundations can trigger unexpected perceptual experiences, which can require us to develop new embodied skills. This, in turn, can alter our possible ways of life, and these provide new norms that drive reflection and constrain our development.

I have completed my arguments for existential enactivism. Once again, it comprises three views: (1) the *Unbounded View*, that there is no principled upper bound to the complexity of the existential properties we perceive, (2) the *Transcendental View*, that ways of life, embodied skills, and existential properties are dynamically interdependent and account for perceptual experience, and (3) *The Reflection View*, that this interdependence is made possible by the interplay between reflection and experience. In the next chapter, I will apply existential enactivism to understanding the etiology of mental illness. This is not solely an exercise in showing the explanatory power of this theory. It also illuminates an implication of existential enactivism: ways of life determine our subjectivity as much as our perceptual world.
The National Institute of Mental Health reports that 1 in 5 adults, and 1 in 2 adolescents (ages 13-18) in the US live with some kind of psychiatric disorder (Ahrnsbrak et al. 2017). This statistic reflects a modern phenomenon; the reported prevalence of mental illness among adults in the US increased *fourfold* between 1955 and 2000, and has only increased since 2000 (CDC/National Center for Health Statistics 2015; Whitaker 2005).

It is also alarming that today *half* of all adolescents in the US are said to have mental illness. Being diagnosed with a mental disorder is no longer a *deviance* from the statistical average for adolescents, but is rather the average itself. If the prevalence of diagnoses continues increasing along this trend, it is not unlikely that being diagnosed will soon become the norm for adults as well. What explains this bewilderingly increase in diagnoses? Are current diagnostic practices flawed? Or, is there an “epidemic” of mental illness, possibly due to some social, economic, or political trends in the US?  

These statistics might seem implausible, but they are robust. The Substance Abuse and Mental Health Services Administration (SAMHSA) interviewed 67,942 people, through a stratified sampling method, who live across the 50 states. Most of these interviews were conducted in face-to-face in household settings. The vast majority of these diagnoses are anxiety, mood, substance abuse, or personality disorders, which are largely socially influenced and without any biomarkers. A small fraction of them are disorders regarded as having a relatively stronger genetic basis, such as schizophrenia or autism (Ahrnsbrak et al. 2017).

The prevalence of psychiatric diagnoses varies widely across nations. The US has the highest prevalence rate in the world (Kessler 2004). Its prevalence is more than six times that of China, for example. Although it is difficult to rule out potential confounds in these epidemiological studies, the magnitude of difference between the US rates and rates of other nations is large enough to support that the prevalence of psychiatric diagnoses is significantly higher in the US than in other nations.
In this chapter, I will argue for an enactivist account of the etiology and nature of mental illness, which helps explain these statistics, although renders them no less alarming. This account will show that mental disorders cannot be adequately understood without recognizing the role of a person’s phenomenological experience, particularly of existential properties. Thus the transcendental conditions specified in existential enactivism also help to explain mental illness. This has implications for psychiatric research and clinical practice, as I will show.

This application to psychiatry will not only demonstrate the explanatory power of existential enactivism; it will also illuminate a feature of the theory that I have not yet explicitly examined. I have presented it, so far, as a theory of perception. This application will show that changes in the perceptual world are coupled with changes in personality or character—understood in the folk psychological sense as patterns of emotion, judgment, behavior, preferences, and values, among other things we take as definitive of a person. So when I claim that ways of life structure our subjectivity and perceptual world, as presumed in my analysis of existential commitment, I mean it in a substantive sense. Understanding the etiology of mental illness shows how this can be the case.

My account will challenge the scientific consensus on the etiology and nature of psychopathology. Although scientists recognize a range of levels of causal factors as involved in disorder etiology, there is an increasing pressure to take biological factors as

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3 Existential enactivism is suited to illuminating the social and personal contributions to disorder etiology. Biological variables, which occur relatively independently of cultural influences, play important roles in the etiology of some mental disorders, and my existential enactivist approach to the etiology of psychopathology can account for these too. I acknowledge that different mental disorders might warrant unique etiological models. These differences, however, are in the peripheral details. My existential enactivist framework for understanding the etiology of psychopathology is applicable for all mental disorders, such as those under the DSM categories of schizophrenia, bipolar, depression, anxiety, obsessive-compulsive disorders, dissociative disorders, eating disorders, and personality disorders. This is possible because my framework captures the transcendental conditions and high-level developmental processes that are involved across these cases. My framework also has relevance for any social category that is susceptible to “looping effects,” which I will present in this chapter. This is because all people have the capacity to have awareness of their experiences and for their experiences to develop into distinctive forms depending on the sociocultural conditions in which people are embedded.
most fundamental (Benning 2015; Pawelzik 2013; Pilgrim 2002). Approaches from various fields (e.g., neuroscience, genetics, cognitive science) privilege biological-level factors in disorder etiology. In contrast, some traditions of clinical psychology (e.g., psychodynamic and humanistic traditions) privilege person-level factors, such as patterns of emotion and judgment (Freud 1896; Rogers 1953/2015). But this view is rare in contemporary discussions of psychopathology.

Regardless of these differences, all approaches share two essential assumptions. First, they assume a primarily empirical or observational methodology. Humanistic and bio-reductionist views alike base their accounts of psychopathology on observation of disordered behavior and by inference to the best explanation of such behavior. Second, they take the individual as a subject of an objective world, and take psychopathology to involve disturbances in her representations of this world. The etiological factors they privilege are all located inside the individual, whether described at the levels of representational states, cognitive functions, neural circuits, or genetic makeup. Third, all these approaches assume that there is some level of analysis that is etiologically privileged, although they sometimes disagree about which level that is.

I will challenge these assumptions. First, I will start from a phenomenological perspective. This is not simply for increasing the accuracy of “what it’s like” to have a

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4 For example, the Research Domain Criteria (RDoC), the latest, highly-funded research agenda for psychopathology by the National Institute of Mental Health (NIMH) prioritizes a neurobiological level as the ultimate level of analysis. It presumes that only this level will reveal the true nature of mental illness and effectively guide research on clinical treatment (Morris & Cuthbert 2012). In this chapter I will challenge this approach.

5 For example, some researchers in cognitive science take that the purpose of their approach is to provide bridge principles, based in a computational level of analysis, for the reduction of higher level factors to biological factors, whether at neural or genetic levels (Montague et al. 2012; Yahata 2017).

6 Some major approaches do consider phenomenological data as causally relevant; but when they do so, they interpret the significance of the phenomenology in ways that preclude the etiological information that it could reveal. The psychoanalytic or psychodynamic tradition, for example, respects phenomenology more than reductive approaches. This tradition validates the etiological validity of a person’s first-person experience and takes free association (which might involve phenomenological descriptions) as a primary source of theoretical data. This tradition, however, remains restricted; it imposes speculative interpretive theories and predetermines the kinds of
mental illness and for improving descriptive accounts of symptoms. Rather, rich phenomenological description is necessary for identifying certain etiological factors that are difficult to capture by observational methods alone and for challenging unexamined assumptions made by observational methods about the nature of mental illness. Second, I will argue against internalism: there is no objective, external world that is dissociable from an individual’s representational states. Instead, there is only one perceptual world that is dynamically co-constitutive with the embodied individual. This, I will argue, entails that pathological disturbances are not the result of disturbances of representational states, but of the perceptual world itself, by which the world is understood in terms of direct coupling. Third, I will argue that no particular level of analysis is privileged, but all are dynamically interdependent and implicated in mental disorder. In particular, social factors have been overlooked by many etiological approaches.

All major approaches capture real causal factors, but none can explain the precise role of factors at any level of analysis because they lack an adequate model that can integrate levels of analysis. Existential enactivism shows that biological and neural factors are tied to physiological embodiment conditions (see chapter 4). These constrain the possible embodied skills a person can develop. Social factors are tied to niche and norm conditions, which also constrain these developmental possibilities by virtue of determining the availability of certain ways of life, which contextualize the development of embodied skills (see chapter 3). Cognitive factors are tied to embodied skills, which are inseparably coupled with existential properties. Personal or psychological factors are tied to practical reflection and other voluntary responses to perceptual experience; these modulate the development of embodied skills and existential properties.

In this chapter, I will first survey dominant contemporary trends of research: biomedical, cognitivist, and biopsychosocial approaches. I evaluate their presumed etiological conclusions drawn. It is also suspect to the other two assumptions made by all major theories of psychopathology.

7 Philosophers who argue for the importance of phenomenological methods for research in psychopathology tend to do so on the basis that these methods are crucial for improving descriptive accounts of symptoms (e.g., Parnas & Zahavi 2002; Stanghellini & Rosfort 2013).
ontology of psychological and social factors and principles of causal relations between these and biological factors. I will argue that such presumptions are flawed, and that existential enactivism can address the problems these approaches face.

In the second section, I will introduce Hacking’s social constructivist approach to psychopathology (Hacking 1998). Hacking argues that the involvement of *looping effects* in disorder etiology indicates that mental disorders are socially constructed. I will argue that his account of looping effects cannot support his social constructivist thesis. The weaknesses of his theory stem from his reliance on a cognitivist metaphysics; this forces him to account for looping effects having direct impact on only mental representations, which are taken to be dissociable from bodily processes. This leaves open the possibility that mental disorders are based in biological pathologies, which are not subject to looping effects. In contrast, existential enactivism can show that looping effects, in fact, necessarily engage bodily processes, and all expressions of pathology are necessarily influenced by sociocultural conditions. This provides a better foundation for Hacking’s thesis.

In the third section, I will present alternative approaches to psychopathology based in phenomenology, narrative psychology, and enactivism. These approaches challenge the metaphysical internalism, among other principles, of dominant trends of research. I examine them for their insights and limitations, which provides context for the existential enactivist approach.

In the fourth section, I will apply existential enactivism to examine a case study of anorexia nervosa. This case study allows us to focus on the phenomenology of disordered experience and understand that certain existential properties, embodied skills, and existential commitments—which depend on sociocultural traditions constructed by psychiatric practices—provide the necessary conditions of the chronic behaviors that are regarded as definitive of mental disorders.

In the fifth section, I will expand on certain features of this case study and provide an etiological framework of psychopathology in general. Psychiatric institutions have led to the construction of niche and norm conditions that allow psychiatric disorders to
function as ways of life to which people can existentially commit. People who are clinically or self-diagnosed inhabit the sociocultural niches of these disorders, which transform their embodiment, perceptual world, and personality. I will also show how mainstream and alternative theories fit into this framework.

In the sixth section, I will return to the initial question: Why is the prevalence of mental diagnoses in the US rapidly increasing? Heidegger’s analysis of technology and enframing is relevant here. Medical psychiatry exemplifies the technological attitude directed towards our own suffering. We regard our suffering as an object to be manipulated and eliminated by technological devices (e.g., medications). I will argue that this attitude is among the factors that explain the bewildering statistic.

In the next chapter, I will propose the aesthetic attitude as a foil. This attitude can permit the development of embodied skills to accept and engage with our suffering in creative ways, which enables transformative outcomes of suffering that are sometimes occluded by psychiatric practices.

Biomedical, Cognitivist, and Biopsychosocial Models

The biomedical, cognitivist, and biopsychosocial approaches dominate contemporary research on the etiology of psychopathology. Although each integrates person- and social-level factors in its models, each underspecifies the ontology of these factors and the causal relations between these factors and those of other levels of analysis. In this section, I will introduce these approaches and examine them with special attention to these limitations.

On the biomedical approach, mental disorders are based in biological dysfunction and are a subset of physical diseases. Research aims to identify the biological causes (whether at genetic, molecular, neurological, or physiological levels) of psychiatric symptoms. Social- and person-level factors relevant to disorder etiology, according to this approach, are outcomes of biological processes, have peripheral modulatory effects on
fundamental biological processes, or have no significant role in etiology altogether (Schaffner 2013).

This approach fails to recognize the dynamical interdependence between all levels of analysis and assumes that the processes that take place at biological levels are causally privileged, determining processes at higher levels in a way that cannot be reciprocated. For example, the Research Domain Criteria (RDoC), a major project of the US National Institute of Mental Health, follows a biomedical approach in its attempt to identify valid psychiatric categories. The only non-biological levels of analysis that RDoC studies are “behavior” and “self-reports,” which are strictly taken as targets to be reduced to the biological level (Morris & Cuthbert 2012).

This is seriously impoverished. The RDoC model does not even acknowledge social levels. It holds that basic social conditions, such as economic status and education, have an insignificant role in disorder or are reducible to their impact on observable behaviors and self-reports. But social conditions also have effects on the living environment, background knowledge, and perceptual experience of individuals; I will show that any adequate etiological model of psychopathology must take these factors into account.

The crucial role of social conditions in disorder etiology is *prima facie* supported by robust empirical evidence. Prevalence rates of schizophrenia, depression, among other disorders significantly correlate with particular socioeconomic conditions and racial demographics (e.g., Freeman 1994; Toyokawa et al. 2012). The prevalence of some mental disorders among non-Western populations suddenly increase when their nations adopt Western culture (Nobakht and Dezhkam 2000; Ung 2003). “Culture-bound” mental disorders, whose occurrence is restricted to certain cultural milieus, are

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8 NIMH specifically created the RDoC project to counter the non-etiological DSM approach and replace it with a valid model (Tabb 2015). But NIMH takes for granted that the biomedical model is valid, which it is not. Research in psychiatry is increasingly transitioning towards biomedical models, like the RDoC model (Benning 2015).
commonplace and well documented (Kirmayer 1989; Lock 2001, 2010; Simon & Hughes 2012; Yap 1965). 9

One might argue that biological factors are the only proximal causes of psychopathology, and that social factors simply modulate mental disorders. For example, social factors might only provide triggering conditions for disorders whose development is genetically determined once triggered; in this case, an adequate model of the conditions underpinning a disorder would only need to focus on biological factors. But this is not the case. The dynamical coupling relation between the embodied person and sociocultural environment entails that the development of psychiatric symptoms depends on perceptual experience, voluntary responses, and social conditions, as much as it depends on emotional or cognitive predispositions that are possibly influenced by genetic inheritance. I will argue for this below.

Moreover, the RDoC model assumes that all factors relevant to disorder etiology can be found inside the head. This is wrong: most processes that occur across intracranial levels are dynamically interdependent with higher-level processes of a person’s perceptual experience, voluntary responses, and sociocultural embeddedness. This is because our biological organization is dynamically coupled to our environments. Explaining a feature of neural activity (e.g., serotonin levels; amygdala activity), requires identifying the phenomenological experience that this neural activity accompanies, as well as the social

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9 Take koro, a disorder that manifests in only some East Asian societies. Western psychiatry describes it as a delusion-based disorder in which people fear that their sexual organs are shrinking or deteriorating, when this is not the case (Simon & Hughes 2012). Hysteria is another culture-bound syndrome that appeared only in Western societies since ancient Greece up to the 1950’s. Medical psychiatry recognized that only females had this disorder, in which the uterus detached from its natural location in the body and “wandered” throughout the body (Simon & Hughes 2012). It was believed that the retention of female semen caused this, and treatment involved vaginal stimulation. Exact prevalence rates of these disorders are unknown, but they are recognized as common within their cultural bounds.

Of course these cases only indicate that some mental disorders, or particular symptoms, appear to be contingent on sociocultural practices; it is possible that other disorders, or more general forms of pathological experience, are based in biological dysfunction that can occur relatively independently of cultural influence. I will argue that any actual phenomenal experience or behavior that is recognized as a psychiatric symptom is necessarily influenced by sociocultural conditions, although the possible development of some psychopathological conditions, in some cases, might be relatively independent of sociocultural influence.
norms and niche conditions that regulate the possibilities of such experience (see chapters 3 and 4). Thus it is impossible to understand the significance of any intracranial state relevant to disorder etiology without identifying the broader personal and social conditions on which these states depend.

The person-level factors that the RDoC model acknowledges are also limited. Emotional styles and self-esteem, for example, are some basic person-level factors that are often acknowledged by clinical psychologists as crucial to disorder etiology, but these are neglected by RDoC (Bolton 2008; Bortolan 2017; Jacobs 2013). Moreover, as I have argued in chapter 4, we have a capacity for practical reflection and can contribute to the transformation of perceptual experience. This capacity has a significant etiological role in the development of some mental illnesses; I will argue for this in this chapter. Yet RDoC ignores such factors; exemplifying the spirit of the biomedical approach, it regards any non-biological factor as inessential.

Cognitivist approaches tend to acknowledge social- and person-level factors, in comparison to biomedical approaches. They take psychopathology to be based in either dysfunctional cognitive functions, unusual inputs, or a mixture of the two. Reductionist varieties reduce these variables to dysfunction of the neural substrate on which they are purported to supervene (Cratsley and Samuels 2013; Montague et al. 2012; Yahata 2017). For example, some varieties of cognitivism reduce the etiological role of social conditions, such as poverty, to inputs that are processed into belief states of helplessness; some models would further reduce these belief states to neural substrate. This reductionism warrants similar criticism that is applicable to biomedical models. It relegates the etiological role of social conditions to distal causes, and takes only proximal causes, which are exclusively internal, to be explanatorily relevant. But cognitive activity depends on social and environmental conditions as much as it depends on neural substrate, and so any explanation of cognitive activity will be necessarily incomplete if it accounts for only to neural and biological factors.

Although some cognitivist theorists recognize that computational functions are malleable, they do not explicitly examine person- or social-level factors as capable of
restructuring such functions (Cratsley and Samuels 2013). These theorists also fail to recognize that changes in inputs and in computational functions are dynamically interdependent. Modifications in computational functions necessarily alter the possible experiences a person can have and thus the possible inputs that can be received by these functions. Such inputs, in turn, modify the computational functions. Such dynamical interdependence between experience and computational functions most closely resembles the kind of relations between factors across levels of analysis, which are neglected by dominant models of psychopathology.

The biopsychosocial model breaks from the reductionism of biomedical and cognitivist models. It was formally proposed by Engel (1981) to challenge the biomedical paradigm of his time (Benning 2015; Pawelzik 2013; Pilgrim 2002). Engel argues that bio-reductionism is incorrect and that non-biological factors are irreducible and necessary to the experience of disease in general, including psychopathology. Drawing on general systems theory, Engel argues that a person is necessarily situated in a social environment, and biological subsystems are necessarily situated in a person. These nesting biological, personal, and cultural systems are interdependent on each other, and no system is reducible to the others. According to Engel, biological life is essentially organized in this way (Engel 1981).

Engel acknowledges that each level of analysis warrants its distinct ontology, characteristics, and causal principles. But he never specifies these details and employs only vague causal concepts. For example, on his model, person-level factors “feedback,” “impinge,” or “contribute” to factors of other levels (Engel 1981). Virtually all theorists who have drawn on Engel’s work and promote their own biopsychosocial models also underspecify the causal relations between factors (Davies & Roache 2017; Suls and Rothman 2004). But these details are essential to formulating an adequate model that could have clinical application; this is born out in the fact that it has been interpreted in diverse, sometimes contradictory, ways (Benning 2015); and researchers cannot utilize

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10 Although there were predecessors of this model (e.g., Grinker 1964), Engel is often credited as formulating the original proposal.
this model to design treatments for patients (First 2014; First & Wakefield 2013; Pilgrim 2002).\footnote{Michael First, an influential researcher in psychiatry who led recent editions of the DSM, acknowledges that the DSM approach of neglecting etiology is problematic, but there are no good etiological approaches. He argues that the biopsychosocial approach seems to be more scientifically valid than alternatives, but this approach is simply too vague to have any clinical applicability (First 2014; First & Wakefield 2013). So the DSM cannot include etiology from this approach, given that the DSM’s primary purpose is to be clinically practical. This exemplifies the importance of identifying an adequately specific integrationist model and the inadequacy of the biopsychosocial model.}

Biopsychosocial models rely on an underspecified ontology of person- and social-level factors. For example, Engel identifies only directly observable social events and causally links these to only psychological attitudes or behavior styles. “The social policies of rehabilitation,” for example, constrain the possible responses a person can take to their medical condition (Engel 1981, 542). This social factor is a directly observable entity and primarily influences behavior. Other contemporary biopsychosocial models retain this view of social factors (Davies & Roache 2017; Suls & Rothman 2004).\footnote{For example, a review article on the various biopsychosocial models of the etiology of schizophrenia shows that these models recognize only environmental chemical exposure and parental age as relevant social factors, and these are only “involved” in or “influence” the development of this disorder (Opler et al. 2013). These factors are particular and observable like the ones Engel identified; there is no mention of general sociocultural conditions that regulate these particular factors and that have impact disorder etiology. Moreover, the imprecise causal terms are inadequate for clinical and theoretical research.}

These models do not account for social factors that are not directly observable, such as varieties of social norms that regulate the possibilities of the observable social events identified by such models. But such norms are explanatorily necessary; the people who enact observable social events are driven by ways of life and must act within sociocultural niches, which have arisen over our cultural history. Thus the possible social events that occur in a given society are systematically regulated by higher-order social forces, such as niche and norm conditions.

Moreover, these biopsychosocial models do not consider that social factors might alter the very possibilities of conscious experience, rather than alter merely the particular experiences a person has. Niche and norm conditions scaffold the development of
embodied skills, which thereby determine the possible perceptual and conscious possibilities for a given person. Thus social factors can alter the possibilities of experience, rather than only influence the particular experiences that occur. Without specifying such details, biopsychosocial models are incomplete.

There is another problem that biomedicine, cognitivism, and biopsychosocial models collectively face. They presume that the mental disorders they target as explananda are natural kinds, when in fact they are theoretical constructs with dubious scientific validity. The Diagnostic and Statistical Manual of Mental Disorders (DSM) has an indirect monopoly over etiological research of psychopathology. Although since the third edition, the DSM brackets etiology and prioritizes diagnostic reliability, its diagnostic criteria are nonetheless authoritative in etiological research: only participants who meet diagnostic criteria are included in studies (Tabb 2015).

But DSM diagnostic criteria are, to an extent, empirically unfounded; this jeopardizes the validity of the etiological models that are tied to these criteria. There are currently five editions of the DSM, and each subsequent one relies on the diagnostic constructs built in the previous one; no edition has substantially deviated from previous editions, despite the attempts of research committees that have formulated recent editions (Tabb 2015). Only six researchers determined the psychiatric categories in the first DSM, published in 1952 (Kendler et al. 2010). They drew from only a few empirical studies, which were poorly designed and lacked controls, to decide on the key symptoms of purported disorders (Kendler et al. 2010).

The validity of DSM categories is challenged by experimental evidence. The vast majority of cases of common mental disorders (e.g., depression, anxiety, substance abuse)...

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13 Only in the past decade, some etiological research rejects DSM diagnostic categories, although most research still presuppose these categories (Tabb 2015). The former is influenced by the RDoC project, whose agenda is to study processes across various biological levels that underlie general cognitive functions, identify these processes in people who experience dysfunction, and ideallistically identify biological profiles of these people (Hyman & Fenton 2003). RDoC presumes that abnormalities of certain cognitive functions will cluster together and indicate boundaries that define new disorders. But as I have argued above, this approach is inherently flawed and cannot accomplish its goals due to its explicit negligence of person- and social-level factors.
display comorbidity with other purported disorders (First 2005). Such comorbidity indicates that the categories do not refer to natural kinds, which should have reliable boundaries that delimit them from others.\(^{14}\) Moreover, looping effects, which I will present in the next section, influence people to develop the symptom clusters predicted by the DSM; this provides apparent validation of diagnostic categories (Hacking 1995, 2006). But this validation is circular. The categories stipulated by the DSM induce the very phenomena these categories describe. This all indicates that the current consensus on disorder categories is dependent on tradition rather than on empirical facts that are independent of social construction. Thus the etiological models that presume DSM categories as disease entities are flawed or incomplete.

The biomedical, cognitivist, and biopsychosocial approaches to psychopathology underspecify social- and person-level factors in disorder etiology. In particular, they fail to recognize the transcendental roles of social conditions in disorder etiology and restrict the ontology of social- and person-level factors to only directly observable states. Moreover, they either neglect the causal relations between factors, define them as simple unidirectional causation, or cite circular causation but underspecify the processes through which such causation occurs. These approaches also mostly presume that mental disorders are like physical diseases whose onset can occur independently of social conditions. Even some biopsychosocial models imply that social conditions merely trigger the onset of psychiatric symptoms, rather than provide necessary conditions for the possible development of these symptoms (Benning 2015; Şar et al. 2017).

Some alternative approaches to psychopathology focus on the transcendental roles of social factors or specify the dynamical interdependence between levels of factors. In the following sections, I will first examine Hacking’s influential social constructivist approach and then a collection of phenomenological, embodied, and narrative-based approaches.

\(^{14}\) Any attempt to defend the validity of these categories must argue that the majority of people who are mentally ill simply have multiple medical conditions. But this is ad-hoc and inferior to the alternative that a person experiences a unified mental illness that involves a cluster of symptoms that is not reliably captured by DSM categories.
Looping Effects and Social Construction

Ian Hacking provides a social constructivist account of psychopathology in *Rewriting the Soul: Multiple Personality and the Sciences of Memory* (1998). He does not only argue that social factors contribute to the etiology of mental disorders; more fundamentally, social factors contribute to determining the very definition and possible manifestations of mental disorders. Hacking thus challenges the foundational assumption of most etiological models that mental disorders are natural kinds. I will argue that Hacking’s social constructivist thesis is right, but he is wrong about the processes in virtue of which social factors have this transcendental role.

In this section, I will first introduce Hacking’s theory of *looping effects*, which he calls *semantic contagion*. Second, I will argue that it relies on a cognitivist metaphysics, and this reliance forces his theory to characterize looping effects as having impact on only mental representations, whereas bodily processes can only be indirectly affected. This makes room for the possibility that mental disorders are driven by biological pathologies, independent of cultural influence, while cultural influences, via looping effects, simply

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15 The concept of natural kinds is contentious. Cooper (2013) examines three major accounts of natural kinds and argues that only the essentialist account (viz., all members of a natural kind share a fundamental, essential property), is incompatible with mental disorders. The other accounts, however, capture mental disorders, even when we recognize the constitutive role of looping effects (Cooper 2013). This is because there are other kinds that are indisputably natural kinds (e.g., animal species that result from selective breeding) that are largely products of human activity. These quasi-socially constructed kinds are classifiable on the basis of stable properties and regular behaviors and count as natural kinds (Cooper 2013). So, mental disorders, which are also quasi-socially constructed kinds, are also natural kinds.

Cooper’s analysis, however, is questionable. Her analogy drawn between the looping effects that constitute human kinds and those that seem constitute other biological kinds is misleading. Although these two cases share the feature that they are “constructed” by human activity, humans are self-aware, and their “construction” is driven by self-reflection; other biological kinds lack this. In effect, the malleability of human kinds is more dynamical, and the characteristics of these kinds can be deliberately rejected or revised by individuals. Other biological kinds do not exhibit these features; their characteristics are modified by exclusively external pressures, and the process of modification occurs in a relatively causally linear manner. It follows that the categorical distinction between *human kinds* and natural kinds is warranted (Hacking 2006). It also follows that mental disorders cannot be natural kinds, or at least natural kinds in the sense that biological species, chemical properties, or other scientific entities are. Seeing Tekin (2014) and Khalidi (2010) for examples of other challenges to Hacking’s reasoning from looping effects to the socially constructed nature of mental disorders.
alter the representations (e.g., beliefs and desires) a person forms about her disorder. Hacking is left vulnerable to objections raised against his conclusion that mental disorders are socially constructed.

Hacking focuses on multiple personality disorder (MPD) and uses this case as the basis for a more general account of the socially constructed nature of mental illness. The primary symptoms that define MPD include switching between personalities (called alters) and having inter-alter amnesia, or significant difficulty in remembering experiences of other alters when embodying any given alter. The general consensus on the etiology of this disorder is that these behaviors are coping mechanisms developed in response to chronic trauma, especially sexual abuse during childhood (Clark et al. 2013; Hacking 1998, 29; Şar et al. 2017). There are many reasons to think that MPD is socially constructed, and Hacking proposes an explanation of the conditions that make such social construction possible; this amounts to a general theory of looping effects.

Before 1972, in the US about a dozen cases of MPD had ever been reported, and after 1986, there were too many cases for any accurate count; one estimate was that 1 in 20 people in the US had this disorder (Hacking 1998, 8). Virtually only women were diagnosed. Then, after 1990, the diagnosis rate dramatically dropped. Today, the incidence is less than 1 in 100 people (Foote 2018). This sudden proliferation and disappearance of MPD is strong prima facie evidence that it is socially constructed.

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16 The name of this disorder has changed to dissociative identity disorder in the DSM-IV, but the symptomatology and etiology remains mostly the same. I will use the term multiple personality disorder throughout this chapter.

17 The complete diagnostic criteria in the DSM-V for MPD are: “(1) Two or more distinct identities or personality states are present, each with its own relatively enduring pattern of perceiving, relating to and thinking about the environment and self,” and “(2) Amnesia must occur, defined as gaps in the recall of everyday events, important personal information and/or traumatic events” (American Psychiatric Association 2013, 292).

18 There are further historical facts that alert us to the socially constructed nature of MPD. Cases of MPD escalated under the particular cultural trend of a sudden mass moral-political outrage at child sexual abuse, mass fear of satanic ritual abuse, and mass social anxieties about the loss of family values; cases suddenly dropped when these trends faded in their prominence (Hacking 1998, 45, 58).
Moreover when MPD was first regularly diagnosed, a patient had 1 alter on average. But within a decade, a patient had 25 alters on average. Trendy practices in psychotherapy may be responsible for this increase. Therapists deliberately encouraged patients to take their alters as real persons, trapped in the patient’s body, because the psychiatric consensus was that developing alters is crucial to healing from trauma (Hacking 1998, 27). Only after researchers noticed the sudden increases in the incidence of MPD cases, and in the number of alters manifested in each case, did they challenge these practices. Skeptical researchers noticed that people diagnosed with MPD tended to be higher in suggestibility, a purported trait of sensitivity to hypnosis and readiness to suspend judgment (Hacking 1998, 15). Suggestible people who underwent this psychotherapy might account for these sudden increases.

This recent history of MPD is strong evidence for the role of looping effects in disorder etiology. Looping effects are the processes by which a social category constructed to describe a certain population influences the self-understanding and behavior of the people described. Thus social categories can alter the phenomena that they are purported to objectively describe (Hacking 2006). This is due to the self-reflective capacities distinct to humans; other natural kinds (e.g., molecules; monkeys) are not responsive to categories constructed about them in this way. If people respond with conformity to these categories, then categories appear to gain scientific validity (Hacking 2006).

Hacking proposes semantic contagion, a theory of looping effects, and argues that looping effects in the context of psychiatry show that some mental disorders are socially constructed. Hacking first assumes that personal identity is based in memory. Past experiences, values, beliefs, among other psychological entities relevant to personality, are stored in memory, and the loss of memory would alter personal identity (Locke 1690/2009; Parfit 1992). But episodic memories are often unreliable and easily confabulated (Loftus 2005). Moreover, Hacking argues that the original experiences,

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¹⁹ Hacking acknowledges that people do not passively swallow socioculturally imposed possibilities of action (Hacking 1998, 239). People can reject or creatively appropriate these impositions. Nonetheless, these responses are still influenced by socially constructed categories.
which we remember, are positively indeterminate; in the majority of our absorbed, everyday experiences, our behaviors are not driven by clear intentions.

Hacking, drawing on Anscombe’s philosophy of action, argues that an action is defined by intentions or *descriptions of behavior*, which he treats as synonymous. A description of behavior motivates a sequence of bodily motions and thereby unifies it as an action (Hacking 1998, 234). Identical motions can constitute distinct actions depending on the description of behavior at hand. For example, the motions of picking up a penny and putting it in a pocket might constitute finding a lucky penny; but it might also constitute a miserly acquisition of an extra cent, depending on the agent’s description of behavior. In everyday experiences, we usually do not have clear descriptions of behavior. By remembering experiences, we can ad-hoc interpret ourselves as acting under particular descriptions of behavior. This “rewrites” the memory and renders the previously indeterminate experience into a determinate action; altered memories can then reshape beliefs, self-understanding, and other domains that influence “personality.”

There are interesting connections between Hacking’s theory of action, Hutto’s enactivist theory of social cognition (2014), and Zahavi’s phenomenological theory of social cognition (2011, 2014). Although Hacking explains an agent’s relation to her own action, while Hutto and Zahavi explain an agent’s relation to other people’s actions, useful comparisons can be drawn. According to Hacking, *descriptions of behavior* are sorts of minimal “stories” of actions to which we can commit and use to modify representations of our past behaviors (Hacking 1998). According to Hutto, *folk psychological narratives* are “stories” that portray characters as having certain intentional states and behaviors under certain circumstances, and these scaffold our social skills, which thereby enable us to recognize people’s intentions given their behaviors in particular circumstances (Hutto 2014). So *descriptions of behavior* and *folk psychological narratives* seem to be similar.

Hacking and Hutto, however, conceptualize the role of these motivators of action in different ways. Hacking argues that we use descriptions of behavior to interpret behavioral events in order to represent these events as involving particular intentional states. In contrast, Hutto argues that folk psychological narrative scaffold our embodied skills, and these skills mediate our perceptual access of people’s behaviors as to manifest their intentional states. The crucial differences are that Hacking takes intentionality to be a product of interpretation that utilizes concepts and inferences, while Hutto takes intentionality to be immanent in and inseparable from the perception of behavior.

Although Hacking’s project has nothing to do with the theory of mind debate, his theory of action shares the same principles as *theory-theory*—the view that understanding other’s intentional states is based in applying concepts or theories and interpreting behaviors. Hutto’s theory is situated at the other end of the debate and is more closely aligned with, although
Hacking argues that social, political, and scientific institutions play major roles in constructing the descriptions of behavior that structure our actions, revisions of memory, and ultimately the trajectories of personal development. Psychiatric diagnoses consist in descriptions of behavior, which a self- or clinically diagnosed person might internalize. A person might have previously performed a sequence of bodily motions without recognizing it as motivated by any clear description of behavior, so it did not constitute a determinate action or experience. But after she is diagnosed, she subsumes this sequence under a new description of behavior—which a psychiatrist or scientific article assures is scientifically accurate. Over a course of interpretations, she no longer experiences the previously indeterminate sequence but experiences a particular symptom of the disorder with which she is diagnosed. Hacking calls this semantic contagion. Being diagnosed with a disorder can thus facilitate the development of the very disorder (Hacking 1998, 238).

Although semantic contagion already explains looping effects to some extent, Hacking acknowledges that it is a rough-grained account and admits that he cannot conceive of naturalistic explanations that might accompany this account (Hacking 1998, 257). According to Hacking, the processes that underlie looping effects are:

“…Phenomena that students of the human mind have hardly begun to address. One of them I call semantic, for lack of a better word. “Semantic” at least has the virtue of making plain that I am speaking more from the space of logic” (Hacking 1998, 257).

distinctive from, simulation theory—the view that understanding other’s intentional states is based in automatic, simulative processes by which observing a behavior is inevitably conjoined with simulating the motives that drive the behavior.

Zahavi provides phenomenological arguments that challenge theory-theory and support enactivist accounts of social cognition, such as Hutto’s. Zahavi argues that both theory-theory and simulation-theory are problematic for assuming that the kind of social cognition that aims to understand people’s intentional states in a rational manner that allows for prediction of their behavior is the primarily kind (Zahavi 2014, 117). But actually another kind of social cognition is the prevalent one. In this kind, we perceive others’ intentions in a more emotional and non-reflective manner. Zahavi calls this direct social perception; it is direct by virtue of the automatic, affective relations that structure our interpersonal experiences (Zahavi 2011). This challenges Hacking’s theory and provides a foundation for Hutto’s theory; while Hacking takes understanding intentions as a conceptual affair, Zahavi takes it as an emotional and pre-reflective affair.
Hacking assumes that we do not know much about the cognitive processes that contribute to looping effects. So he refrains from any fine-grained explanation of this macro-level phenomenon and is unable to specify exactly what he means by the term semantic.

But Hacking gives up too soon. There are various paradigms in the cognitive sciences that might be used to explain semantic contagion. But Hacking’s formulation of semantic contagion is friendly only to one paradigm: cognitivism. In fact, he presupposes this paradigm in his formulation of semantic contagion. So fine-grained explanations that are consistent with semantic contagion must be based in a cognitivist metaphysics, and such cognitivist explanations of looping effects cannot secure Hacking’s conclusion of the socially constructed nature of mental illness.

Semantic contagion presumes metaphysical principles of cognition that are also presumed by cognitivist theories. Semantic contagion involves (1) imagistic representations of bodily movements that can be isolable from the conceptual significance of these images, (2) the application of concepts to interpret these images and draw conclusions about the actions these images signify, and (3) the utilization of these conclusions to structure future interpretations of bodily movements and to shape desires, beliefs, and preferences among other psychological items that constitute personality.

21 For my purposes here, I take cognitivism, computationalism, and representationalism to be roughly synonymous. I will stick to the term cognitivism because I have earlier presented an approach to psychopathology based in this paradigm of cognitive science.

22 This is how Hacking characterizes the process that underpin looping effects:

“A new past comes into being once events are recalled and described within a new structure of causation and explanation. It need not be a false past, in the sense that it is at odds with, inconsistent with, what would have been recorded if everything had been overseen by a great camcorder in the sky. But the permanent videotape thus imagined gives pictures of events, not descriptions of them. The past becomes rewritten in memory, with new kinds of descriptions, new words, new ways of feeling, such as those grouped under the general heading of child abuse... this causal story has become part of the conceptual space in which she lives, thinks, feels, and talks.” (Hacking 1998, 94; emphasis added).

Hacking compares the indeterminacy of memory with videotapes or pictures. Memory represents experiences. Hacking explains that many experiences are indeterminate because they are series of bodily movements that require unification by the imposition of an intention or description of
Cognitivism holds that we register only low-level sensory stimuli of a situation, and conceptual meaning of the situation, such as the meaning that constitutes an action, must be generated subsequently. This is consistent with (1) and (2). Hacking agrees with cognitivist theorists that visual properties can be perceived independently of any meaning; and that meaning results from inferential activity, which draws on the concepts or theories available to an individual. Cognitivism also holds that perceptual input, cognitive processing, and behavioral output occur in a manner of unidirectional causation. This is consistent with (3). Hacking agrees with representationalist theorists that once visual properties are transformed and have acquired conceptual meaning, an individual can subsequently utilize this meaning to plan future behaviors. Because Hacking presumes these cognitivist principles, if he decided to pursue more fine-grained explanations of semantic contagion, he could only formulate explanations that follow from the cognitivist metaphysics, or related paradigms, on which semantic contagion is built.

But no cognitivist explanation that could enhance Hacking’s semantic contagion could secure Hacking’s conclusion that mental disorders are socially constructed. Cognitivism cannot challenge the status of mental disorders as natural kinds, because on this paradigm the cognitive system is causally self-contained and only distally linked to bodily processes; and conscious experience are based in representational states, which are only distally linked to the environment and the body. Objectors to Hacking’s conclusion might argue that mental disorders are based in bodily processes. Looping effects, which

behavior. We often do not have these descriptions of behavior ready in the moment of experience, but we interpret memories of these experiences, compared to a videotape, and form a “retroactive redescription” of them (1998, 256). Hacking, in explaining memory and experience in terms of videotapes, pictures, images, or bodily movements presupposes that these are isolable from the conceptual meaning that constitutes them as actions.

Moreover, Hacking claims that we “live” inside a “conceptual space”; although he does not explicate his notion of a conceptual space, it seems closely aligned with the cognitivist notion of an inner realm of representations, which we directly experience, rather than the external world. Hacking argues that looping effects change this conceptual space; this seems to imply that this conceptual space consists in representations that are modifiable by doxastic activities.

Hacking does not explicitly discuss how these changes in conceptual knowledge and memory amount to changes in personality. He does argue, however, that these changes provide new descriptions of behavior that a person uses in performing future behaviors, and he implies that personality develops over these new experiences.
result from the application of concepts to interpreting visual properties, can alter only representational states. These constitute a person’s subjective experience (e.g., beliefs, desires) of the objective world, including their physical body, according to cognitivism. Thus, looping effects can alter only subjective experience, while biological pathologies, which are resistant to looping effects, could give rise to the disorder itself. Mental disorders might be natural kinds, by virtue of their biological basis.

Thus, by presuming cognitivism, Hacking’s account of looping effects cannot challenge the claim that mental disorder are natural kinds. This natural kind status would entail that mental disorders are based in exclusively biological and other low-level factors, which are resistant to effects of a person’s agency or sociocultural situatedness. This is wrong. Not only is it theoretically inaccurate, but it also has destructive practical consequences. This view of the nature of mental illness facilitates looping effects that preclude people from transforming their experiences and transcending conditions that sustain their psychopathological experiences. I will argue for this below.

I will provide an alternative approach to psychopathology based in existential enactivism. This approach will challenge cognitivism and show that looping effects entail changes in our bodily processes and perceptual world. Although I disagree with Hacking regarding the processes that underpin looping effects, I will defend Hacking’s conclusion that mental disorders are largely socially constructed.

Before I present these arguments, I will examine approaches to psychopathology based in phenomenology, narrative psychology, and enactivism, which set the context for my existential enactivist approach.

**Phenomenology, Narrativism, and Enactivism**

Embodied cognition and enactivism have potential to revolutionize the study of psychopathology (see, e.g., Cardona 2017; Colombetti 2013; Gallagher 2017; de Haan 2017; Drayson 2009; Fuchs 2017; Hoffman 2016; Hutto 2010; Myin et al. 2015;
Sneddon 2002). But all applications of embodied cognition or enactivism to understanding psychopathology, so far, are at best preliminary.\(^{23}\)

The enactivist approach to psychopathology is related to the broader movement of phenomenological psychopathology (e.g., Dreyfus 1989; Giorgi 2011; Jaspers 1913/1997; Ratcliffe and Broome 2012; Stanghellini and Rosfort 2013; Trigg 2017; Varga 2014). The phenomenological approach employs a first-person methodology, emphasizes the embodied nature of mental disorder, and prioritizes the role of self-interpretation in disorder etiology. This challenges the principles of dominant approaches in empirical research, which maintain a third-person methodology, treat mind-body interactions as a unidirectional causal affair, and focus on empirically measurable factors. Although phenomenological accounts tend to be more developed than enactivist accounts, they are still limited. They sometimes neglect the role of sociocultural conditions, underspecify the effects of embodiment in disorder etiology, and fail to integrate factors between levels of analysis (e.g., biological, personal, and social factors).

Narrative-based approaches to psychopathology fill in the lacuna of sociocultural conditions (e.g., Bruner 1991, 2000; Callender 2005; Fireman et al. 2003; Frank 2013; Mitchell 2007; Sontag 1989/2001; Tekin 2014; Thornton 2003). Many theorists in this vein are inspired by Foucault’s and Hacking’s insights into the social construction of mental disorder (Foucault 1961/1988, 1963/2003, 1966/1994; Hacking 1995, 1999). They emphasize that sociocultural narratives influence the ways by which people interpret their experiences, develop emotional, cognitive, and behavioral habits, and manifest psychiatric symptoms. Virtually all these theories, however, are married to internalist or cognitivist assumptions and face the same challenges that Hacking’s theory does.

\(^{23}\) These proposals are general, speculative, and given in papers. Most of them only draw on the general idea that humans are embodied and coupled to the environment in a relation of circular causality. Some theorists focus on the implication that emotional and cognitive processes are fundamentally integrated (e.g., Colombetti 2013), while others focus on the implications that factors across levels of analysis, inside and outside the individual, are changed in experiences of mental disorder (e.g., Fuchs 2017). The only substantial account will be a monograph by Sanneke de Haan (forthcoming).
In this section, I will survey some theories from these three traditions—Dreyfus (1989), Frank (1995), Myin, O’Reagan, and Myin-Germeys (2015), Fuchs (2017), and de Haan (2017). I will draw out the key insights and limitations of these accounts and, in the next section, present the existential enactivist approach to psychopathology.

Dreyfus (1989) argues that although diverse psychological approaches to psychopathology (e.g., psychoanalysis, behaviorism, cognitivism) are incompatible on some respects, they nonetheless share a metaphysical assumption that the subject accesses only representations of the world (Dreyfus 1989). When applied to the study of psychopathology, this entails an epistemological conception of psychopathology: mental illness is based in epistemologically flawed representations (Dreyfus 1989).24

Dreyfus argues that Merleau-Ponty’s existential phenomenology presents a radically different way of understanding the mind. On this view, the mind is composed of the subject and phenomenal world in a relation of dynamical co-constitution. The world is achieved by the modes by which a person encounters it, and the subject has no distinct interiority but is constituted by the world that she discloses. Dreyfus calls the application of this view to understanding mental illness the ontological conception of psychopathology: mental illness is based in the phenomenal world itself (Dreyfus 1989).

Drawing on Merleau-Ponty’s analysis, Dreyfus argues that mental illness ensues when a particular experience in the world acquires the role of a transcendental condition of the world (Dreyfus 1989).25 For example, let us imagine that some person occasionally

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24 The psychoanalytic tradition, for example, holds that mental illness is based in repressed, unconscious representational states whose contents conflict with those of conscious representations; and this, purportedly, can lead to a variety of neuroses. Behaviorism, as another example, might seem to reject the ontology of representations, but it preserves the epistemological relation in the feature of adaptability exhibited by a subject’s behavior in relation to the environmental situation; the more adaptive a conditioned behavior is, the more “epistemologically sound” it is.

25 This analysis of psychopathology is found in “The Body in Its Sexual Being” in The Phenomenology of Perception (1945/2012). In this chapter, Merleau-Ponty explains that during mental illness, there are systematic transformations of meaning found in the phenomenal world. He compares this to the systematic transformations of that would occur if a sensory organ failed. For example, the perceptual world would lose its dimension of sound if a person’s auditory system failed; likewise, perception would lose dimensions of meaning (e.g., certain social significances) if
experiences others in terms of their social standing relative to her own. She fixates on this
type of experience, and it comes to structure the world; it no longer serves as one
experience among others. She involuntarily perceives all people in terms of their social
superiority or inferiority, and this is pathological. Dreyfus calls the phenomenon in which
a particular experience comes to structure all relevant experiences generalization (Dreyfus
1989).

The processes that underlie generalization are complex, and Dreyfus provides only
a tentative account. On Heidegger’s analysis, moods can modulate transcendental
conditions of experience. Dreyfus suggests that generalization occurs when the affective
component of an experience is “frozen,” grows into an enduring mood, and thereby
enables the phenomenal world to show up in accordance with the structure of the
generalized experience (Dreyfus 1989). Genetic predispositions, family environments,
and other circumstances prime particular experiences to be especially emotional and
disposed to instigate enduring moods.26

I agree with almost all components of Dreyfus’s proposal. The pathological
experiences that constitute mental illness are fundamentally responsive to disturbances in
the phenomenal world, rather than to disturbed beliefs, desires, or other mental states
that represent an objective world. But his proposal is preliminary and requires
completion. For, although Dreyfus implies that the changes in experience that constitute
mental illness are perceptual, he does not pursue this point. Clarifying that the perceptual
world undergoes such changes is crucial to explaining the voluntary responses people with
mental illness can have and the involvement of bodily processes in disorder experience; I

26 Dreyfus argues that moods can be so enduring that a person might become incapable of
recognizing that the phenomenal states these moods determine are deviations from previous
states. The job of the therapist is to help a person remember what the world was like prior to
generalization and to find ways to experientially achieve these previous states (Dreyfus 1989).
In metaphorical terms, a person must understand that the current world is a deviation, dismantle the
pathological experience from serving its transcendental role, and place it back into its original
place as just one experience among other experiences.
will soon show this. Moreover, how moods can determine the conceptual contents of experience, and how moods can become transcendental conditions of experience, remain mysterious. I will address these ambiguities in my existential enactivist approach. While Dreyfus is right to recognize the role of mood, he neglects the roles of sociocultural conditions in regulating the possibilities of mood. This prevents him from appreciating Hacking’s insight into the socially constructed nature of mental illness. I will show that by taking a closer look at the relevant perceptual phenomenology, we can learn just how generalization happens.

The narrative approach to psychopathology focuses on sociocultural conditions. Arthur Frank studies the ways in which sociocultural narratives shape people’s experiences of illness, whether physical or psychological, and catalogues the major narratives that have done this in contemporary Western societies (Frank 1995). He argues that during the era of “modernity,” medical fields disseminated authoritative knowledge about illnesses. Their bio-reductive paradigm contributed to the dominant cultural narrative according to which patients are helpless victims of disease and must rely on doctors and medical systems. This narrative constrained people’s self-understanding, possibilities of action, and overall illness experiences. Frank calls this impact of scientific knowledge on individuals “medical colonization,” as it strips patients of agency over their illnesses (Frank 1995, 10).

In contrast, in our current “postcolonial” or “postmodern” era, people increasingly acknowledge the socially contingent nature of knowledge in general, including scientific knowledge. According to Frank, when epistemic objectivity is challenged in this way, in some contexts, the categorical line between fact and opinion is indefensible, and the individual’s experience gains authority. Frank uncovers postmodern illness narratives, which challenge the modern narrative of victimhood and help people recover agency regarding their illness.

Frank is right to emphasize that sociocultural narratives constrain the possibilities of our personal identity and experience. This narrative approach complements Hacking’s semantic contagion and supports the idea that the development of many mental disorders
depends on a person’s exposure to sociocultural depictions of these disorders. As a sociologist, however, Frank is not interested in explaining how this social influence occurs. The only explanation he offers is vague: sociocultural narratives evolve over cultural history, are internalized by individuals, and shape their experiences (Frank 1995, 3). His approach can be complemented by existential phenomenology and enactivism, which can provide these details. I will argue, in particular, that narratives are based in patterns of embodied, perceptual experience, which in turn are based in our ways of life.

In the enactivist tradition, Erik Myin, Kevin O’Reagan, and Inez Myin-Germeys apply the sensorimotor contingency theory to examine psychopathology (2015). They argue that mental illness is based in maladaptive patterns of interaction between a person and her environment; these interactions give rise to disordered phenomenal experience (Myin et al. 2015). These patterns are regulated by the “skills” a person develops to cope with her environment, and these skills are in turn modulated by affective states. For example, low self-esteem might provoke patterns of interaction that give rise to feelings of paranoia. These feelings feed back and lower her self-esteem, which maintains these patterns of interaction (Myin et al. 2015). So mental disorders are based in phenomenal experience, rather than representational states, and result from a circular causality between embodiment and environment.

I agree with Myin, O’Reagan, and Myin-Germeys that mental disorders arise from disturbances in skill-based interactions with the environment. But their account remains vague. They do not investigate the conditions that explain the possibility of disturbed patterns of interaction. For example, they fail to recognize any social- and person-level factors as relevant to disorder etiology, which I will show are transcendental.

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27 See Noë (2004) and O’Regan and Noë (2001) for original formulations of the sensorimotor contingency theory; or, see my section on Noë in chapter two.

28 This idea is very similar to Heidegger’s argument for the relation between mood and understanding (his term for skills) (Heidegger 1927/2010). See my section of Heidegger in chapter 2 for details.

29 The authors suggest that psychotherapy works insofar as it can help a person change her patterns of interaction with the environment. Recovery occurs by disclosing a perceptual world that is harmonious with higher-order desires and by cultivating these achievements into enduring habits (Myin et al. 2015).
conditions of such disturbances. The authors thus overlook the socially constructed and existential nature of psychopathology.

Fuchs advances a view of psychopathology that draws on phenomenological and enactivist traditions and recognizes social- and person-level factors in disorder etiology (2017). Like Myin and colleagues, Fuchs challenges the reduction of mental disorders to dysfunction of intracranial functions. He also recognizes that the biopsychosocial approach is underspecified and fails to account for principles of interaction between biological, personal, and social factors (Fuchs 2017, 255).

Fuchs claims that his enactivist approach overcomes these deficiencies: he argues that factors across brain, body, and society are dynamically interdependent. For example, the contribution of neural factors in mental illness is necessarily regulated by higher-order processes; and vice-versa (Fuchs 2017, 256). He proposes a framework according to which levels interact “horizontally” (interactions between environmental or societal factors and the individual) and “vertically” (interactions between psychological, cognitive, and biological factors within an individual) (Fuchs 2017, 256). Fuchs argues that physical illnesses are based in disruptions to the vertical dimension, whereas mental disorders are based in disruptions to both vertical and horizontal dimensions (Fuchs 2017, 257).

Fuchs argues that some disruptions to “vertical causality” result in inner conflicts between higher-order desires and actual behavior; this is accompanied by self-criticism, which is the cause of many mental disorders (e.g., obsessive compulsive disorder, substance abuse, and mood disorders) (Fuchs 2017, 258). In depression, for example, a person’s self-criticism lead to changes in emotion and neurobiological activity. These changes, in a manner of circular causality, lead to changes in phenomenal experience, behavior, and social interaction, which ultimately provide fodder for further self-criticism. Fuchs concludes that maladaptive styles of “subjective ascription of meaning, assessment of a situation, and relation to oneself,” such as self-criticism, or more generally, negative

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30 This is Fuchs’s latest and version of his theory. See his previous articles for other versions that are consistent with and contribute to this one (Fuchs 2005; Fuchs 2009; Fuchs & Schlimme 2009).
self-interpretation, is the etiologically privileged factor in psychopathology (Fuchs 2017, 258).

Fuchs's account is problematic. First, his model does not specify the causal interactions involved in disorder etiology any more than Engel's biopsychosocial model does. Like Engel, Fuchs merely stipulates that “circular processes” and “mutual influences” are involved, without identifying any principles of interaction between levels of analysis (Engel 1981; Fuchs 2017, 256). Although he adds the terminology of “vertical” and “horizontal” causation, this terminology itself is unclear and does not shed light on any actual processes that would have clinical and theoretical implications.

Second, Fuchs does not specify the phenomenology of self-interpretation that he identifies as fundamental to disorder etiology. Does it require language, inference, and voluntary cognition, or is it an automatic and perceptual affair? Fuchs hints toward the former; he never refers to any phenomenology of the world, nor to any conceptual entity related to affordances, which would imply an automatic or perceptual character of self-interpretation. That would be phenomenologically untenable, entailing that the meaning that structures the phenomenal world and sustains behavior is the product of controlled activity and is based in representational states, which is not the case, as I have argued in previous chapters. But Fuchs's account is so vague that it is possible he takes this self-

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31 Fuchs also mischaracterizes the biopsychosocial approach. He fails to mention that Engel proposed a general systems framework that integrates factors across the various levels that Fuchs identifies in a manner of circular causality that virtually identical to that which Fuchs proposes (Engel 1981). Although general systems theory and dynamical systems theory are theoretically distinct, in the practical application of these theories on understanding etiology of psychopathology, their differences are not relevant. In effect, Engel's and Fuchs's accounts are identical in their deployment of causal concepts and conceptualization of causal principles between levels of analysis. For instance, the descriptions of circular causality Fuchs presents in his account could be exchangeably described by either general systems theory or dynamical systems theory.

32 Dreyfus, for example, does argue for some particular processes, although his proposal is preliminary. He specifies that moods modulate the modes by which we encounter the world, and experiences of intense affect, induced by biological predispositions and environmental circumstances, allow for certain kinds of experience be foundation of enduring moods. Such details permit him to draw conclusions about psychotherapeutic practices that might be effective.
interpretation to be based in perceptual experience. Regardless of which phenomenology Fuchs would defend, this vagueness itself is problematic.

Third, for all the emphasis Fuchs places on circular causality, he implies that self-interpretation has privileged top-down causal powers in disorder etiology. He writes: “Mental disorders may firstly be comprehended as vertical circular disorders… [that is] processes that affect the person’s self-relationship” (2017, 260; emphasis added). Fuchs claims that, in contrast, “deviations of neural activity… do not determine the cause of a disorder—they may as well be an accompaniment or a result” (2017, 261). He explicitly claims that, in the development of mental illness, self-interpretation is etiologically privileged, whereas neurological factors are peripheral. This contradicts the entailment of circular causality that all etiological levels are equally implicated. Although Fuchs intends to create an enactivist model based in dynamical systems theory, he violates the principles of this theory.33

Fuchs also regards social conditions as less etiologically powerful than conscious willing; this is the fourth problem for his account. After claiming that person-level factors take first priority, Fuchs adds “mental disorders should also be considered as processes of horizontal circularity… they are linked to more or less pronounced interferences with responsivity towards the social environment” (2017, 261). Fuchs argues that person-level disturbances are fundamental, and they might hinder social interactions, which are peripheral factors in disorder etiology.

This leads to the fifth problem for Fuchs’s account. He reduces social-factors to a person’s participation in social interactions (Fuchs 2017, 261). But there are many kinds of social factors (e.g., ways of life; sociocultural niches) that cannot be derived from person-level factors and are etiologically fundamental. Nowhere does Fuchs mention that we are embedded in cultural contexts, which constrain the possibilities of self-

33 Although I will explain psychopathology using my ontology of existential properties, embodied skills, and ways of life, this does not mean that I believe this ontology is more causally fundamental than the ontologies on molecular and physical levels. I use this ontology for heuristic reasons, to explain the interactions between factors across levels of analysis, which are equally necessarily implicated.
interpretation and psychopathological experience. This neglect is consistent with Fuchs’s presumption that mental disorders are natural kinds, which is a sixth problem for his account.

Sanneke de Haan, who is Fuchs’s student, argues that our voluntary ability to self-evaluate is underemphasized by biopsychosocial theories and plays a crucial etiological role (de Haan 2017, 529). Her analysis is similar to my account of practical reflection in some respects (see chapter 4). de Haan argues that self-evaluation influences a person’s actions and course of mental illness. For example, self-evaluation might elicit shame, and this emotion prevents a person from looking for help; in turn, social isolation exacerbates her shame (de Haan 2017, 530).

de Haan integrates this self-evaluative ability in an enactivist framework and proposes that it can affect the ways objects and events appear. She recognizes that the phenomenal world for humans affords meaning-based “valences,” which can override the mere affect-based “values” that are available by virtue of our vital needs (de Haan 2017, 532). For example, people can perceive food as a dieting tool rather than as value for satisfying nutritional needs. By altering our attitudes toward objects, self-evaluation modifies the meaning objects afford in a person’s experience.

Like Fuchs, de Haan criticizes the biopsychosocial model, argues for a dynamical systems framework, and concludes that “disordered patterns of sense-making,” and the self-evaluation that regulates these patterns, are privileged in disorder etiology (de Haan 2017, 532). Although de Haan seems to imply that the meaning we make is phenomenally immediate, her account is unequipped to explain how this could be the case. She is ultimately silent on the phenomenology and leaves open the possibility that she takes this sense-making to be a controlled activity, which would be problematic for the aforementioned reasons, and for reasons I will raise in the following sections. Like Fuchs, de Haan assumes that some etiological factor can be privileged and takes this factor to be our self-evaluations. But this is unwarranted, for the reasons given in my critique of Fuchs. Moreover, de Haan’s criticism of Engel’s model is misplaced, since her notion of circular causality is just as underspecified as Engel’s and Fuchs’s.
de Haan is right to recognize that self-evaluation is etiologically relevant, but her analysis is limited. She does not specify any principles that might account for patterns of conclusions drawn by self-evaluation. She only briefly mentions that self-evaluations are motivated by the goal of “living a good life” (de Haan 2017, 532). This seems wrong. I have argued that evaluations are motivated by our existential commitments (see chapter 4). That is, we will evaluate our experiences in accordance with criteria that function to maintain our current behaviors that satisfy our commitments to ways of life. The behavior of a person who receives psychiatric diagnosis is destructive in some way, and the evaluations she draws will be aimed towards maintaining this behavior. On my account, only in unusual circumstances, in which we actively fight against our normative desires, can we draw evaluations in accordance with ethical ideals. This usually requires scaffolding of some sort, such as talking with a supportive friend or using language to direct attention and facilitate evaluations. But in most cases, we do not strain ourselves to this extent. Our primary mode of self-evaluation does not aim to satisfy ethical ideals, but rather aims to satisfy our existential commitments.

de Haan also underspecifies the relationship between our biological and existential needs: “We do not only have the will to survive, we also have the ‘will to meaning’” (de Haan 2017, 532). She distinguishes between two kinds of “will,” one oriented towards biological survival and the other towards our values. But de Haan does not question how the two are related, or how we arrive at our values. Both issues are crucial for understanding the etiology of psychopathology; only some values are related to psychopathology, and we need to explain why a disordered person holds these values rather than others. Existential enactivism addresses these issues. In chapter 3, I argued that the meaning and values we pursue are determined by our existential commitments and serve to preserve our ways of life. In chapter 5, I showed that existential preservation is an extension of biological survival and is entailed by our enculturation; sociocultural niches have evolved from ecological niches, and our embodied skills evolve from existential and physiological conditions. We should think of the “will to meaning” as essentially survival-oriented.
Existential enactivism, I will show, is better-equipped to explain the etiology of mental illness. The existential enactivist approach—while consistent with some features of the approaches I have surveyed in the previous sections—is more powerful than any of them. By specifying the particular processes and principles by which biological, cognitive, personal, and social factors interact, existential enactivism provides a plausible etiological model that has clinical implications.

A Case Study: Anorexia Nervosa

In this section, I will use existential enactivism to examine a case study of anorexia nervosa. I choose this case because anorexia, in particular, is a patent example of a socially constructed mental disorder, and analyzing it sheds light on the roles that existential properties, embodied skills, and ways of life play in psychopathology. These conditions shape all mental disorders but might not be as prima facie evident in the etiology of other disorders. In the next section, I will extract an etiological framework of psychopathology from this case study.

The study of anorexia reveals the extent to which ways of life can determine the possibilities of perception, personality, and behavior. For humans, food and social relations are goods, necessary for survival. But when they show up in the perceptual world of a person diagnosed with anorexia, the existential properties of these goods render them into threats to survival. As a consequence, anorexia has the highest mortality rate out of any mental illness; about 10% who meet this diagnosis die within 10 years of onset (Rikani et al. 2013).^{34}

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^{34} The primary diagnostic criteria of anorexia in the DSM-V are: (1) “Persistent restriction of energy intake leading to significantly low body weight (in context of what is minimally expected for age, sex, developmental trajectory, and physical health)”, (2) “Either an intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain (even though significantly low weight)”, and (3) “Disturbance in the way one’s body weight or shape is experienced, undue influence of body shape and weight on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight” (American Psychiatric Association 2013, 339). There is a behavioral aspect of self-starvation, an affective aspect of fear at circumstances that would hinder weight-loss, such as eating, and a perceptual aspect of seeing one’s body as average or fat, despite any empirical measurement of low weight. I argued earlier...
In the literature, there are two overall perspectives on the etiology of anorexia.\(^{35}\) One is a historical or Foucauldian perspective: anorexia is a strictly modern phenomenon that depends on certain historical, social, and political conditions in Western societies. Historians, sociologists, and anthropologists typically take this perspective, and they imply that this disorder is socially constructed, rather than a natural kind (e.g., Gelo et al. 2015; Gremillion 2005; Heyes 2009; Vilei et al. 2015). The other perspective is scientific: it takes for granted that anorexia is a natural kind and assumes that biological, neural, and psychological factors—factors “inside” the individual—exhaust the etiology (e.g., Cooley et al. 2001; Kaye et al. 2005; Leon et al. 1995; Vocks et al. 2007). Although each perspective is incomplete, and an adequate etiology requires their integration, these perspectives are often presented as mutually exclusive. I will show that the existential enactivist approach does justice to both.

Those who defend the scientific etiology are subject to the criticisms I have raised against dominant approaches to psychopathology. The presumption that anorexia is a natural kind is tied to an incorrect view of the etiological role of social conditions. Much evidence suggests that this disorder is socially constructed: researchers cannot identify any biomarkers of the disorder, and this disorder arises only in contemporary Western cultures (Rikani et al. 2013). Moreover, the transition of developing nations to increased exposure to Western media is correlated with a significant increase in the prevalence of anorexia (Nobakht and Dezhkam 2000; Ung 2003).

At best, biopsychosocial approaches claim to take factors across levels of analysis as equally relevant. But these approaches provide such ambiguous descriptions of the processes by which these factors interact that they are not any more explanatorily powerful than listing proposals of etiological factors based in different levels of analysis, that the scientific validity of DSM categories, however, must be questioned due to their historical basis in arbitrary theoretical decisions and their self-validation via looping effects.

\(^{35}\) The alternative enactivist, phenomenological, and narrative psychological approaches do not figure in here because these approaches are not common in the literature, and there either no accounts or very few from these veins that study anorexia in particular. I categorize theories found in the mainstream literature on the etiology of anorexia in this section. Features of these alternative approaches will be integrated in my existential enactivist account of anorexia.
without explaining their connections. For example, at a person level, anorexia is correlated with dissatisfaction with physical appearance, low self-esteem, and depressive symptoms (Cooley et al. 2001; Rikani et al. 2013). Social factors include Western beauty standards, which influence a person’s attitude towards her body image (Cooley et al. 2001). At a genetic level, twin studies show that fraternal twins are less likely to both develop anorexia than identical twins—but these studies are vulnerable to household confounds, so claims to the genetic basis of anorexia are unfounded (Klump et al. 2001). At a neurobiological level, studies show that abnormal serotonin activity is associated with anorexia—but however, many disorders exhibit the same patterns of serotonin activity, and current neuroscientific methodology is imprecise (Kaye et al. 2005). There are currently no proposals for the actual relations between these personal, social, genetic, and neurological factors.

On the other hand, those who take a historical perspective acknowledge that biological and psychological factors are involved in the development of anorexia; but they fail to address the means by which sociocultural forces transform these. For example, Gremillion emphasizes that in contemporary capitalist cultures, in which food is abundant, obesity is perceived as indicative of laziness, and thinness is perceived as indicative of success (2005). These norms must be in place in a society for anorexia to occur (e.g., Gremillion 2005; Gelo et al. 2015; Vilei et al. 2015). But these theorists only mention that such social conditions are causally linked, in some unspecified way, to psychological and biological changes related to anorexia.

The etiology of anorexia involves factors across all levels of analysis. The significance of any given factor, however, can be understood only in light of its integration in an adequate etiological model, and this model is lacking. So in contemporary research, any factor can be regarded as merely correlated with the diagnosis of anorexia. Formulating an adequate model will methodologically depend on the phenomenology of the disorder, because diagnostic criteria are derivative from these and are presupposed by etiological research.
These phenomenological details are best provided by examining case studies. Empirical studies must select participants in accordance with DSM diagnostic criteria, which are empirically dubious and based in tradition. Such studies must also operationalize (simplify and make experimentally tractable) symptoms and signs of recovery, among other components of disorder etiology. Case studies do not require these methodological steps that reduce complexity to align with theoretical assumptions; so, they enable us to discover features of the disorder that might yield etiological significance.

My case study is of a close friend. She is aware that at least some childhood experiences, among other possible factors, predisposed her to fixate on becoming socially desirable. There are many means to do this, but in contemporary Western cultures, gender and beauty norms, and the niche conditions that facilitate them, dispose females to discipline their bodies as a means. The anorexic way of life is also prevalent in Western cultures and involves dieting and self-discipline. This way of life is proliferated by medical psychiatry and “DSM culture”—which includes psychiatric practices, health insurance policies, popular cultural conceptions of mental disorders, media portrayals of mental disorders, and so on (Tekin 2011).

My friend’s encounters with such niche and norm conditions of beauty standards and the psychiatric category of anorexia made it possible that she discovered controlling calorie intake and body weight as activities to achieve her end. By practicing these activities, she developed embodied skills, related to the way of life of anorexia, that determined the existential properties she perceived. Objects across contexts manifested properties related to controlling calorie intake and body weight. If she encountered food in any situation, for example, she perceived it as manifesting that it has x calories and will thwart her progress toward social desirability. She could not perceive food as nutrition.

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36 I have chosen this particular case because it has significantly more detail, conveyed by my friend, than published case studies. Also, many details in my friend’s case are consistent with those presented in the literature (Fairburn et al. 1999; Pike et al. 2008; Stice 1994). My friend has given full consent, reviewed this presentation of her experiences, and affirms the accuracy of reported details.
But, as I have argued in chapter 4, ways of life to which a person is existentially committed are reciprocally dependent on embodied skills and perceptual experience. Disturbances in perceptual experience can have dramatic bottom-up effects. My friend accidentally discovered that controlling calories and body weight enabled her to perceive herself as powerful and safe; this discovery was an external disturbance relative to her previously normative practices, which were driven primarily by seeking social desirability. By obsessing with controlling calories and weight, she could prolong these activities and let them govern more domains of her life. She had power and control during these activities. So, the more she obsesses, the more powerful she was, over the whole perceptual world.  

This discovery gave her a new way of life, which supplied norms about controlling calorie intake and decreasing body weight for the sake of being in control of the world, rather than for being socially desirable. Occupying a regulative role in practical reflection, these new ideals determined that the significance of her experiences were exhausted by their relevance towards satisfying these ideals. If an experience failed to satisfy (e.g.,


“The shrinkage of lived space, which leaves no margin, leaves no room for chance… like space, causality, before being a relation between objects, is based on my relation to things. The ‘short-circuits’ of delirious causality, no less than the long causal chains of methodical thought, express ways of existing” (Merleau-Ponty 1945/2012, 359).

Those of us who are free from obsessions perceive a normal “lived space”; we encounter a wide variety of objects and activities and a broad network of interrelated things, so any one thing can acquire many different practical relations with other things. Thus our experience of event causality can utilize many different things, or events, as mediating factors, and we can access many potential explanations of causality (based on different combinations of events) for any given event. Events appear ordinarily, involving chance and accident, given our sense that there could have been many possible causal paths that led to this event. With this sense, we can be free or easy going, and everyday things rarely have power over us.

However, for those of us who have obsessions, we perceive a tightly constrained “lived space.” Every object and event that appears in such a tiny world is hyper-significant. Very few objects exist in the first place, because we fixate on just a few activities and blind ourselves from others. So, any given event can acquire relations to only a few possible events. In this desert of events, we cannot perceive that there could have been many possible causal routes that led to a particular event. So we perceive only one or a few possible explanations for an event, and the event stands hyper-significant. There is no room for chance, and everything is an omen or command.
eating too much), she would punish herself and form resolutions that her future experiences would better align with these ideals (e.g., eat fewer calories). Over these experiences, my friend developed new embodied skills, altered the existential properties that objects manifested, and transformed her ways of life. Objects manifested properties related not to social desirability, but to having power and self-discipline.

Biological changes that accompanied significant weight loss also contributed to this shift in my friend’s ways of life. Her hormonal levels and affective regulation, among other bodily processes, were dysfunctional. These changes in physiological conditions made it impossible for her to maintain interest in being socially desirable. This constrained the possible perceptual experiences and embodied skills she could develop. Her perceptual world presented existential properties primarily about self-discipline and power; there was nothing left that could remind her that she once cared about being sought after by peers.

My friend could not access her family’s perspective: she starved herself, destroyed her future, and rejected their help. According to her family, this behavior was incomprehensible. Social relations and food are evolutionarily adaptive. But my friend perceived these as threats to her survival; the existential properties across her world relayed the significance that her family tried to ruin her, by forcing her to eat. She could not allow that. Eating more would violate her existential commitments, which had structured her subjectivity and world; such violation would feel like death. So she protected her anorexic practices with as much dedication as organisms protect their vitality, and she perceived any person who hindered her practices as a threat to her survival. Her practices would condemn her to biological death, if she maintained them long enough; but she could not perceive that.

My friend was so fearful about losing her way of life that she achieved visual and proprioceptive experiences of her body as overweight, which served to protect her existential survival.38 Such perceptions increased her motivation to restrict calorie intake

38 This experience is definitive of body dysmorphic disorder. As defined by the DSM-V, this disorder requires primarily: (1) “Appearance preoccupations: the individual must be preoccupied
and satisfy her ideals. Because these perceptions were so adaptive, my friend reinforced them in practical reflection, which dynamically fed back into experience, over which she developed embodied skills of perceiving her body in this visually distorted way. These skills could stabilize certain low-level properties of her perceptual world; she *visually* and *proprioceptively* perceived her body as overweight, in spite of her actual weight.

While starvation and isolation seem to be self-defeating and irrational, in light of existential enactivism, we can see that these behaviors are rational in the context of the agent’s perceptual world. For example, in my friend’s world, people who cared about her, and food items, manifested existential properties that they would endanger her, and her body manifested visual and proprioceptive properties that indicated it was overweight. Given these perceptual experiences, it was only rational for her to reject social relations and food and to aim to lose further weight. But the existential properties my friend perceived deviated from those that the majority perceive; hence the initial incomprehensibility.

Body dysmorphia shows that it is possible that ways of life and embodied skills determine not only the existential properties that objects manifest, but the spatial dimensions of these objects—especially, if the object is one’s own body. There is psychological and sociological research that people associate their body with self-worth, especially in contemporary Western societies (Miller & Pumariega 2001). This makes the physical body an extremely existentially significant object; the body mediates other people’s perceptions of one’s subjectivity, ways of life, and social status. The body is a unique object, and embodied skills that mediate perceptual access to it can change not only the body’s existential properties but also its visual-spatial properties.

My project has focused on arguing for the relation between embodied skills and existential properties, so exactly how low-level properties can be altered requires further research. Perhaps *sensorimotor skills* that present the visual properties of objects can be regulated by existential concerns and lead to visual- and proprioceptive-hallucinatory perceptions of objects with which a person is extremely concerned (see chapter 2 for a summary of Noë’s sensorimotor contingency theory). Moreover, people with body dysmorphia do not have hallucinations in general; only features of their body, which is the primary object of existential concern, are visually or proprioceptively distorted. This further supports that existential concerns are fundamental, and ways of life can alter low-level properties, in addition to existential properties.
The Existential Enactivist Framework of Psychopathology

Drawing on key features of this case study, I will propose a framework for understanding the etiology of psychopathology, using ways of life, embodied skills, and existential properties. This framework can integrate the factors identified by scientific and historical approaches in a way that is more explanatorily powerful than other integrationist attempts (e.g., biopsychosocial models; Fuchs’s and de Haan’s enactivist models). By doing so, this framework shows that mental disorders are socially constructed.

My friend was predisposed to be especially sensitive towards whether she was socially desirable; this was foundational to her existential commitments. In general, people who develop mental illnesses are initially predisposed to some vulnerabilities, and they respond by seeking out ways to protect themselves or to reduce the negative affect that accompanies such vulnerabilities. These vulnerabilities are outcomes of people’s interactions with sociocultural environments, a process that implicates genetic and environmental factors, as any non-reductive etiological model would acknowledge. Existential enactivism, as I will show, provides further detail on how such factors interact and lead to behavioral outcomes that are identified as psychopathological.

Genetic-level factors constrain physiological conditions, embodied skills, perceptual experience, and viable ways of life (see chapters 3 and 4). At an evolutionary scale, the niche and norm conditions that evolve cannot demand us to perform activities that violate our genetic and biological constraints, because previous generations could never construct such conditions. At an individual scale, a person’s genetic inheritance constrains the ways of life that are natural for her to adopt and in turn the behaviors and experiences that become normative for her. This genetic influence intersects with other factors (e.g., social demographics, family and local community practices, the material availability of ways of life) and constrains the ways of life that are viable commitments for a given person. My friend, for example, was a female situated in a Western society, which provides social norms that specify that the social desirability of females is tied to a certain
type of physical appearance. Given this intersection between her demographics, vulnerabilities, and sociocultural environment, she adopted practices of losing weight to respond to her vulnerabilities regarding her social desirability.

If she was a male, or born in a culture in which social norms were different, she would not have adopted these practices in response to the same vulnerabilities, which might have a partially genetic basis. Or, some cultures might not, in the first place, offer the social norms necessary for people to have vulnerabilities about social desirability in ways that people in Western societies do. It is possible in some cultures my friend could never have desired to be socially desirable, or at least not in the particular way that she did. Nonetheless, there are certain general vulnerabilities that humans across cultural contexts can have, and genetic inheritance might sometimes be necessary for some vulnerabilities to possibly develop. This development will be necessarily contingent on niche and norm conditions, given the dynamical interdependence between our embodiment and the environment (see chapter 3). This all comes to show that the possible expressions of psychiatric symptoms are culturally contingent, in spite of possible genetic involvement.

The extent to which genetic factors constrain the development of the embodied skills relevant to psychopathology results from combinatory effects of many circumstantial variables. It is currently impossible to examine the genetic basis of mental disorders at large, and no reliable biomarker has been identified for any psychiatric illness (First & Wakefield 2013). With regard to influence on phenotypic development, many genetic factors are inseparably interdependent with environmental conditions. Only a few genetic factors correspond with phenotypic traits independently of environmental influence, and those determine only certain physiological features, rather than features of high-order phenomena, such as subjectivity, cognition, and perception (Schaffner 2016, 114; Varela et al. 2000, 195). Genetic contributions to the latter are so enmeshed with non-genetic variables that it is impossible to identify principled correlations between genes and features of such high-order phenomena (Varela et al. 2000, 202).
In response to partially genetically influenced vulnerabilities, my friend was attracted to and developed embodied skills for sociocultural practices of losing weight. These skills were existentially crucial to my friend, given that the vulnerabilities they addressed were the foremost of her concerns and had structured much of her life. Once developed, these skills determined the existential properties of objects across her perceptual world and thereby altered her existential commitments. Before these developments, my friend was committed to becoming socially accepted; but after, my friend was committed to losing weight. This comes to show that when people are predisposed with certain vulnerabilities and are situated in certain sociocultural niches, they develop embodied skills for the sociocultural practices that can satisfy their needs—which in turn alters their ways of life and the possible needs they can have. I will soon show that these practices and ways of life are often influenced by medical psychiatry, which permits people to develop psychiatric symptoms.

Cognitive- or representational-level factors, on my framework, are understood as embodied skills. Some cognitivist approaches hold that chronic abnormal inputs can alter some cognitive functions that synthesize the representations a person perceives (Cratsley and Samuels 2013). For example, regarding the etiology of anorexia, exposure to beauty standards might contribute to inputs that modify a person’s cognitive functions, so these synthesize visual stimuli of her body into representations of her body as fat. But cognitivist models lack principled ways of specifying which kinds of input are capable of altering cognitive functions.

Existential enactivism explains this idea more powerfully. Not any sort of “input” can alter cognitive functions. The cognitive functions that are relevant to psychopathology are tied to emotion, belief, and behavior. Existential properties (rather than low-level properties) engage emotion, belief, and behavior. So, the sorts of inputs that have potential of altering cognitive functions, or embodied skills, are existential properties. In other words, only objects and events that are relevant to a person’s existential commitments can transform her embodied skills and perceptual experience. For example, a person must be committed to having a body that is socially desirable in
order to have perceptual access to events as manifesting existential properties relevant to beauty standards. Only then can such “input” scaffold the development of her skills, or alter her cognitive functions, which determine the existential and visual properties that her body is fat.

By taking cognitive processes and bodily processes to be causally related in a distal, unidirectional manner, cognitivist models have difficulty arguing that social conditions can have top-down effects on bodily processes. At most, on these models, social conditions might impact perceptions and beliefs about the external world, including their own bodily conditions, which thereby induce actions that can eventually affect bodily processes. But as I have argued in my critique of Hacking, cognitivism leaves open the possibility that mental disorders involve biological causes that drive the development of mental illness independently of social influences or representations people form. Cognitivism is thus ill-equipped to argue against the natural kind status of mental disorders.

Existential enactivism does not face these challenges of explaining how social influences can impact bodily processes and how mental illness is socially constructed. Perceptual experience is not based in mental representations but rather in the environment itself, which is disclosed through the dynamical coupling relation between our embodied organism and the environment (see chapter 2; and Thompson 2007). So the existential properties of the world necessarily engage and alter our embodied skills—which, described at a biological level of analysis, are centralized in the nervous system, distributed in the body, and engage various biological processes. Because existential properties are necessarily influenced by sociocultural conditions, these conditions can affect at least those bodily processes implicated in the development and deployment of embodied skills.

Even biological processes that we might typically regard as resistant to non-biological influences can be affected by sociocultural conditions. In chapter 3, I provided experimental evidence that our commitments to ways of life can lead to significant changes in neural substrate. The phenomenon of neural plasticity generally reflects such
top-down effects. These changes in neural substrate, in turn, constrain the possible development of a person’s embodied skills, perceptual experiences, and existential commitments.

Epigenetic research shows that certain environments and experiences can induce changes in DNA methylation, histone modification, and ultimately phylogenetic expression, which play roles in the development of some mental disorders (Toyokawa et al. 2012). For example, nutritional deficiency and maternal separation induce epigenetic changes associated with schizophrenia (Heijmans et al. 2008). In general, research shows that environments in which people experience chronic stress or strong affect yield epigenetic changes (Toyokawa et al. 2012). Researchers, however, tend to assume that environmental events directly induce epigenetic changes, or they are silent on the mediating processes (Dolinoy et al. 2007; Kendler & Greenspan 2006). But such direct causation is implausible, and epigenetic accounts are incomplete if they neglect the issue.

This research indicates that strong affect corresponds to significant changes in epigenetic processes. The capacity of an object to trigger strong affect is regulated by our existential commitments to ways of life, if the object does not directly threaten biological survival. I will focus on this in chapter 6. A person will interact only with objects that are relevant to the satisfaction of existential commitments, and the significances of objects are determined by such commitments. Epigenetic processes are thus modulated by the dynamic relations between a person’s embodied skills and perceptual world, which are in turn constrained by sociocultural conditions. Epigenetic processes provide *prima facie* evidence that the perception of some existential properties, and thus our existential commitments, play a role in regulating these changes in genomic expression and altering various biological processes.

There are further biological mechanisms proposed to explain top-down effects. The hypothalamic-pituitary-adrenal (HPA) axis facilitates cross-talk between nervous,

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39 The most striking cases of neural plasticity, which have been studied thus far, are cases of phantom limbs and blindness. But scientists conclude that subtle neural plastic changes occur in everyday experiences (Ramachandran & Hirstein 1998; Sadato et al. 1996).
immune, and endocrine systems. Studies on emotional stress show that affective experiences can significantly alter activity in immune and hormonal regulation (Exton et al. 2000; Manley et al. 2018; Schedlowski & Pacheco-Lopez 2010). The midbrain periaqueductal gray (PAG), which spans the hypothalamus and amygdala, regulates top-down pain processing. Changes in beliefs, desires, and motivations can lead to changes in activity in these pain-processing areas (Wager & Atlas 2015). Positron emission tomography (PET) studies show that these PAG mediated processes can release endogenous opioids (Petrovic et al. 2002). This decreases overall neural activity in pain-processing pathways and lowers the subjective experience of pain. So conscious experiences and affect, which are governed by our existential commitments, can regulate some biological functioning, especially those related to pain, immune, and endocrine systems.

Etiological processes of psychopathology include such top-down influences, by which sociocultural conditions constrain the existential properties we perceive, the deployment of our embodied skill, and affective activity—which potentially alters neural plasticity, epigenetic processes, and other aspects of bodily functioning. Over such top-down processes, people can develop psychological and somatic symptoms predicted by psychiatry and thereby apparently validate psychiatric theories.

Medical psychiatry has a long-standing history in Western civilization and has influenced the construction of certain niche and norm conditions (Foucault 1961/1988, 1963/2003). These conditions permit psychiatric disorders to function as ways of life in relevant societies and predetermine the possible developmental trajectories of people who are described by and accept these diagnostic labels.

Anorexia as a diagnostic category, for example, is represented by many sociocultural practices and institutions. Television portrayals, internet communities, and psychiatric practices affirm it. When people have certain vulnerabilities and seek relief, they develop embodied skills for practices that are influenced by psychiatric categories or might increase suffering and predispose them to commit to ways of life of psychiatric disorders. Those sociocultural conditions that facilitate the way of life of a psychiatric
disorder scaffold the development of embodied skills, which in turn systematically
determine the existential properties that objects manifest and constrain the possibilities of
conscious life—as well as the possibilities of some features of biological functioning,
given the aforementioned evidence. The symptoms stipulated as characteristic of some
psychiatric disorders, such as anorexia, could not develop in the absence of these
psychiatric-influenced social conditions. These top-down processes explain looping effects
and show that such effects necessarily regulate the development of mental illness.

This explanation also neatly accounts for the insights of narrative psychology and
overcomes its limitations. Narrative psychology implies that narratives are linguistic or
conceptual; but on this understanding, it is difficult to explain how narratives can
transform our personality and possibilities of life. Existential enactivism shows that
linguistic narratives are grounded in more fundamental patterns of human activity, which
are stabilized by niche and norm conditions, are unified by ways of life, and transform our
personality, perceptual world, and conscious possibilities. It might appear that we are
changed by narratives. But in fact we are changed by the scaffolding constraints imposed
by such conditions. Because linguistically conveyed narratives are also derived from these
very conditions, there is a fit between our ways of life and these narratives.

Existential commitments to ways of life do not exclusively determine the
devolution of psychopathology. There will always be external disturbances
relative to a person’s normative ways, and such disturbances can shift the course of
development. My friend did not foresee that the practice of losing weight would also
reward her with a sense of power and safety. This unintended discovery provided her with
a new commitment of having absolute power. This bears to show that during
psychopathological development, people can find themselves with commitments that
have little to do with their original desires, and that are often influenced by medical
psychiatry, which has a monopoly over normative practices related to our suffering.

Once people are fully existentially committed to the ways of life of mental
disorders, they are driven to preserve their ways of life and to fend off events that might
hinder this pursuit. Such events include those in which others try to intervene in their
practices, or those in which they fail to meet the norms and ideals of their commitments, as seen in the case study of my friend with anorexia. This drive towards existential survival accounts for the obstinacy of some mental disorders. Such obstinacy might seem baffling because mental disorders seem to consist of maladaptive practices and self-inflicted suffering. But people do not aim to make themselves suffer.

People can resent their ways of life of mental disorders, which have insidiously developed, and want to get rid of them; but this is very difficult to do. These ways of life have already structured their subjectivity and the possible meaning that shows up in the perceptual world; people cannot think, feel, or act in ways independently of these ways of life, and they are driven to avoid existential death. Moreover, the existential properties determined by these ways of life sustain new vulnerabilities and needs, and people’s seemingly maladaptive practices have utility for addressing these.

On the existential enactivist framework, person-level factors include a person’s voluntary responses to perceptual experience, including practical reflection (see chapter 4). This framework can show how person-level factors identified in biopsychosocial models interact with factors of other levels of analysis within the broader etiological processes that underpin psychopathology. For example, I have mentioned that biopsychosocial models of anorexia show that person-level factors of body dissatisfaction and perfectionism are correlated with the disorder (Cooley et al. 2001; Pike et al. 2008).

Existential enactivism explains that such dissatisfaction and perfectionism are rational responses to the existential properties that show up for a person with anorexia. In my friend’s perceptual experience, her body manifested the existential properties that it is disgusting and must be disciplined. Whenever she reflected on such experiences, ideals of her disorder established the criteria of her evaluations. Over such self-evaluations, she formed resolutions to perform her psychopathological practices with ever more stringency. This enabled her to new experiences, which in turn shaped her embodied skills and the possible existential properties that objects manifested. An observer, like a psychiatrist, might regard my friend’s behaviors as indicating dissatisfaction and perfectionism. These behaviors are part of a dynamical cycle between practical reflection
and perceptual experience, a cycle that functions to preserve our ways of life and ward off threats to such existential survival.

The existential enactivist framework is consistent with the fact that some mental disorders have biological origins, which are independent of social influences. Nonetheless, this framework shows that social influences and existential commitments determine the perceptual world and constrain our possible thoughts, feelings, and actions, modulating any biological effects to produce the symptoms we observe in mental illness. The particular extent to which a mental disorder is socially constructed depends on many variables, and existential enactivism shows that at least the actual symptoms manifested are necessarily socially contingent. The possibility of developing some symptom might, in some cases, be relatively independent of social influences.

Let us briefly return to multiple personality disorder (MPD), whose etiological analysis provides unique support for this framework. MPD seems to be a special case in which a plurality of existential commitments to ways of life, which we all have, are somehow insulated from each other and enable the development of distinct personalities and perceptual worlds. A recent review of etiological proposals for MPD found that people diagnosed with it have atypical meta-memory patterns; they are remarkably effective at suppressing memories (Şar et al. 2017). This adds to the long-standing consensus that people diagnosed with MPD are high in suggestibility, or the ability to suspend judgment and be hypnotized.

These meta-memory patterns and traits that underlie suggestibility might enable a person to compartmentalize her ways of life, personalities, and perceptual worlds. The “alters” that a person develops are usually caricatured personas, composed of demographic stereotypes—closely related to characters portrayed on popular television (Hacking 1995, 32). A person is sensitive to these ways of life, interacts with relevant niche conditions, and develops embodied skills distinct to these ways of life. She can do this while preventing the existential properties distinct to one way of life from interacting with those of others, by virtue of her unusual meta-memory abilities and traits of suggestibility. The outcome of this insulation between developmental trajectories is the
phenomenon of having multiple “alters,” between which a person can switch. Cases of MPD provides evidence that ways of life make possible the development of embodied skills, perceptual worlds, and personalities.

The existential enactivist framework focuses on the dynamical interactions between ways of life, embodied skills, and existential properties. Social factors can be understood on the basis of an ontology of niche and norm conditions, which are organized by ways of life. Biological factors are tied to physiological conditions, which constrain the possible development of embodied skills and the viability of committing to any way of life. Person-level factors include our conscious responsiveness to existential properties and practical reflection, which can alter the developmental trajectories of our embodied skills, the existential properties that the world chronically manifests, and our ways of life. Cognitive factors are understood as embodied skills, which we have developed over our interactions, shaped by practical reflection, with niche and norm conditions unified by our commitments to ways of life. These skills establish the baseline of perceptual experience and constrain our conscious possibilities. All factors are dynamically interdependent, and none are etiologically privileged. Although different disorders involve different contributions at these levels of analysis, the etiology of any mental disorder can be understood on this model.

Conclusion: The Medicalization of Suffering

I have argued for an existential enactivist framework for understanding the etiology of psychopathology, which more powerfully explains the interactions between factors across levels of analysis than current integrationist approaches. Biopsychosocial and previous enactivist proposals refer to dynamical interactions between levels of analysis but do not specify the ontologies of these levels or any principles of their interaction. The existential enactivist framework addresses these details, powerfully explains the evidence that other empirical approaches target, and might be useful for psychiatric research.
In this section, I return to the question: why has the prevalence of mental disorders drastically increased over recent decades? I will argue that the social conditions that facilitate what Heidegger calls the *technological attitude* and *enframement* contribute to this increase.

The existential enactivist approach entails that many mental disorders are socially constructed. The possible expressions of *existential suffering*—that is, suffering that is not directly caused by biological dysfunction or threats to vitality—is always governed by our ways of life; I will analyze the conditions of this kind of suffering in chapter 6. In Western societies, psychiatry is the epistemic authority on our existential suffering; it is supposed to be science, and as secular people we are supposed to believe in it. Psychiatric research has determined that some forms of existential suffering are disease entities. I have argued that this shapes our possible experiences of suffering, regardless of whether we are diagnosed, and determines the psychiatric symptoms developed by people who accept diagnoses.

This medicalization of existential suffering is insidious. To return to the statistics I presented in the introduction, 1 in 5 adults, and 1 in 2 adolescents, live with any mental illness, and this statistic is the result of a fourfold increase in the prevalence rate over the previous four decades (Ahrnsbrak et al. 2017). As Western psychiatry is adopted by the medical systems of non-Western nations, the incidence of psychiatric disorders rises among these populations (Summerfield 2008; Timimi 2014; Watters 2011).

Of course many factors contribute to these bewildering statistics. Historically, people did not have adequate access to diagnosis, and increased access might contribute to the rising prevalence of diagnoses. Western trends of individualism and capitalism might facilitate social isolation and competition, which increase vulnerability to depression and anxiety and might also contribute to the rising prevalence. But none of this undermines the social constructivist criticism of psychiatry, which I have argued for in this chapter. These factors can be understood as increasing the extent of exposure to DSM culture and thus the likelihood of developing socially constructed disorders.
Individualism and capitalism, among other high-order cultural forces, might be tied to the *technological attitude*, proposed by Heidegger in the *Question Concerning Technology* (1952/1977). I will analyze the medicalization of psychiatric disorders as a case of directing the technological attitude towards our suffering, and show that this is a explanatorily powerful way to examine psychiatric practices. According to Heidegger, we naturally adopt a technological attitude at times: this attitude presents objects as resources that can be exploited for our advantage, once we understand the mechanistic nature of these objects and identify the laws that govern their behaviors (Heidegger 1952/1977, 12). *Enframedment* occurs when this desire for control ultimately controls us; we are so addicted to controlling objects in this technological manner that the values of objects, which structure our perceptual world, are exhausted by their relevance for us to manipulate and benefit from them (Heidegger 1952/1977, 20). So, given that the perceptual world admits of only these values, we cannot help but desire to control objects. According to Heidegger, contemporary Western cultures predispose all its people to be *enframed*.

In practice, this attitude presents objects as mechanistic in nature and manipulable by technological devices, which are engineered by experts (Borgmann 1988). We do not know how these devices works, and we do not develop the skills to engage with the object directly; or, if we had these skills formerly, they deteriorate. This leaves us as dependent on technologies and as alienated from objects. For example, we might adopt a technological attitude towards our boredom and manipulate it by relying on social media to provide ourselves entertainment; but we do not understand the computer technologies that provide these experiences, or how these technologies eliminate our boredom. Our alienation from these technologies is revealed when we examine them in this critical manner. Moreover, by relying on technologies, we prevent ourselves from learning how to deal with our boredom directly. If we did not immediately eliminate our boredom with technologies, we would become aware of our alienation from our own boredom, as well.

This alienation indicates a transformation in the existential properties manifested by the objects we manipulate with technologies. Our own boredom, for example,
manifests properties that specify that the boredom ought to be eliminated by our scrolling through social media. It no longer can manifest properties that would enable us to regard it as familiar and affording gratifying forms of first-hand engagement. We also lose perceptual access to existential properties of many distal objects, whose uses depend on our first-hand engagement with the immediate object. For example, we cannot be entertained by a lengthy story told by a neighbor. This object is distally related to the immediate object of our boredom; before people came to rely on technologies to eliminate our boredom, they might have been motivated to develop skills for listening to lengthy stories, or for engaging in other relevant activities. But now, lacking such skills, we perceive the lengthy story as drab, lacking the existential properties that would have made it stimulating; for instance, we have only developed skills for engaging with short-form pieces of social media, rather than with people’s spoken stories. Because we depend on technologies and take them for granted, we rarely notice that we have lost these skills and perceptual access to certain existential properties that would enable us to be intimate with objects, rather than to be alienated from them.

Psychiatric science results from the societal adoption of a technological attitude towards our existential suffering (Sadler 2005; Phillips 2013). We develop embodied skills that determine our suffering to manifest existential properties that it is based in biological dysfunction. Since we cannot control such biological conditions, the rational response in this context is to seek pills or other technological fixes. But such psychiatric treatments are often no more effective than placebos.40 Over recent decades, new and

40 The general effectiveness of a treatment depends on the psychiatric disorder; but for the most common mental disorders, like depression and anxiety, there are no treatments that are superior to placebos. There has been much pharmaceutical research on depression, due to its high prevalence and investments in the antidepressant industry—which generates 500 billion dollars a year in the US (Kirsch et al. 2008). Major pharmaceutical companies that hold monopolies over antidepressant drugs have suppressed large trials, which show that antidepressants are no more effective than placebos (Kirsch et al. 2008, Langdon-Neuner 2008, Moynihan et al. 2002). These repressed studies were revealed, under lawsuit pressures. Once they are taken into account with published studies, the overall statistics reflect that antidepressants have no clinical difference to placebos (Kirsch et al. 2008, Pereira & Ioannidis 2011). Pharmaceutical interests also interfere with many large scale trials and covertly include pre-selection phases, in which the participants who respond positively to placebos are excluded from the trials; this is an effort to mask the fact that antidepressants are no more effective than placebos (Lakoff 2007). Various
purportedly more effective psychopharmaceuticals have been designed, and the proportion of diagnosed US citizens who take psychopharmaceuticals has increased; yet, these changes accompany the escalating prevalence of psychiatric diagnoses (Kirsch 2011; Whitaker 2010).

The medicalization of existential suffering is destructive in at least these respects: we fail to develop embodied skills that would enable us to perceive our suffering as something existentially significant, responsive to our agency, and affording first-person engagement. In turn we are alienated from our existential suffering, cannot sit with it, and must rely on technological fixes, which are often ineffective or at least bring us into a cycle of dependence. It is plausible that before adopting Western psychiatry, people did not perceive lethargic or nervous moods as medical symptoms. Instead, they had embodied skills that determined that such moods manifested existential properties of natural affective states that will pass just like any other mood, even if they are stronger and more obstinate than others. There are cross-cultural studies that support this speculation (Frank 1995; Kleinman 1989; Moynihan et al. 2002; Summerfield 2008). The rational response to such perceptual experiences of non-psychiatric suffering is to go outside, talk to family and friends, or do anything we ordinarily do to cope with common moods. This sort of response might let a person overcome extreme moods and preclude such moods from facilitating the development of more obdurate conditions that sustain the mood. The medicalization of suffering prevents this; and it might encourage the development of such obdurate conditions.

psychopharmaceuticals used for treating anxiety and schizophrenia also do not outperform placebos (Kirsch et al. 2008; Papakostas and Fava 2009).

Many psychotherapies also do no better than placebo therapies (Glass et al. 1983; Wampold et al. 2005). Some theorists even propose that psychotherapies are functionally identical with placebos, and their effectiveness is exhausted by the mechanisms that underpin placebo effects (Jopling 2008). I personally think psychotherapies are less technological than psychopharmaceuticals and encourage the development of embodied skills for directly engaging with suffering. See chapter 6 for an argument for non-technological methods of approaching our suffering that might help prevent the development of psychiatric symptoms; this has implications for how we might understand the effectiveness of psychotherapies.
Of course, every cultural paradigm comes with its own distinctive niche and norm conditions that pertain to regulating the normative expressions of existential suffering, which can be devastating or liberating. I do not think that psychiatrized cultures are absolutely destructive, or non-psychiatrized cultures are absolutely superior. Some cultures, for example, have taboos against kinds of experiences that are medically diagnosed in psychiatrized cultures, and this can be destructive, too. But the fact that the prevalence of psychiatric diagnoses is rising precipitously in Western cultures, while not in other cultures, suggests that the medicalization of existential suffering determines us to suffer in strange ways that contribute to this rise.
Conclusion: Suffering and Freedom

Let us return to the idea advanced in chapter 1 that we are distinguished from other animals by our capacity to suffer in so many ways. I am now in a position to explain that claim. I will argue that the type of circumstances that induce suffering also enable us to perceive the world as manifesting special existential properties that, in turn, afford an opportunity for us to become aware of the contingency of our subjectivity and world. This awareness is the basis of what I will call existential freedom. I will then tentatively propose that adopting an aesthetic attitude towards our suffering is a way of becoming existentially free.

But first, I review what we have learned over the previous chapters. I have argued for Transcendental View, the Unbounded View, and the Reflection View, which together constitute existential enactivism. In chapter 1, I distinguished my approach from those taken in the cognitive penetration debate, emphasizing that complex meaning is registered in perceptual experience.

In chapter 2, I presented a select history of the antecedents of existential enactivism: transcendental idealism; philosophy of embodiment; existential phenomenology, and embodied cognition. I interpreted this history as a progressively more sophisticated deployment of Kant’s transcendental method, yielding increasingly naturalistic transcendental conditions of experience.

In chapter 3 I began arguing for existential enactivism. Embodied skills, background knowledge, intentional attitudes, and other embodiment conditions, while necessary conditions of perceptual experience, are not sufficient. I identified features of
sociocultural niches, which have co-evolved with our biological phylogenesis, as further transcendental conditions of perceptual experience. Niche conditions scaffold the development of embodied skills, the embodiment conditions relevant to determining existential properties. Niche conditions also facilitate the sociocultural patterns that, when exploited by perceptual processes, underlie the conceptual contents of existential properties.

This complexity, however, gives rise to a “frame problem”: how do we become sensitive to the particular patterns that underlie our existential properties? I argued that social norms govern the development of our embodied skills and constrain the existential properties we perceive. These norm conditions are interdependent with niche conditions; they drive the behaviors that construct and maintain niche conditions, and they also rely on those niche conditions to facilitate the human behaviors that give rise to these norms.

Norm conditions gain their normative status by virtue of our existential commitments to our ways of life. Our subjectivity and our world are structured by our ways of life, and to preserve these, we must fulfill our commitments, which requires the development of embodied skills that enable satisfaction of those norms. Since embodied skills mediate perceptual experience, ways of life systematically unify the existential properties that ultimately show up for a given person. The Transcendental View is the thesis that ways of life, embodied skills, and existential properties are dynamically interdependent.

I also argued for the Unbounded View, the thesis that there is no principled upper bound of the complexity of existential properties. I argued that expert performance, in which we engage in cognitively complicated activities in an absorbed, spontaneous manner, is best explained by the perception of vastly complex existential properties. I then showed how such perception is possible. Our biological organism is hooked up to the environment through a relation of dynamical coupling, and each mutually determines the other. Existential properties become salient in this coupling.

In chapter 4, I addressed the questions of how we become existentially committed to ways of life in the first place, and how motivation towards conformity is able to shape
the development of embodied skills and existential properties. The *Reflection View* explains how this is possible. We often spontaneously reflect on our perceptual experiences and examine them in accordance with criteria that are based in the social norms of our ways of life. Language enables us to combine and to rearrange representations of perceptions, to discover new facts, and to act and perceive in new ways. This, in effect, alters the possibilities of future behaviors and perceptual experiences, over which we develop our embodied skills to increasingly conform to norms of our ways of life.

This account also constitutes an independent argument that perceptual experience necessarily manifests existential properties. I argued that the existential condition of affect entails the perception of *minimal affective values*, and the conditions of intersubjectivity and language entail the development of these values into existential properties.

Perceptual experience, I showed, is always influenced by unpredictable features of the environment, and some disturbances can alter the development of our embodied skills, independently of the normative power of our existential commitments. Examples of extreme disturbances, such as bodily and psychological trauma, highlight the fact that our existential commitments are reciprocally dependent on perceptual experiences.

In chapter 5, I proposed existential enactivism as a framework for understanding the etiology of mental illness. The cultural history of psychiatric practices has facilitated the construction of distinct niche and norm conditions, which permit diagnostic categories to serve as ways of life to which people can existentially commit, when they are diagnosed or self-diagnosed. These ways of life shape a person’s embodiment so that she encounters a perceptual world that solicits her to manifest the symptoms of the diagnostic category. Psychiatry can therefore *create*, and not only *cure*, the forms of suffering it describes.
Existential Suffering

Most animals suffer primarily from threats to biological survival. But we can be threatened by unmowed lawns, coffee stains, spilled secrets, farting in public, or silence in a conversation. How can this be? Our suffering is primarily driven by threats not only to biological survival, but also to existential survival. We are committed to ways of life because our senses of who we are and the facts of the world are structured by these ways of life. We are driven to maintain an “equilibrium” of the normative states of our subjectivity and world (Haugeland 1998, 333). This is an extension of the need to maintain the homeostasis of biological processes, which all life forms share (Jonas 1968; Thompson 2007). Pain has evolved as a mechanism for monitoring environmental conditions as having value for threatening homeostatic requirements. Our distinctively human suffering consists in subtle varieties of pain that respond to complex existential properties, including threats to our existential commitments.

Many sorts of unexpected circumstances can disrupt the equilibrium of our subjectivity and world; in these cases, we can no longer satisfy our existential commitments. We must find new means to conform to the norms we recognize, or give up and watch the world to which we are committed disintegrate. For example, large coffee stains might signal our slovenliness or incompetence. A peer’s disconcerting silence might suggest our social ineptitude. These are cases of existential suffering—suffering that is caused by threats not to biological survival, but to our ways of life. I argued in chapter 3 that we inherit sociocultural niches and ways of life from previous generations just as we inherit genetic material. These niche and norm conditions provide the evolutionary constraints necessary for the adaptation of our cognitive capacities and for us to become existential committed to ways of life. Our existential commitments both constitute our distinctiveness in the animal kingdom and condemn us to suffer in unique ways.

Nonetheless, threats that induce existential suffering also enable us to free ourselves from the tyranny of social norms. This disequilibrium allows us to perceive a world of existential properties that differ from those with which we are antecedently familiar. Such perception, enabled by suffering, grants us the rare opportunity to become
conscious of existential commitments as objects, as opposed to background conditions, and so allows us to reflectively call them into question. When we enter into this kind of reflection on our ways of life, the possibility of radical transformation is open to us, a possibility that amounts to existential freedom.¹

The Aesthetic Attitude

Heidegger argues that the form of suffering he calls Angst lets us become self-aware of the contingency of the perceptual world, which is prerequisite for authenticity (Heidegger 1927/2010, 134). Authenticity is related to existential freedom. We are authentic when we become explicitly aware of the sociocultural traditions that have shaped the possibilities of our perception and knowledge. Merleau-Ponty clarifies this point. He argues that we should understand freedom in terms of achievements not at the level of empirical, moment-to-moment experience, but rather at the level of transcendent, long-term actualization of ways of life (Merleau-Ponty 1945/2012, 534). When we do away with an empirical sense of freedom, we can see that long-term cultivation of the ontology that structures the lived world is a more fundamental existential sense of freedom. It is not freedom from objects that disturb our everyday pursuits, but it is freedom from the meaning of these objects that constitute their ability to disturb us.

To take Merleau-Ponty’s example: if a rock-climber failed to reach a ledge necessary for her ascent, this failure is not a case of a lack of existential freedom (Merleau-Ponty 1945/2012, 537). Because she has chosen the rock-climber way of life and has actualized it to the extent that she is capable of perceiving a ledge as having

¹ I argued in chapter 4 that we usually engage in practical reflection, in which we also make evaluations of our experiences and form convictions to adjust our normative performances. These adjustments serve the ends of satisfying the standards of our current ways of life. In contrast, the adjustments that constitute existential freedom serve the ends of changing our very ways of life, or creating new normative standards that will dictate future perceptual experiences and episodes of practical reflection. John Haugeland draws a similar distinction between repair and revision in our rule-following (1998, 334); in repair we try to find more adept practices that can achieve the outcomes specified by given rules, and in revision we try to change the rules themselves (see chapter 2).
significance relative to rock-climbing, she is existentially free. We can recognize our existential freedom only when we become aware of the contingency of our perceptual world on our sociocultural inheritance.

Merleau-Ponty, however, does not clarify whether existential freedom requires the voluntary pursuit of any way of life whatsoever, or whether the ways of life we pursue must meet additional criteria, such as being ethical or being aligned with higher-order desires. The development of some mental disorders illustrates that people, in response to the atypical perceptual states afforded by suffering, can pursue ways of life that perpetuate further suffering. They might be aware of the aforementioned contingency of self and world, which is necessary for existential freedom, but mental illness shows that this awareness does not entail transformation that is freeing. Merleau-Ponty also does not account for cases in which people might perceive that they actively determine their world and liberate themselves, but are actually self-deceived. My case study of anorexia is an example of such self-deception. Unknowingly to my friend, oppressive socio-political conditions influenced her to believe that the anorexic way of life is liberating.

Moreover, Merleau-Ponty does not ask whether empirical and existential freedom are related. I will argue that disruption to the former is a necessary condition for the latter. Disruptions to empirical freedom constitute disequilibrium of our normative states and usually induces suffering. But we can learn to embrace this disequilibrium as an opportunity to cultivate awareness of our ways of life and to become existentially free.

Adopting an aesthetic attitude towards our suffering is one way to realize the existential freedom that suffering affords. When we attend to art objects, such as

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2 I am inspired by two concepts here. First is Heidegger’s analysis of poiesis and the poietic attitude (Heidegger 1952/1977, 13). For Heidegger, when we adopt this attitude towards an object, we reveal its broader historical and cultural significance. We engage with the object not as a resource to be exploited, but as something that is entwined in our ways of life and merits appreciation or admiration.

Second is rasa, a central theory in traditional Indian aesthetics. I draw on specifically K.C. Bhattacharyya’s explanation of rasa, in “The Concept of Rasa” (1930) (Bhushan & Garfield 2011, 195-206). This is a deep and rich concept, and I can only provide a very rough account of it here. The etymology of rasa traces back to its reference to sap, flavour, or essence, and was later interpreted to refer to the purest form of joy, which characterizes the nature of the Braham, which
literature, painting, or music, we let go of our mundane interests, open ourselves to the aesthetic experiences these objects afford, and play with different ways of relating to the art object until we access such experiences. That is, we set aside our embodied skills that usually mediate perceptual access to mundane objects and determine normative existential properties relative to our existential commitments. This allows the art object to manifest extraordinary narrative, ethical, or other varieties of existential properties, which constitute aesthetic experiences.

When we adopt an aesthetic attitude towards our existential suffering, we set aside the embodied skills developed for dealing with medicalized suffering—which determines that our suffering manifests properties that it is based in biological dysfunction, resistant to our agency, and requires medical treatment. Instead, we adopt the aesthetic attitude by which it is possible to relate to our suffering in creative, though critical, ways. We critically examine the situation that has induced our suffering; this is God or the totality of the universe in Vedāntin philosophy. Rasa might be understood as special “transcendental” emotions, which are abstracted from any particular, empirical experience.

Good works of art give us access to rasa. But rasa is not only found in joyous aspects of art, such as a happy ending in a story. Even morally atrocious events depicted in artwork can manifest rasa; unlike ordinary experience in which similar events would provoke particular emotions of pain, injustice, and disgust, artwork can show atrocious events as necessary in a greater whole and as beautiful in other respects, which evoke rasa. Encountering rasa also requires the subject to orientate herself in a special way, in which she attends to the universal structures of experience, rather than any particular event. This transcendent structure becomes object of the subject’s experience and determines her emotion. This transcendent structure is absolutely stable, in contrast to the contingency of any particular that fits into this structure. This structure underpins the whole of human life and lets every particular event relate to all others and serves a necessary role in this greater structure. Given that the subject’s experience depends on this transcendent structure, rather than the particulars that are structured by it, her emotions are absolutely stable. She is free from the emotional volatility, and reactivity to fluctuating events, that defines first-order experience. Rasa is a “transcendental” emotion in the precise sense that it accompanies awareness of this universal, transcendent level.

The special orientation that a subject must adopt to access the rasa of an artwork has inspired my formulation of the aesthetic attitude.

3 Of course the aesthetic attitude would be effective only for cases of suffering that are neither highly biological in nature nor unresponsive to voluntary efforts. But many cases of existential suffering are like this. Only in recent decades have mental illnesses increased dramatically in prevalence, so it is likely that before, people could overcome their suffering through their own efforts and prevent it from becoming chronic and warranting a diagnosis (CDC/National Center for Health Statistics 2015; Whitaker 2005). See chapter 5 for more arguments for the social construction of so many forms of suffering that have been fallaciously taken as natural kinds.
ideally brings us into awareness of how our ways of life have contributed to the existential properties that render objects into causes of suffering. We thereby provide ourselves an opportunity to change our embodied skills, respond to different social norms, and commit to new ways of life. This all informs our actions and shifts the possible outcomes of suffering. But how does one actually do this? To which social norms should we attempt to commit, once we have the awareness of the contingency?

One might object that the aesthetic attitude can only be adopted towards art objects. It is difficult to adopt an aesthetic attitude towards everyday objects, let alone to ourselves and our lives, because we are not practiced in recognizing such objects as affording aesthetic experiences, and we usually perceive them only instrumentally. In the context of psychiatry, it is even more difficult, if not impossible, one might think, to achieve the attitude towards our suffering. Suffering is simply painful, not beautiful; and we lack the social norms that would allow us to perceive suffering aesthetically.

Not so fast. It is possible to adopt aesthetic attitudes toward one’s own suffering, to perceive its beauty, and to realize this beauty as one would the beauty of a work of art. Some writers and artists have unique ways of life in which it is socially normative to adopt aesthetic attitudes toward their own suffering and realize the potential beauty of suffering by re-presenting suffering in artistic mediums. Although social norms for an aesthetic treatment of actual suffering are primarily embedded in artistic ways of life, those norms and other norms that govern our perception of art can provide us models.

The transformative value of some artworks is based in the virtual experiences they offer once we adopt an aesthetic attitude towards them. By engaging with great, narrative

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4 This critical examination of suffering entailed by an ideal aesthetic attitude distinguishes this attitude from others by which we blindly wish for our suffering to go away or to manifest certain significances that make us feel better. The critical examination requires a degree of epistemological accuracy. Of course, it is likely that in many cases there are no determinate facts about the causes of our suffering or the possible outcomes of it, and in such indeterminacy we cannot aim for epistemological accuracy in a traditional sense. This is why I talk about art and aesthetics: in the midst of such indeterminacy, we must decide which facts should obtain, or which explanations of our situation are appropriate. Criteria for guiding such decisions are not objectively determinable in many cases. Aiming for an aesthetic transformation of our suffering is open-ended and yet imposes constraints, which I will show are useful for our existential freedom.
art objects (e.g., poetry, novels, films), the object enables us to have quasi-perceptual virtual experiences. These experiences, designed by the best artists of our cultural history, scaffold new perceptual skills and offer special norms that can guide our practical reflection. Often, we could not develop these skills or discover such norms on our own. Calvino succinctly lists some transformative effects of reading classics, which hold for appreciation of art more generally; art can be “formative, in the sense that they give a form to future experiences, providing models, terms of comparison, schemes for classification, scales of value, and exemplars of beauty” (2000).

Many artists represent suffering in their works, and the virtual experiences these works afford can help us discover new ways to relate to our suffering and achieve transformation—or essentially, to make use of the existential freedom afforded by our suffering. Tragedians, for example, contextualize suffering within narratives that reveal suffering as uniting humans across time place and time, enabling us to have common empathy. Or, some tragedians show that a character’s suffering has a conclusion, contextualized in her community, which gives it greater significance and a necessary role; such completion is aesthetically satisfying (Dewey 1935/2005; Kermode 2000).

By developing aesthetic embodied skills of perceiving suffering in these virtual worlds afforded by artwork, we might acquire similar skills that could mediate perceptual access to our own suffering and realize it as manifesting similar aesthetic existential properties. Transferring such skills is not, however, straightforward. The possibility of such transference requires that the virtual experiences afforded by artworks are congruous with our actual experiences in important respects. But the two domains will always differ to some extent, and transfer requires effort. Nonetheless, there is evidence that skills can be transferred across domains (see chapter 3), and I only propose that engagement with art can serve as an aid for our aesthetic treatment of suffering and for offering ideals of the aesthetic properties we aim for our suffering to manifest.

Studying the humanities, including philosophy, is also useful for dealing with existential suffering. This study aids the development of critical thinking and self-
knowledge, which are crucial for succeeding at an aesthetic treatment of our suffering.\footnote{A few Western philosophical traditions, such as Hellenistic traditions, regard the practice of philosophy as a way of life (Cooper 2012; Hadot 1995). Interesting, in many philosophical traditions, such as those found in Buddhist and Indian contexts, theoretical study of philosophy and dedication to meditative practices are regarded as inseparably joined in a dialectic process. Meditative practice partially serve as practice of the application of theoretical truths in everyday situations, as to transform one’s future experiences, which in turn open new possibilities of philosophizing (Gethin 2010).} Like artists, scholars of the humanities “off-load” their knowledge in their theoretical works, and our engagement with these can scaffold our skills of critical thinking and self-knowledge. These skills enhance the function of practical reflection; so it yields realizations that are accurate in accordance with the actual conditions of our suffering and are effective in helping us transform our suffering into aesthetic outcomes. Many people recognize the importance of the arts and humanities, but existential enactivism shows that these do not merely enhance a person’s character or enrich quality of life. Such engagement and study can substantively transform the perceptual world and free us to new possibilities of thought, feeling, and action.

There is empirical evidence that adopting an aesthetic attitude towards suffering can be therapeutic. The Institute of Social Aesthetics and Mental Health, based in Vienna, is a research institute and treatment center that is founded on the principle that aesthetic experience has distinct psychological effects that can treat some obstinate psychiatric symptoms (Musalek 2013). Their research suggests that people with addiction are more likely recover if they perceive their aim as not abstinence, which is culturally associated with ideas of restriction and lack of freedom, but rather as living freely, or some other ideal that aesthetically appeals to them (Musalek 2010). In a psychiatric context, aesthetic experiences can engage special emotions crucial for motivation (Callender 2005, 2006). This institute does not produce controlled studies, however, so the claims by its researchers are largely based on theory.

Narrative psychotherapy aims to help patients discover accurate and empowering narratives in which they might integrate their suffering and understand their experiences in potentially aesthetic ways (White & Epston 1990). This therapy does not necessary
inform patients that suffering is a medical symptom. Rather, it aims to help patients discover that they had agency during periods in which, according to their previous beliefs, they were helpless; and to help them identify goals that aid transformation of their suffering (White & Epston 1990). There is experimental evidence that this therapy is more effective in reducing the severity and duration of symptoms of depression and post-traumatic stress disorder compared to control therapies (Lopes et al. 2014; Ruf et al. 2010). Although studies for the clinical efficacy of psychotherapies are difficult to control and replicate, this is preliminary evidence for the effectiveness of the aesthetic attitude.

The attitudes we adopt toward suffering regulate our deployment of embodied skills, which determine existential properties and thereby constrain or enable our conscious possibilities. Conservative views of perception cannot show this. These views take what I call existential properties as “merely subjective” in the sense that they are mental states, imagined or inferred by us. I have argued against this. I have shown that existential properties are grounded in transcendental conditions based in natural constraints, evolutionary processes, sociocultural traditions, and the activities of billions of humans over this history. Existential properties are not constructed by voluntary cognitive activity. Rather, in perceptual experience, all objects manifest some existential properties as necessarily as they have extension in space and time. Existential properties are objective, in these senses. So, the consequences of the attitudes we adopt are more substantial than they would seem, according to conservative views of perception.

Despite this objective nature, existential properties are nonetheless responsive to our agency. Our existential commitments can admit objects into the perceptual world, or banish objects from this world, and thereby alter our possible thoughts, feelings, and actions. To an extent, our commitments are determined by the transcendental conditions I have identified. But we also play a role in determining the perceptual world, which ends up determining us. Adopting the aesthetic attitude towards our suffering is one way to embrace this role; it lets us deploy practical reflection to examine our commitments and open ourselves to freedom. But embracing this role and questioning implicit norms does not only free ourselves. It also lets us contribute to the niche and norm conditions that
future generations will inherit, thereby enabling new possibilities of perception and ways of life.
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