A demonstration of enactivist personality assessment using the five-factor model

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A DEMONSTRATION OF ENACTIVIST PERSONALITY ASSESSMENT USING
THE FIVE-FACTOR MODEL

A Dissertation
Submitted to McAnulty College and Graduate School of Liberal Arts

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Philosophy

By
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December 2023
A DEMONSTRATION OF ENACTIVIST PERSONALITY ASSESSMENT USING
THE FIVE-FACTOR MODEL

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ABSTRACT

A DEMONSTRATION OF ENACTIVIST PERSONALITY ASSESSMENT USING
THE FIVE-FACTOR MODEL

By
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December 2023

Dissertation supervised by Russell Walsh

This dissertation seeks to extend the intellectual and existential horizon of the enactive approach by bringing forth an enactivist understanding of human cognitive life as it is lived from the perspective of personality traits. The theoretical task of this dissertation is to review existing evidence in support of the Enactivist Big-5 Theory (EB5T) of personality and its potential for bridging the phenomenological gap between minimal and human cognition. As a phenomenologically grounded theory of personality, EB5T conceptualizes individual differences not merely as differences in trait measures within a person but as differences in styles of how individuals bring forth, experience, and participate in their worlds—a process termed world-enactment. The methodological task of this dissertation thus becomes to demonstrate how a person’s traits find life within their experience as styles in order to garner empirical evidence in support of EB5T.
This study is an amalgam of a case-study approach, individualized assessment, and empirical phenomenology. It employs a sample of convenience (n = 4) and repurposes Constance Fischer’s phenomenologically based approach to psychological assessment into a qualitative method of researching traits as styles of world-enactment. The results of this study garnered preliminary empirical evidence in support of the viability of the proposed paradigm. The findings shed light on the relationship between traits as styles of world-enactment and the world as it is lived, by demonstrating how participants’ various traits found life in their experiences of repetitious distress. In the final analysis, we find that a style of world-enactment is a description of how one’s manners of participation in the world, as reflected by one’s traits, prefigure the world as seen and encountered in perception. After presenting the major findings of this research, this dissertation concludes by discussing the limitations as well as implications of this study for future research in cognitive science, personality theory, empirical phenomenology, and the psychological assessment of personality.
DEDICATION

I dedicate this dissertation to my grandparents, Dr. Boris Simonyan and Dr. Nelli Baghdasaryan, who showed me how to give it my all, and to my brother, Edgar, for continually disclosing the possibility of the horizon beyond my own.
ACKNOWLEDGEMENT

Every figure is indebted to its ground. Indeed, words will always fall short of the gratitude I feel toward the phenomenal individuals who made it possible for me to “burst forth” in the ways that I did throughout my doctoral training. For this reason, I’ll make this note brief by simply saying, “Thank you all, my conditions of possibility—you know exactly who you are.”

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Chapter 1: Introduction

This dissertation seeks to make a positive contribution to the body of literature in the cognitive sciences that is concerned with understanding human experience as essentially enactive (Varela, Thompson, & Rosch, 1991; Thompson, 2004; 2005; 2007; 2011). According to enactivism, the mind is not an event that occurs in the brain but an ongoing dynamical process of interaction between an embodied brain and its world across time.

Although enactivism draws on a variety of scientific disciplines to probe the question of human cognitive life, it is fundamentally a phenomenologically oriented approach. Indeed, the forebearers of enactivism originally presented it as a “continuation of a program of research founded over a generation ago by the French philosopher Merleau-Ponty” (Varela et al., 1991, p. xv). Thus, a defining feature of enactivism is that it employs phenomenological methods of research in studying experience rather than relying solely on third-person methodologies, such as those typically outlined by neuroscience and scientific psychology.

The Explanatory Gap of Human Cognitive Life

This dissertation addresses a significant gap in the enactivist literature. Despite its reliance on phenomenology, enactivism currently lacks a paradigmatic phenomenological model of human experience to guide its scientific research on the mind (Hovhannisyan & Vervaeke, 2022). Indeed, the prototypical enactivist strategy has sought to leverage its understanding of human experience by drawing on non-human models of cognitive life—most commonly the autopoietic cellular model of cognition (see Varela et al., 1991; Thompson, 2007). However, strategies that make inferences about human experience by drawing on non-human models of
cognitive life—such as autopoiesis—are phenomenologically limited and should not be simply taken for granted (Hovhannisyan & Vervaeke, 2022). Without a paradigmatic model of human cognitive life, enactivist accounts of the more classical (autopoietic) variety ultimately undermine enactivism’s very aim of undertaking a science of *human* lived experience as they risk reducing the mind of a person to the workings of a cell.

**Alternative Enactivist Strategies**

More recent enactivist research has sought to circumvent this challenge by adopting a piecemeal approach to the study of lived experience. Specifically, there has been a growing trend amongst enactivists to theorize various aspects of human experience without necessarily appealing to the autopoietic framework of classical enactivism but by creatively applying concepts from phenomenology, dynamical systems theory, and American pragmatism—a cluster of metatheoretical frameworks that is paramount to the enactivist paradigm—toward understanding select aspects of human experience in enactivist terms.

Researchers who have adopted the piecemeal approach have formulated positive accounts of perception, embodied interaction, social cognition, and emotion—among others—on enactivist grounds with fair success. Others have gone as far as to deliberately distance themselves from enactivism’s autopoietic underpinnings, claiming that autopoiesis is neither necessary nor sufficient for conceiving of human cognitive life in enactivist terms (e.g., Hutto & Myin, 2012).

Although adopting a piecemeal approach has allowed various thinkers to conceptualize select aspects of human experience in enactivist terms without necessarily confronting the risk of reductionism associated with the autopoietic framework, proponents of the piecemeal approach
have confronted a different challenge: the lack of a *unified* understanding of what constitutes human cognitive life with which to integrate their distinct theories into a unified model of human experience. Specifically, there is currently no consensus among enactivists of the piecemeal variety as to how their various claims about perception, embodied interaction, social cognition, emotion, and others, are meant to fit within a more unified account of human cognitive life. This poses a significant challenge for an approach like enactivism, whose very purpose was originally to elucidate the structures of *human* experience in a way that simultaneously extends across the entire range of possible human experience while reaching down to its depths.

**The Cognitive Scientist’s Dilemma**

The autopoietic model does not constitute a phenomenologically plausible model of human cognitive life, but it nevertheless affords a kind of ontological grounding for enactivists to integrate their various claims under a single conceptual framework. Conversely, the piecemeal approach affords a more direct study of human lived experience without the risk of reducing it to the workings of single-cellular life, but without an explicit account of human cognitive life by which to unify its various claims under a single conceptual framework (e.g., Noë, 2009; Gallagher, 2017; Hutto & Myin, 2012). As it currently stands, the enactive approach as a whole is unable to deliver on its promise of affording a science of *human* lived experience without first securing an explicit model of human cognitive life as such.

**Enactivism and the Human Sciences**

Advancing a comprehensive *science* of human lived experience requires something more from enactivism than either the piecemeal approaches it has employed in the past or the cellular
models of cognition that have prefigured its understanding of human lived experience. To ameliorate this issue, this dissertation ventures to explicitly conceptualize human experience on its own terms through a disciplined dialogue between enactivism and the empirical human sciences.

The kind of dialogue between the cognitive and human sciences sought here is already underway (Hovhannisyan, 2018a; 2022; Hovhannisyan & Vervaeke, 2022; Hovhannisyan & Goicoechea, 2023). A recent model by Hovhannisyan and Vervaeke (2022) has sought to address the explanatory gap of human cognitive life theoretically by articulating an enactivist account of human personality. Specifically, by synthesizing insights from the enactive approach with insights from the trait approach to the study of human personality, it has produced an Enactivist Big-5 Theory (EB5T) of personality. EB5T advances a phenomenological understanding of individual differences not merely as differences in trait measures within a person, but as differences in styles of how individuals bring forth, experience, and participate in their worlds—a process termed world-enactment (Hovhannisyan & Vervaeke, 2022; Hovhannisyan & Goicoechea, 2023). EB5T draws on the five-factor model (FFM) of personality, which claims to describe the universal trait structure of human personality (Costa & McCrae, 1992; McCrae & Costa, 2003). To the degree that its claims of universality hold true, EB5T promises to move enactivism “beyond the life of a cell and into the mind of a person” (Hovhannisyan & Vervaeke, 2022, p. 343).

Although the EB5T framework is theoretically promising, its value as a scientific theory still needs to be demonstrated. This dissertation adopts an interdisciplinary approach as it explores the dialogue between the enactive approach to cognitive science and the trait approach to personality in psychology to enable significant theoretical and scientific advancement on both
fronts. Such an approach should benefit enactivism by placing it in direct dialogue with one of the most esteemed and well-researched disciplines in psychology: personality theory. The trait approach should in turn be benefited by finding a novel explanatory grounding in what is arguably the cutting-edge of contemporary cognitive science: enactivism.

The Research Question

The primary goal of this dissertation is to determine through empirical means the extent to which EB5T can be applied toward understanding human personality as a properly enactive phenomenon, and to substantiate, on this basis, its plausibility as a paradigmatic model of human cognitive life for enactivist research.

If, according to EB5T, individual differences in traits correspond to differences in styles of world-enactment, then the guiding question of this research is as follows: How do individuals’ traits find life within their experience as styles of world-enactment? Put differently, the broad task is to explore and articulate a method of disclosing the enactive nature of personality as a form of lived experience in individuals’ lives.

Some Preliminary Remarks on Methodology

Studying personality as lived experience requires selecting the right method for its disclosure. The literature on the phenomenology of individual differences is virtually non-existent, thus it is necessary to venture beyond currently established theoretical bounds in order to recover an effective means of researching personality as (enactively) lived experience.

The individualized approach to psychological assessment that was pioneered by Constance Fischer (1994) has recently been used clinically to assess psychopathology by using an
instrument derived from the five-factor model (Hovhannisyan & Goicoechea, 2023). Importantly, the individualized approach is grounded in phenomenology and the human sciences (Fischer, 1994). In virtue of its grounding in phenomenology, the individualized approach is thus not only philosophically confluent with enactivism but is also germane to the broad aims and theme of this dissertation, which are to address the enactivist explanatory gap of human cognitive life by placing the cognitive and human sciences in a disciplined dialogue.

Although the individualized approach was originally conceived as a method of disclosing and thematizing the structures of human lived experience for the purpose of treating struggling individuals in the clinical domain, this dissertation seeks to repurpose the individualized approach into a method of conducting descriptive phenomenological research in the scientific domain. The premise of this design is that using the individualized approach to assessment as a method of research affords the means not only of broaching questions of personality from a clinical point of view but advancing our theoretical understanding of human personality as (enactively) lived experience.

The Outline of the Dissertation

Situating scientific contributions in their proper theoretical context is necessary for foregrounding their significance. Thus, this dissertation begins with a literature review that spans Chapters 2-3. Chapter 2 includes a review of the theoretical and philosophical underpinnings of the enactive approach to cognitive science. In particular, it discusses (a) the phenomenological foundations of enactivism, (b) existing empirical research approaches based on enactivist principles (e.g., neurophenomenology), and (c) the current limitations of the enactive approach to human lived experience. Chapter 2 concludes by underscoring the significance of the existent
“phenomenological gap” in the enactive tradition between minimal and human cognition (i.e., the explanatory gap of human cognitive life), brought about by the continued absence of a viable human alternative to the single-cellular (autopoietic) model of cognition in enactivism.

Chapter 3 then reviews the emerging dialogue between the cognitive and human sciences, with a special focus on (1) the trait approach in personality psychology, (2) the Cybernetic Big-5 Theory of personality (DeYoung, 2015), and (3) the Enactivist Big-5 Theory (EB5T) of human personality (Hovhannisyan & Vervaeke, 2022; Hovhannisyan & Goicoechea, 2023). This chapter seeks to illustrate how the introduction of the cybernetics and dynamical systems theory frameworks (DeYoung, 2015) in the field of personality theory led to the emergence of EB5T, an enactivist model of human cognitive life that promises to bridge the phenomenological gap between minimal and human cognition. Chapter 3 concludes with a discussion of EB5T’s main phenomenological implications for the study of human personality and cognitive life more broadly. Namely, it discusses the notion that individual differences in traits correspond to stylistic differences in how we come to participate in and bring forth the very worlds which we experience—a process termed world-enactment (Hovhannisyan & Vervaeke, 2022; Hovhannisyan & Goicoechea, 2023), a core construct in this dissertation.

Chapter 4 conducts a review of the individualized approach to assessment, focusing largely on its phenomenological commitments. After explicating the main underlying principles of the individualized approach, Chapter 4 holds a brief discussion of the points of confluence between enactivism and individualized assessment by way of phenomenology all in order to set the stage for the kind of research that will be undertaken: namely, of repurposing individualized assessment into a method for researching personality as lived experience.
The remainder of Chapter 4 includes the Research Methods portion of this dissertation, in which the parameters and various features of the research design are carefully detailed and articulated. This study employs a sample of convenience (n = 4) and is an amalgam of a case-study approach, individualized assessment, and elements of empirical phenomenology. Chapter 4 also includes a discussion of the contents and underlying rationale of the various procedures to be undertaken at different stages of the research process.

Three individualized assessment summaries based on participant interviews presenting participants’ styles of world-enactment are included in Chapter 5 in the service of later articulating and providing further theoretical definition to the central construct of this dissertation: *styles of world-enactment*.

Accordingly, Chapter 6 discusses the significance of the summary reports for articulating the construct of interest. The results of the study suggest that a style of world-enactment is a description of how one’s manners of participation in the world, as reflected by one’s traits, prefigure the world as seen and encountered in perception. Chapter 6 also reviews the methodological guidelines for conducting research on the phenomenology of individual differences and discusses the phenomenological insights gained into the structure of repetitious distress through the participant interviews and reports.

Finally, Chapter 7 reviews the contribution of this dissertation and includes a discussion of the significance of this research for cognitive science, personality theory, empirical phenomenology, and the psychological assessment of personality.

Enactivism was born out of a powerful tradition whose long-standing aim has been to shed scientific light on the enigma of human experience while staying true to its underlying phenomenology. This dissertation seeks to seriously embody the enactivist spirit and is nothing
more than an attempt to advance enactivism more fully into the heart of its matter: human life as it is lived.
This chapter conducts a review of the theoretical and philosophical underpinnings of the enactive approach to cognitive science in order to begin situating this study in its proper intellectual context. It begins by discussing the phenomenological foundations of enactivism in relation to the hard problem of consciousness and the theory of autopoiesis, a cornerstone of enactivist philosophy. This discussion seeks to underscore (1) the fundamental problem being tackled by enactivism—namely the explanatory gap between lived experience and physical matter—and (2) enactivism’s proposed solution to this problem—namely biological embodiment. It then reviews the current limitations of the enactive approach to human lived experience and identifies a significant explanatory gap facing enactivism: the phenomenological gap between minimal and human cognition. The phenomenological gap refers to the problem of accounting for human cognitive life on its own terms rather than in reference to the autopoietic structure of lower forms of life (e.g., single-celled organisms). Upon explicating the significance of the phenomenological gap, this chapter finally alludes to the emerging dialogue between the cognitive and human sciences, which seeks to bridge the phenomenological gap with the Enactivist Big-5 Theory of personality (Hovhannisyan & Vervaeke, 2022; Hovhannisyan & Goicoechea, 2023).

The Hard Problem of Consciousness

How does the inner, subjective domain of lived experience arise from the objective, external workings of physical matter? This is this question posed by the explanatory gap between lived experience and physical matter, a modern version of the Cartesian mind-body problem. To
understand the overarching rationale of enactivist philosophy, it is important to understand the problem posed by the explanatory gap, which is of central concern to the enactive approach.

The explanatory gap was famously dubbed “the hard problem of consciousness” by the philosopher David Chalmers (2010). Chalmers deliberately named it the hard problem only because the challenge it presented was of a metaphysical kind that, at least in principle, could not be addressed through strictly scientific means (see also Nagel, 1977; Jackson, 1982).

In his formulation of the hard problem, Chalmers used what is now considered an iconic thought experiment in the philosophy of mind to argue that consciousness is not physical—(quite a radical conclusion from the point of view of the ordinary scientist). The thought experiment asks us to imagine a physical clone of ourselves that, despite being identical to us in every physical way (e.g., molecular structure, neural functioning, external behavior, etc.), is a “zombie” in that it does not actually possess an internal experience of conscious awareness. Though counterintuitive in some regards, Chalmers’ essential point was simply that because it is possible to imagine, without contradiction, the underlying physical processes of a human being without the conscious experience that we would normally attribute to them, then the lived experience of the person is not causally reducible to the physical workings of their brain or body. Consciousness, for Chalmers, is therefore fundamentally not physical because there is prima facie nothing about the physical behavior of the brain or the body that requires us to posit consciousness in order to explain it.

Chalmers’ response to the hard problem is not necessarily representative of the received view in the mind sciences—as it entails an ontological rift between the mental and the physical that is difficult to reconcile with the naturalistic assumptions of contemporary cognitive science—but his formulation of the problem is nevertheless widely accepted. The hard problem
is a significant problem because (1) although consciousness is an irreducible fact of human experience, (2) it does not seem to be possible, at least *prima facie*, to explain consciousness in physical terms—and yet (3) the broad task of cognitive science just is to theorize the relationship between human lived experience and the physical brain-body-environment system. A viable science of the mind must be able to circumvent the hard problem in a reasonable way if it is to succeed at explaining the mind scientifically.

The Enactivist Proposal: Adaptive Autopoiesis and the Organization of the Living

In response to this challenge, enactivism begins not by proposing a direct solution to the hard problem but by reframing it at the level of basic assumptions. While the classical formulation of the hard problem entails an ontological discontinuity between the mental and the physical, enactivism seeks to circumvent this issue by positing an intervening variable that has the potential to integrate both: life (Thompson, 2007).

To this end, enactivism begins by making the important observation that living systems constitute a subset of physical systems whose dynamics are essentially self-organizing. Self-organization is an important concept from dynamical systems theory that describes physical processes whose interactions with the environment (re-)produce the very conditions necessary for their instantiation (Juarrero, 1999). In other words, self-organization is an essential trait or characteristic of systems that are self-producing, or “autopoietic.” For instance, a living cell metabolizes resources it extracts from the environment through its interactions in order to replenish its structural integrity to thereby continue metabolizing external resources, until its eventual dissipation. A living cell is thus by definition autopoietic in its organization.
The second important observation made by enactivism is that the dynamics of lived experience are likewise governed in self-organized ways. For example, the experience of hunger is catalyzed when the hormone ghrelin is secreted in the stomach, which then organizes one’s lived experience of the world by activating a set of motivational and perceptual systems that are aimed at actively seeking food. When one is famished, it becomes especially difficult to tend to tasks that are irrelevant to obtaining food, such as studying for an exam. This attentional narrowing helps to focus the organism’s cognitive and behavioral resources on the goal of obtaining food, veering away from possible distractions. Once food has been consumed, increased insulin levels in the blood then trigger the secretion of the hormone leptin, which suppresses hunger and reverts one’s experience of the world to a non-seeking state, allowing one to once again focus on tasks like studying for an exam. The experience of hunger and the associated behavioral and perceptual states thus emerge as a self-organized system that dissipates once the goal of consumption has been realized. Like the metabolism of the cell, this system is essentially self-organized because the functioning of its constituent parts (e.g., hormonal release and subsequent behavioral and perceptual changes) leads the network as a whole toward a particular state without the need for top-down control. Recursive feedback from the environment, not willful control from a pilot at the helm, is what drives the dynamical system toward its destination.

From these two observations, enactivism advances the following understanding. Insofar as there is a formal continuity between lived experience and living matter vis-à-vis self-organization, and given that living systems form a subset of physical systems whose constitution is autopoietic, there is therefore an ontological continuity between the mental and the (bio-)physical such that renders the explanatory gap bridgeable, at least in principle.
Enactivism and the Deep Continuity of Life and Mind

The abovementioned processes of metabolism and hunger-satiation are but basic examples of adaptive autopoiesis being instantiated at two distinct levels of analysis, both of interest to the enactive approach: biology and experience (for an in-depth discussion of autopoiesis, see Thompson, 2007). The theory of autopoiesis is of definite importance to the enactivist paradigm because it is used for bridging the explanatory gap by grounding mind—an entity historically regarded as essentially non-physical—in life—a fundamentally physical process.

We thus arrive at a related and equally important notion in enactivist cognitive science: the deep continuity thesis between life and mind. The continuity thesis complements the autopoietic framework by claiming that the core organizational and phenomenological properties of complex human minds are in fact an articulation of those inherent in basic forms of life (Thompson, 2007). In other words, the central claim of the enactive approach is that the same autopoietic principles that organize a living cell can actually be seen permeating the phenomenology and organization of animal and human cognitive life. Indeed, the illustrations of cellular metabolism and the experience of hunger were meant to exemplify just this point. However, a more formal presentation of this argument is in order.

The theory of autopoiesis was originally advanced by Chilean biologists Humberto Maturana and Francisco Varela (1980) as an account of the necessary and sufficient conditions constituting life. The basic idea was that any physical system—comprised of a network of mutually dependent processes—whose functioning produces the very conditions needed for the instantiation of its processes is an autopoietic and, thus, living system.
When the theory of autopoiesis made its way into cognitive science (Varela et al., 1991), enactivists foregrounded an important implication of autopoiesis in their discussions of cognitive agency: adaptivity. Their basic logic ran like this. All open physical systems are subject to the second law of thermodynamics, entropy. This means that with time, all systems decompose and lose their structural-functional organization. What distinguishes living systems from non-living physical systems, however, is their capacity to resist the law of entropy. Thus, living systems constitutively perform work to promote themselves into far-from-thermodynamic-equilibrium conditions, staving off entropy and, consequently, satisfying their viability conditions—in other words, staying alive. The kind of work life performs to sustain itself in light of its precariousness in the world is what we call adaptivity, which forms the core organizing principle of cognitive life and agency. The minimal sense of agency implicated in the adaptive behavior of the single-celled organism, in other words, is the lifeblood of cognition.

Recall that the explanatory gap implicated a fundamental ontological discontinuity between human lived experience and the rest of nature. Thus, the rationale behind the enactive approach is that by securing a naturalistic account of cognitive agency in the most basic forms of life (i.e., the single cell), the task of securing an ontological grounding for human experience in the structure of biology itself will have been fulfilled. After all, once a property like minimal cognitive agency is shown to be a constitutive feature of life itself (which is accomplished through the theory of adaptive autopoiesis), then once it is also shown that this property is instantiated in something as phylogenetically primitive as a single-celled organism, like a paramecium, then it necessarily follows that organisms like human beings, whose evolutionary history originates from single-cellular life, must possess this property as well.
Indeed, to leverage this line of argument, enactivists consider the paramecium, the most basic form of life on the planet, as the paradigmatic case of minimal cognitive agency (Thompson, 2007, p. 74). This task entails analyzing the bacterial cell as a situated biological whole and disclosing, in reference to its morphological, physiological, and behavioral features, the underlying structure of its cognitive normativity (i.e., adaptivity). To this end, a functional analysis reveals that a paramecium seeks areas with greater concentrations of sugar both by random search and gradient following. In the absence of concentration gradients, the paramecium tumbles and is carried by the flow of its milieu until a concentration gradient is detected. Then, it switches modes and begins swimming up the concentration gradient by beating its cilia until it reaches the food source that it detected, which it constitutively aims to consume and metabolize as a function of its autopoietic constitution.

An important point to make here is that the behavior of the paramecium is governed not by physical laws but by norms that are inherent to and emerge from its very organization, which is autopoietic (Thompson, 2007). An additional insight that follows from the illustration is that the significance of sugar as food is not inherent to the sugar molecules themselves but emerges as a relational property between the sugar and the paramecium’s very organization, which requires sugar as a necessary condition for its autopoiesis. Fundamentally, therefore, we see in this illustration that autopoiesis acts as a biological grounding for cognitive agency because it offers an account of the norms that are intrinsic to the organism at the level of its organization, which is then used to ground an account of sense-making or cognition as biologically realized (i.e., how the organism realizes what is relevant for its autopoiesis).

For enactivism, therefore, mind is what life does: adaptive autopoiesis in response to a dynamic environment. And if mind is what life does, enactivism maintains, then we should
expect there to be a deep ontological continuity between biologically embodied lived experience and embedded physiology. Indeed, with the continuity thesis, the enactive approach conceives of adaptive autopoiesis as the ontological “throughline” that gathers all living and cognitive forms and places them along the same bio-cognitive continuum.

The Body-Body Problem

The deep continuity of life and mind is an axiomatic principle of enactivist philosophy. A consequence of advancing the deep continuity thesis is that it helps to reformulate the classical mind-body problem into a different kind of problem that affords a novel means of bridging the gap between lived experience and physical matter: the body-body problem.

The body-body problem is based on a set of distinctions that finds its origin in classical phenomenological thought, bringing us to a discussion of the phenomenological precursors of the enactive approach. Toward the end of his life, Husserl (1954/1970) discussed two ways in which the body could be disclosed in our experience. In the first, the body presents itself as a living, physiological, or objective body—Körper—a material thing that can be studied scientifically and through third-personal means (e.g., through biology or chemistry or physics). In the second, the body presents itself as a subjectively lived body of experience—Leib—an embodiment of our agentic self with a first-personal point of view on the world.

These two “bodies” do not imply two separate ontologies, for they both emerge from the same source: our embodied self. Rather, as Thompson puts it, they are “two types within one typology of embodiment” (Thompson, 2011, p. 8). To illustrate, let us consider the following example. When the right hand touches the left, the hand being touched is rendered but an object in the world. Yet upon being touched, the left hand nevertheless remains a locus of subjective
experience that sees the hand that is touching it as the object. The same logic applies to the touching hand, for in touching, it is in turn touched by what it touches and is thus instantly objectified. Both hands have the potential to be disclosed as either subject or object, and hence aptly reflect the duality of presentation—Körper and Leib—that characterizes our bodily existence and phenomenology.

The phenomenologist Merleau-Ponty later adopted this Husserlian distinction and elaborated its meaning in his own work when discussing the structural intertwining of self and world, or “the chiasm,”¹ a concept we will return to when discussing the notion of optimal gripping in Chapter 3 and again in Chapter 6. Importantly, Merleau-Ponty’s contribution to our understanding of the phenomenology of perception and embodied experience came to form the philosophical backdrop of the enactive approach, and thus many of the phenomenological ideas that inspired Merleau-Ponty also became a deep source of inspiration for enactivism. In this way, the Husserlian distinction between the living (Körper) and lived bodies (Leib) was taken up in the context of enactivism to establish a new standard for addressing the explanatory gap. Rather than seeking to disclose the nature of the relationship between the mental and the physical—a pair of ontological categories that are by definition mutually exclusive—either through means of reduction (i.e., physicalism or idealism), dualism (of which solutions like Chalmers’ are an example), or a “magical third ingredient” (supernaturalism) (Thompson, 2004; 2007; 2011), the task became to understand the relationship between the physiological or objective body (Körper) and the subjectively lived body (Leib) by making common reference to life—the underlying field that grounds both types of bodily being. Seeing as how a description of the organizing principles of life was already afforded by the theory of adaptive autopoiesis, the next step thus required the

¹ Chiasm The structural mutuality of embodied self and perceived world.
formulation of an appropriate methodology through which to disclose the relationship between *Körper* and *Leib* in a disciplined manner.

Neurophenomenology: A Pragmatic Remedy to the Hard Problem

Soon after the publication of *The Embodied Mind* (Varela et al., 1991), late philosopher and neurobiologist Francisco Varela— one of the founders of the enactive approach— published a seminal article in which he delineated a methodological solution to the hard problem based on the enactive approach, which he entitled “neurophenomenology” (Varela, 1996). As an empirical offshoot of enactivism, neurophenomenology heavily incorporated notions of self-organization and complexity from dynamical systems theory— on which the theory of autopoiesis is predicated— in order to demonstrate how the relationship between *Körper* and *Leib* could be studied scientifically, without necessarily reducing one to the other.

The aim of neurophenomenology was not to erase the distinction between the mental and the physical but, in line with enactivist principles, to disclose the implicit continuity between lived experience and the physical brain-body-environment system by creatively integrating data gathered from both sides of the mind-body equation. The guiding principle of neurophenomenology was that of “mutual enlightenment through mutual constraints.” To this end, data collected from one side of the equation (e.g., third-personal, neurobehavioral data: hormonal releases in the body and brain, behavioral changes, etc.) were to be used to generate insights about the other side of the equation (e.g., first-personal, phenomenological data: perceptual and motivational changes, attentional changes, etc.) and vice-versa. Descriptions of the neurodynamics in the embodied and embedded brain, for instance, as measured by various objective instruments (EEGs, ECGs, fMRIs, etc.) during the temporal unfolding of a particular
type of experience (e.g., hunger), were to be systematically co-related with rigorous phenomenological descriptions (first- and second-person reports) of the unfolding of that experience. By lining up first- and third-personal descriptions of certain types of experience in this way, the deep (ontological) continuity between Körper and Leib—the living and lived bodies—would be disclosed without erasing the apparently irreducible distinction between them.

It is in this way that neurophenomenology was presented as a methodological, rather than metaphysical, remedy to the hard problem, for it offered a way of placing the two poles of the gap—the mental and the physical—in a workable relationship in light of the gap rather than seeking to close the gap by means of reduction. Neurophenomenology thus conceptualized the hard problem not as a problem to be solved but as a precondition for understanding the dynamical relationship between biologically embodied lived experience and embedded physiology.

Enactivism and Human Experience

Since its inception, neurophenomenology has been employed to study various types of experience in a non-reductionist fashion, such as those involving perception (Lutz & Thompson, 2003), emotion (Robbins, 2013), time-consciousness (Varela, 1999), and even epileptic seizures (Petitmengin et al., 2007). At the level of Körper, the neurophenomenologist begins by collecting physiological brain data and, on this basis, generating models of the temporal dynamics of the brain as they occur over the unfolding of a particular type of experience (e.g., meditative awareness). Then, at the level of Leib, she collects rigorous phenomenological descriptions of the unfolding of the event as it is experienced and reported by the same participants, until, finally, considering both types of data in a mutual light. The results of the
various neurophenomenological studies conducted to date have been cutting-edge and their success has subsequently affirmed the empirical research potential of the enactive approach to human experience. They have all demonstrated the enactivist hypothesis that first- and third-personal descriptions of experiential events can be systematically co-related at the level of shared dynamics, thus hitting on the deep ontological continuity between life and mind.

The Explanatory Gap Revisited: The Unification Problem

Philosophically, enactivism takes as its point of departure the hard problem of consciousness and advances the life-mind continuity thesis to remedy the ontological gap that exists between the mental and the physical. The reasoning here, as we have seen, is that by demonstrating that “mind is what life does” in virtue of its very organization (i.e., adaptive autopoiesis), the fact of human lived experience can be provided with the ontological grounding that it needs in order to be amenable to scientific investigation. To this end, enactivism takes the paramecium as the paradigmatic case of minimal autopoietic agency—and thus, of cognition—and subsequently concludes that, insofar as human being is biologically embodied, the organizing principles of human lived experience are therefore an articulation of those found in the single-cell. The scientific task of broaching important aspects of human lived experience then acquires a new kind of significance in light of the gap, with an attendant method to its disclosure—neurophenomenology.

Although the enactive approach makes it possible to bridge the ontological and epistemological (scientific) gaps between human lived experience and neurobiology—via the continuity thesis and neurophenomenology, respectively—there does remain a third gap that is in need of bridging. We may refer to this third gap as the phenomenological gap. For although we
have a well-defined understanding of the normativity around which the existence of a paramecium is organized—namely, we know what matters to the paramecium (i.e., sugar) and also how the paramecium behaves to realize what matters to it (i.e., tumbling and swimming)—we nevertheless lack such an understanding when it concerns the normativity around which the existence of a human person is typically organized. Enactivism maintains that the core phenomenological and organizational principles of human experience are an articulation of those found in the most basic forms of life, but this does not give us much when considering an actual human being, since a single-celled organism and a human person are literally worlds apart. The phenomenological gap of lived experience calls for a plausible model of human cognitive life on its own terms.

Alternative Enactivist Models of Human Experience

Alternative enactivist approaches to human experience have sought to go beyond the autopoietic framework by emphasizing other aspects of human phenomenality, such as sensorimotor agency (O’Regan & Noë, 2001), the experience of affectivity (Colombetti, 2007), or the motivational pragmatics of embodied interaction with the world (Crippen & Schulkin, 2020). Such accounts have afforded two main advantages for enactivist research on the mind. First, they have advanced enactivism’s understanding of human experience on the theoretical front by selecting various important aspects of human experience and considering them on their own terms rather than in reference to the autopoietic (single-cellular) understanding of cognitive agency. And second, in considering these aspects on their own terms, these accounts seem to have sidestepped the phenomenological limitations confronted by the autopoietic paradigm,
which risks reducing the intentionality of the human mind to the teleology of the cell (Hovhannisyan & Vervaeke, 2022).

Nevertheless, the advantages brought about by departing from the original autopoietic understanding of embodied agency come at a serious theoretical cost. First, such approaches tend to be selective and piecemeal, that is, they attend only to certain aspects of lived experience (e.g., thinking) and not others that are equally important for apprehending the big picture (e.g., feeling, wanting, perceiving, etc.). As a consequence, they produce a family of loosely related theories of human experience that are all enactively informed but nevertheless theoretically disunified. This state of theoretical disunity then comes to reflect a rather kaleidoscopic vision of human experience from the enactivist lens. The need thus arises to integrate these various theories within a unified understanding so as to render human experience more theoretically intelligible and coherent from enactivism’s perspective. Yet in the absence of a viable overarching framework (like that of autopoiesis), theoretical integration of the various pieces of the human puzzle (e.g., cognition, emotion, perception, motivation, etc.) becomes virtually impossible.

The cognitive scientist’s dilemma thus presents us with two options: either to pursue theoretical unification at the risk of reduction by adopting the autopoietic model or to evade reduction by departing from it, but at the cost of remaining in a theoretically disunified state with regards to human experience. Neither of these options is particularly appealing from a theoretical perspective and thus compels us to contemplate the possibility of a third.

The Need for a Disciplined Dialogue Between the Human and Cognitive Sciences
Without a paradigmatic model of human cognitive life at hand, enactive cognitive science can never fully realize its non-reductionist aspirations with respect to human lived experience. The broad task of this dissertation is to make significant headway on the phenomenological gap by engaging with recent research in cognitive science that seeks to advance enactivism beyond the life of a cell and into the mind of a person. The pathway out of the cognitive scientist’s dilemma, according to this research, requires dialoguing enactivism with the empirical human sciences, particularly contemporary personality theory. The guiding assumption of this dissertation is that the five-factor model (FFM) of human personality, a cornerstone of contemporary personality theory, can offer enactivism the conceptual resources by which to integrate the major aspects of human experience that are of interest to cognitive scientists (cognition, emotion, motivation, perception, etc.) within a single, unified theoretical account of human cognitive life that considers human experience on its own terms (rather than in reference to the autopoietic cellular model). This is because contemporary personality theory is concerned precisely with the whole person and not just “the parts,” and the FFM makes it possible to conceptualize how the various aspects of human experience (e.g., thinking, feeling, perceiving, acting, etc.) are bound up together in the phenomenology of traits, the construct that describes the broadscale patterns of cognition, emotion, motivation, and behavior seen in human experience. In the following chapter, we review the emerging dialogue between the enactive and human sciences by discussing the Enactivist Big-5 Theory (EB5T) of personality which promises to address the phenomenological gap by offering an enactivist model of human cognitive life, as such.
Chapter 3: Enactivist Big Five Theory

In the previous chapter, we discussed one of the core philosophical concerns that is driving the enactive approach to cognitive science, namely bridging the explanatory gap between lived experience and the physical brain-body-environment system. We reviewed some of the conceptual tools enactivism employs from phenomenological philosophy toward addressing this gap. Philosophically, it draws on phenomenology to reformulate the mind-body problem into a body-body problem and advances the deep life-mind continuity thesis, such that the task of bridging the gap no longer entails demonstrating how two ontologically unrelated domains interact but how two distinct presentations of our bodily life—the body as living and the body as lived—can be understood in common reference to life as adaptive autopoiesis. Methodologically, we then reviewed how the enactive approach implements these ideas in an empirical research context to form neurophenomenology, a mixed-method approach to the study of consciousness in its (neuro)biologically embodied form.

Despite affording the means to bridging the explanatory gap ontologically (through the continuity thesis and the body-body reformulation) and epistemologically (through neurophenomenology), we saw how enactivism confronts yet another gap which it must also circumvent if it is to stay aligned with its non-reductionist aspirations. This gap, which we termed the *phenomenological gap*, concerns the problem of conceptualizing human cognitive life on its own terms. At present, the enactive approach lacks a paradigmatic model of human cognitive life with which to broach questions of human lived experience directly. Rather, its attempts at understanding human lived experience are typically made in reference to the autopoietic organization of the cell, an organismic lifeform that is literally worlds apart from that
of the human. The phenomenological limitations of adopting such an approach must be ameliorated if enactivism is to advance beyond the life of a cell and into the mind of a person.

At this point, we discussed how alternative enactivist approaches seek to circumvent the phenomenological gap by theorizing various important aspects of human lived experience without appealing to the autopoietic framework (i.e., sensorimotor perception, affective experience, embodied interaction, narrativity). However, the consequence of broaching questions of human experience in such a piecemeal fashion is that doing so generates a host of loosely related theoretical understandings of the human mind without an overarching account of how these understandings are to be related, except only in name (i.e., insofar as they are all “enactivist”). We characterized this unfavorable theoretical position as the cognitive scientist’s dilemma, namely the problem of how to bridge the phenomenological gap by generating a theoretical account of human cognitive life that is able to (1) explain various important aspects of human experience (cognition, emotion, motivation, perception, behavior, etc.) on their own terms but (2) in a theoretically unified, rather than disunified fashion.

The task of this chapter is to review recent work that directly ventures to bridge the phenomenological gap by advancing an enactivist theory of human personality. The guiding assumption of this emerging literature is that personality traits are the ontological nexus point where the various aspects of experience that are of interest to cognitive scientists (i.e., cognition, emotion, motivation, perception, behavior, etc.) converge, such that generating an enactivist theory of the trait structure of human personality makes it possible to theorize the enactive nature of human cognitive life as such, in turn making it possible to bridge the phenomenological gap in a non-reductionist fashion.
The Enactivist Big-5 Theory (EB5T) of personality advanced in the literature affords a viable pathway for bridging the phenomenological gap of human cognitive life. EB5T is the result of a synthesis of core concepts from cognitive science, personality theory, and phenomenological philosophy. According to EB5T, personality traits are “dispositional tendencies for how we come to optimally grip our distinctly human worlds” (Hovhannisyan & Vervaeke, 2022, p. 341). Individual differences in personality, therefore, are “reflective of stylistic differences in optimal gripping tendencies between human beings” (p. 341), a concept that we plan to thoroughly discuss in this chapter. As a theory whose main constructs, personality traits, bear (near) cross-cultural universality, EB5T affords what is arguably an account of the universal structures of human cognitive life in enactivist terms, and therefore bridges the phenomenological gap for enactivism theoretically.

A proper presentation of EB5T and a review of its implications for the enactive approach to human experience requires a careful unpacking of EB5T’s theoretical and historical context. We thus begin this chapter with a close discussion of the five-factor model (FFM) of human personality, which constitutes the first foundational pillar of EB5T by describing human personality across five major traits or dimensions.

Next, we enter into a discussion of the Cybernetic Big-5 Theory (CB5T) of human personality, which constitutes the second foundational pillar of EB5T. Here we find that CB5T effectively transforms the FFM from a merely descriptive model of human personality to an explanatory, functional one, by situating it in a cybernetic framework (DeYoung, 2015). In this portion of the chapter, we closely review CB5T’s theoretical rationale, its core set of claims regarding personality structure and functioning, and some of the necessary theoretical limitations it confronts as a cognitive scientific theory of personality structure and functioning.
This prepares us to launch our discussion of EB5T, which seeks to bridge the same explanatory gap regarding human personality functioning that is of central concern to CB5T, while circumventing CB5T’s apparent theoretical limitations. The main strategy by which this is accomplished, as we will see, resides in replacing CB5T’s cybernetic frame with an emerging framework in cognitive science that explains cognition as a process of relevance realization (RR) (Vervaeke, Lillicrap, & Richards, 2012; Vervaeke & Ferraro, 2013a; 2013b). The theory of RR advances an understanding of cognition as constituted by processes of optimization concerning trade-off relationships that emerge inherently out of all and any acts of real world problem-solving (Vervaeke et al., 2012). In light of RR’s affinities with enactivist cognitive science (see Hovhannisyan & Dewey, 2017; Hovhannisyan & Vervaeke 2022; Hovhannisyan, 2018a; 2018b; 2022), this step then allows EB5T to advance an account of personality functioning in which individual differences are understood as differences in styles of optimization between individuals for coming to grips with the world.

At this point, we review some of the main theoretical advantages afforded by EB5T, note some key areas of overlap between EB5T and CB5T as well as important points of departure. This leads us to highlight the fundamentally phenomenological character of EB5T’s conceptualization of traits, which hearkens back to the philosopher Merleau-Ponty’s (1942/1963) discussions of embodied cognition as “optimal gripping”. However, we take this conceptualization of traits deeper into the phenomenological terrain by advancing a conceptualization of individual differences as differences in styles of world-enactment (see Hovhannisyan & Goicoechea, 2023). This step toward phenomenology makes it possible to apprehend human personality not simply as measured on a standardized test sheet but as lived out in the world and in the flesh. Our discussion of the notion of world-enactment then leads us
to the core empirical research question of this dissertation, which then becomes the guiding
question of the subsequent chapter on methodology and research design: How can personality as
lived experience be properly disclosed into our understanding as phenomenon?

The Theoretical Precursors of EB5T

The Trait Approach

All theories of human personality seek to address the following set of questions: what
aspects of personality transform across the lifespan and what aspects remain relatively stable
throughout development? Stage theories of development like Freud’s (1905/1949) psychosexual
model or Erikson’s (1959/1994) psychosocial model are examples of theories that seek to
address questions of the former type. Trait theories, on the other hand, are concerned with
addressing questions of the latter type. As their name suggests, trait theories focus mainly on
identifying a basic set of traits that best capture what a person is like.

Contra states, which describe cognitive, motivational, emotional, or behavioral activity
enacted by a person across shorter timescales (e.g., seconds or minutes), traits are descriptions of
relatively stable and enduring patterns of cognition, motivation, emotion, and behavior that
unfold across longer stretches of time (e.g., months, years, or even decades). An important
property of traits is that they are probabilistic, not deterministic, descriptions of human activity.
To illustrate this point, let us imagine a location tracking device that draws lines on a map
corresponding to the real paths traversed by an agent in the world. Let us suppose that this device
is kept running over the course of a decade such that all the paths traversed by the agent during
this timeframe have been traced on the map. We can imagine how, after 10 years of tracing, the
lines will appear more densely distributed in some regions of the map than in others. In this analogy, the map represents the agent’s psychic space (the totality of their cognitive, emotional, motivational, and behavioral activity) and the darkest regions (density distributions) on the map represent the agent’s personality traits. Although we can never predict with absolute certainty where the agent will appear in the world, we can nevertheless use the information provided by the map to predict with a degree of confidence where the agent is most likely to appear at any given point in time. Similar to the map, traits help us to locate, ceteris paribus, the intersection of cognitive-emotional-motivational-behavioral coordinates that an agent is most likely to inhabit within their psychic space at any point in time.

The Five-Factor Model

The five-factor model (FFM) derives from the trait approach and identifies five basic traits that it deems essential to the structure of human personality: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (McCrae & Costa, 2003). The “big five” are said to describe relatively stable and enduring patterns of cognition, motivation, emotion, and behavior observed across the lifespan and cross-culturally (McCrae & Costa, 2003). The predictive utility of the five traits is non-trivial. Measures of the big five are predictive of important life outcomes. For instance, trait Conscientiousness describes individuals who tend to be punctual, organized, and personally invested in the pursuit of long-term goals, and is predictive of outcomes like marital success, vocational performance, and even longevity (Kotov et al., 2017). Although there is some variation in measures of the five traits within an individual, from age 30 onwards a person’s trait composition undergoes little to no change (McCrae & Costa, 2003).
The Lexical Hypothesis

The big five were derived as a consequence of subjecting large sets of trait descriptors to factor analysis, a statistical approach that allows us to explain the intercorrelations between variables in terms of underlying factors. In the case of the FFM, we might begin by considering that how one describes oneself along the dimension of trait sadness will likely be predictive of how one describes oneself along the dimension of trait gloominess (positive correlation), or, conversely, trait gregariousness (negative correlation). From a conceptual point of view, the big five are higher-order traits whose measures are predictive of possible state descriptions that are likely (or unlikely) to apply to a person. However, importantly, the intercorrelations themselves were derived not conceptually but statistically. Therefore, the big five constitutes an empirically valid representation of the latent structure of human personality.

An important methodological feature of the FFM is that it was derived by adopting a lexical approach to personality (McCrae & Costa, 2003). The lexical hypothesis states that to the degree that words used in natural language refer to real aspects of human experience, words found across all languages presumably refer to aspects of human experience that are universal and therefore likely to be most real. In this way, given the cross-cultural validity of the big five (McCrae & Costa, 2003), it follows from the lexical hypothesis that the trait structure of personality as described by the FFM has grounding in “objective reality” and is therefore amenable to rigorous scientific investigation.
The Hierarchical Trait Structure of Personality

An important feature of personality from the FFM point of view is that traits are structured hierarchically, meaning that traits that are higher up on the hierarchy “subsume and are superordinate to traits lower on the hierarchy” (Hovhannisyan & Vervaeke, 2022, p. 358). Each of the big five is thus essentially a factor that accounts for the shared variance observed between several lower-order traits (DeYoung, 2015).

Although initially the big five were thought to be orthogonal, research eventually demonstrated weak but reliable correlations between traits Conscientiousness, Agreeableness, and Neuroticism, on the one hand, and traits Openness and Extraversion, on the other hand (DeYoung, 2015). These findings indicated the presence of two higher order factors or meta-trait corresponding respectively to each of the groupings: meta-trait Stability and meta-trait Plasticity (DeYoung, 2015).

The question as to what lies directly under the level of the big five has garnered competing responses. Although some assessment instruments like the NEO-FFI-3 seek to describe personality only at the level of the big five, others are able to provide finer-grained understandings of the person’s traits at levels below the big five. For instance, the NEO-PI-R, an alternative instrument also based on the FFM, not only measures individual differences in the five major trait dimensions, but also generates a percentile breakdown of the facets (sub-traits) associated with each of the traits. In the NEO-PI-R, each of the big five yields six additional facets such that there is a total of 30 facets between all five traits. A less common instrument, the Big Five Aspects Scale (BFAS) (DeYoung, Quilty, & Peterson, 2007), has identified an intermediary level between the big five and the facets which it refers to as the aspect level. The
aspect level consists of pairs of traits (aspects), each of which counts as a higher order factor in relation to the facets underneath in the hierarchy (DeYoung et al., 2007).

When considered in a mutual light, these distinct but related areas of empirical research on the FFM suggest that the hierarchical structure of personality consists of the two meta-traits at the very top, followed by the trait, aspect, and facet levels underneath. DeYoung (2015) aptly summarizes the statistical trends observed between and within each of these levels:

At each level of the hierarchy (below the highest [i.e., the meta-trait level]), some set of forces causes groups of traits to vary together in patterns described by the next higher level of the hierarchy, and some other set of forces causes each trait to vary independently of the others. In other words, all traits below the highest level of the hierarchy have both shared and unique valid variance. (p. 35)

Cybernetic Big Five Theory

Despite its descriptive and predictive utility as an assessment tool, the FFM does not offer an explanation as to how the trait structure of personality in its apparent form came to be or even what functionality it is fulfilling within the person (DeYoung, 2015). Part of the problem here is one of circularity. Though traits are used to explain certain patterns of behavior (or cognition, motivation, emotion), they themselves are understood in terms of behaviors (or cognitions, motivations, emotions). Thus, one cannot simply appeal to behaviors (or cognitions, motivations, emotions) when explaining traits. A scientifically valid theory of traits and their functions must therefore circumvent the circularity issue posed here in the explanations that it generates.
Recent work by DeYoung (2015) has sought to circumvent the circularity problem by accounting for the functionality of traits in cybernetic terms, proposing what he calls a Cybernetic Big-5 Theory (CB5T) of personality. Cybernetics is “the study of goal-directed, self-regulating systems” and finds grounding in evolutionary and complex systems theory (DeYoung, 2015, p. 33). CB5T takes as its point of departure the idea that personalities are “individual variations on a general evolutionary design” (McAdams & Pals, 2006, p. 205 as cited in DeYoung, 2015, p. 2). Adopting a cybernetic approach to personality thus allows DeYoung to theorize (a) the adaptive functions that the traits in the FFM evolved to fulfil in the human world and (b) the dynamical processes by which these traits come to realize their adaptive functionality in a person’s world.

DeYoung’s CB5T framework achieves (a) and (b) in the following manner. As an evolutionarily grounded theory of personality, CB5T begins by explaining traits as adaptations to certain classes of problems that have existed in human cultures across evolutionary stretches of time (DeYoung, 2015). In other words, each of the big five constitutes a complex, self-organizing system within the person that is aimed at making domain-specific adaptation possible. For example, (1) trait Extraversion is explained as an adaptation to the problem of sensing and pursuing rewards in the environment. Conversely, (2) trait Neuroticism is explained as an adaptation to the problem of sensing and responding to threats in the environment. In addition, traits Conscientiousness, Agreeableness, and Openness are explained as adaptations to the problems of (3) prioritizing goals across different timescales, (4) prioritizing own versus others’ goals, and (5) attending to the incentive reward value inherent in information, respectively (DeYoung, 2015).
As a cybernetic theory of personality, CB5T is committed to the idea that “the operation of cybernetic systems can be characterized by a cycle with five stages: (1) goal activation, (2) action selection, (3) action, (4) outcome interpretation, and (5) goal comparison” (DeYoung, 2015, p. 2). DeYoung (2015) explains:

In the first stage, one of the person’s goals is activated and guides the rest of the upcoming cycle. In the second, decision making takes place to select an appropriate action to move toward the goal. In the third, that action is carried out. In the fourth, the consequences of that action are interpreted; feedback processes provide information about the state of the world after the action, and that information is analyzed and structured using remembered knowledge […] Finally, the current state is compared to the goal to detect any mismatch. If the current state and the goal match, then that goal has been accomplished and a new goal will emerge to guide the next iteration of the cycle. If a mismatch is detected, however, the cycle will begin again with the same goal in place, and another action will be selected in order to attempt to move toward the goal. (p. 2)

DeYoung then elaborates that “each of the five traits corresponds to interpersonal variation in one of the major functional categories of intrapersonal mechanism [the Big Five] involved in the operation of the human cybernetic system” (DeYoung, 2015, p. 41). CB5T, in other words, “conceptualizes traits as parameters on the system’s cybernetic functioning with respect to set problem domains (‘broad class of stimuli,’ in DeYoung’s terms) for which the traits have adapted, such that interpersonal differences in personality are essentially attributable to
variations in the parameters operant on each trait’s functioning at the intrapersonal level” (Hovhannisyan & Vervaeke, 2022, p. 350).

An important feature of CB5T is that its explanation of personality targets not only the big five trait level, but also that of the meta-traits: Stability and Plasticity. In other words, CB5T is ultimately seeking to explain the adaptive functionality of the personality hierarchy as a whole, rather than of traits found on any one of the levels per se. To accomplish this, DeYoung (2015) begins by discussing the “fundamental problem” faced by any cybernetic system: entropy (p. 14). He explains that entropy is “always spontaneously increasing and […] threatens the stability of ongoing goal-directed functioning” (DeYoung, 2015, p. 14). Here, DeYoung (2015) adopts a psychological conception of entropy as uncertainty, particularly as denoting a state of mismatch between how the cybernetic system predicted the world to unfold and how the world has actually unfolded. Accordingly, greater degrees of prediction error entail higher levels of uncertainty or entropy and, therefore, of threat to the integrity of the system’s goals and goal-seeking strategies. However, he continues to explain, uncertainty constitutes “the only class of stimuli that is simultaneously innately threatening and innately promising” (DeYoung, 2015, p. 15). In other words, increases in uncertainty are not just threatening but “also promising [because] they act as incentive rewards, because they signal the possibility of reducing [uncertainty] in the longer term, either by attaining some specific reward or by acquiring information” (DeYoung, 2015, p. 15).

On this basis, DeYoung (2015) then advances the core claim of CB5T, that “two types of mechanism that respond to the unknown evolved to meet two fundamental human needs, one reflecting the threat, and the other the promise, inherent in the unknown” (p. 15). He continues,
The first of these needs is to maintain the stability of ongoing goal-directed functioning. The second is the need to engage in exploration that integrates novel or anomalous information with existing knowledge. CB5T identifies the metatraits, Stability and Plasticity, as the broadest dimensions of personality that reflect variation in the mechanisms designed to meet these needs. (DeYoung, 2015, p. 15)

Bringing all of this together, CB5T thus states that at the highest level of personality, the metatraits, Stability and Plasticity, are functioning to cope with the two basic needs of security (from threat) and exploration (of reward), respectively, and that this thematic division is evident in the functions fulfilled by the big five: (1) trait Conscientiousness corresponds to the parameters of the human cybernetic system that are concerned with motivational stability, (2) trait Agreeableness corresponds to those that are concerned with social stability, and (3) trait Neuroticism corresponds to those that are concerned with emotional stability, whereas (4) trait Openness corresponds to those that are concerned with cognitive exploration and, finally, (5) trait Extraversion corresponds to those that are concerned with behavioral exploration (DeYoung, 2015).

CB5T: Two Important Implications

CB5T’s significance for personality research is radical in its implications. Indeed, it is the first comprehensive theoretical framework of its kind to transform the FFM into an explanatory theory of traits and their functions by drawing on advances in cognitive science (DeYoung, 2015; Hovhannisyan & Vervaeke, 2022). Since the initial publication of CB5T (DeYoung, 2015), DeYoung has used this framework to theorize sources of psychopathology and wellbeing.
from the trait perspective (DeYoung & Krueger, 2018; DeYoung & Tiberius, 2023). The originality of this approach lies in the fact that the FFM was initially developed as a measure of normal personality and has seldom been used, except in a descriptive or predictive capacity, in the assessment of disordered ways of being. A cybernetic approach to psychopathology made possible by CB5T, on the other hand, allows, for the first time, for explanatory questions concerning the causes of psychopathology be broached from a FFM perspective.

Another important implication of CB5T is with regards to personality neuroscience research. Indeed, the hypothesis goes, if traits are real entities in the person, then individual differences in trait measures should also find expression at the level of neural structure and functioning (DeYoung, 2010). The task of personality neuroscience thus becomes the study of how interpersonal variation in the structure and functioning of general neural design correlates to interpersonal variation in personality structure and functioning. Given that CB5T provides the explanatory scheme by which to understand the functions of the various traits, conceptual insights from the cybernetic level of analysis can be used to guide empirical research in personality neuroscience, and empirical findings can in turn be used to inform theoretical claims made about the cybernetic organization of human personality. Important findings from the field of personality neuroscience have plausibly demonstrated that dopamine is the main neuromodulator of exploration, and thus likely underlies the functioning of traits Openness and Extraversion, and serotonin is the main neuromodulator of security, as it is associated with the functioning of trait Neuroticism (DeYoung, 2013).
CB5T: Three Important Limitations

Despite its significance for personality research, CB5T faces three limitations that are important to consider. The first two limitations are of a theoretical kind, and the third is philosophical. The first concerns the role of the cybernetic cycle in CB5T’s theorization of individual differences. Hovhannisyan and Vervaeke (2022) offer the following summary of this challenge:

[…] as DeYoung (2015) himself admits, the Big Five do not neatly line up with the various stages of the cybernetic cycle but seem to be differentially involved in all stages at different times (p. 34). The reason for this is that the five stages do not occur serially but are always occurring in parallel; yet various combinations of traits always seem to be implicated at different stages of the cybernetic process. The stepwise nature of the cybernetic process is therefore at best heuristically helpful in understanding personality function, but it fails to constitute a clear, literal depiction of the functional processes implicated therein. (p. 350)

The authors conclude that, “To the degree that any functional account of personality is grounded in cybernetics in such a manner, therefore, its value as a functional theory is going to be limited, even if it is heuristically useful” (Hovhannisyan & Vervaeke, 2022, p. 350). The theoretical challenge here is thus to make use of literal rather than metaphorical or analogical categories in conceptualizing the structure and function of personality, which CB5T does not do.

Accordingly, the second theoretical limitation concerns the fact that CB5T seeks to explain the functionality of the trait hierarchy as a whole, yet its account of the cybernetic functioning of
the human personality includes only the metatrait and trait levels but not that of the aspects. Specifically, DeYoung (2015) accounts for the functionality of the metatraits as consisting of the two necessary strategies used by the human cybernetic system for tackling the problem of entropy mentioned before. The functions of the big five are then explained in reference to the five stages of the cybernetic cycle. Subsequently, DeYoung causally accounts for the metatraits in terms of the cybernetic functions fulfilled by the big five, thus effectively grounding the metatraits in the frame of cybernetics. When explaining the functions of each of the big five, DeYoung appeals to the aspect pairs found underneath, which he defines in terms of the descriptive-statistical findings drawn from existing personality research (DeYoung et al., 2007). He also complements the descriptive-statistical findings with neurofunctional insights drawn from personality neuroscience in order to connect the aspects with the traits at the level of function (DeYoung, 2010; 2013; 2015). However, an important feature of the aspect level is never truly explained. Specifically, the explanatory question that arises asks why there appear to exist only two and not more aspects per trait at the level underneath the big five. In other words, insofar as the aspects describe real entities in the personality hierarchy—which is a commitment made by CB5T as per the lexical hypothesis—then the pair-structure itself needs to be explained in functional terms. As it currently stands, CB5T does not explain the pair-structure of the aspects but merely assumes it on statistical grounds (DeYoung, personal communication). This is an important feature of the trait hierarchy that a theory of personality should also be able to explain if it is to constitute a truly comprehensive theory of human personality function.

The final challenge concerns CB5T’s confrontation with what is arguably the most notorious problem in the philosophy of mind and cognitive science because of its (CB5T’s) very commitment to cybernetics itself: the frame problem. The frame problem is the problem of
“explaining how cognition realizes what is relevant and is arguably a basic theoretical constraint that applies to all explanatory accounts of cognitive function” (Dennett, 1987; Vervaeke et al., 2012 as cited in Hovhannisyan & Vervaeke, 2022, pp. 350-351). Theoretical research on the frame problem has shown that theories of cognitive function that seek to explain cognition in terms of either representations or computations are bound to confront the frame problem, because both representations and computations presuppose (rather than explain) the very capacity to realize what is relevant (for full review of these arguments, see Vervaeke et al., 2012; Vervaeke & Ferraro, 2013; Hovhannisyan & Dewey, 2017; Hovhannisyan, 2018a, 2018b; Hovhannisyan & Vervaeke, 2022). As a theoretical framework that is steeped in the representationalist-computationalist paradigm of early cognitive science, cybernetics is ill-equipped to circumvent the frame problem. Hence, any theory of personality that is grounded in cybernetics is also bound to confront the frame problem, and this is also true of CB5T (Hovhannisyan & Vervaeke, 2022, pp. 350-351). The philosophical challenge facing CB5T is therefore that it must be entirely emptied of any representationalist or computationalist commitments if it is to explain the functionality of the trait hierarchy without succumbing to the frame problem. In other words, something more than cybernetics is required to attain this great explanatory feat.

From Cybernetic to Enactivist Big-5 Theory

A recent contribution by Hovhannisyan and Vervaeke (2022) sought to systematically ameliorate the three abovementioned challenges by grounding a theory of personality function in enactivist rather than cybernetic principles. The enactivist turn was initiated, first, by grounding Merleau-Ponty’s notion of cognitive activity as optimal grip in Vervaeke et al.’s (2012) theory of
relevance realization (RR), an account of cognitive function that circumvents the frame problem in cognitive science. The turn to enactivism was then brought to completion by conceptualizing trait functionality in optimal gripping terms, yielding an account of individual differences in traits as differences in dispositions for how we come to optimally grip our distinctly human worlds (Hovhannisyan & Vervaeke, 2022).

A full review of Hovhannisyan and Vervaeke’s (2022) argument will not be conducted here (see Hovhannisyan & Vervaeke, 2022; Hovhannisyan & Goicoechea, 2023). However, a summary will be presented just to demonstrate how the Enactivist Big-5 Theory (EB5T) of personality circumvents the three limitations confronting CB5T, thereby making it possible to bridge the phenomenological gap between minimal and human cognitive life.

The Core Theoretical Principles of Relevance Realization

Vervaeke et al. (2012) formulated the theory of RR to explain how real-world cognition can achieve its functionality without succumbing to the frame problem (Vervaeke et al., 2012; Vervaeke & Ferraro 2013a; 2013b). To this end, they identified two theoretical requirements that a theory of RR must meet if it is to be viable. First, a theory of RR must not assume a substantive (i.e., fixed) definition of relevance, since relevance constitutes an evolving and context-dependent category. And second, in explaining cognitive function, a theory of RR must evade circular fallacies, that is, it must not tacitly presuppose the capacity for RR in its account of how cognition realizes relevance (see Hovhannisyan & Dewey, 2017; Hovhannisyan & Vervaeke, 2022; Vervaeke et al., 2012).

Most representationally or computationally driven theories of cognitive function fail to meet one or both of these requirements (see Vervaeke et al., 2012). To ensure that their theory
succeeds, the authors thus advance an account of how cognition realizes relevance that is neither representational nor computational, but economic in its organization. To illustrate this point, the authors (2012) draw an analogy between the processes of relevance realization and those of evolution via natural selection. Hovhannisyan and Vervaeke (2022) explain that just as the theory of evolution via natural selection…

[…] dispenses with the project of theorizing about biological fitness and instead explains how biological fitness is continually realized in an evolving and self-organized fashion through the mechanisms of natural selection, so too does Vervaeke et al.’s (2012) theory of RR dispense with theorizing about relevance as such; instead, it attempts to explain the mechanisms by which relevance—i.e., *cognitive fitness*—is continually realized in a self-organized, evolving, and dynamically situated fashion. (Hovhannisyan & Vervaeke, 2022, p. 353)

To this end, Hovhannisyan and Vervaeke (2022) helpfully summarize the key principles of the theory of RR in the following terms:

1. First, specify some problem domain for the agent that constitutes a condition for successful interaction with the world (e.g., “avoiding harm”).
2. Second, specify two distinct (heuristic) strategies that can be used in the service of accomplishing the same goal but in complementary ways (e.g., “fight when faced with a threat, but risk being eliminated now” versus “flee when faced with a threat, but risk being eliminated later”).
3. Third, pair these opponent strategies in a trade-off relationship and set them to optimize for reward relative to the given problem domain (e.g., avoid danger) in a dynamically recursive fashion (e.g., set the “fight-or-flight response to potentially dangerous stimuli” to optimize for threat-avoidance through an iterative process across a variety of contexts).

4. Fourth, repeat steps 1–3 for other sets of problems until you have articulated a problem landscape involving a complex cognitive economy of competing goals and problems (e.g., hunger, thirst, sleep, etc.)—and concomitant opponent-processes—facing the agent.

5. Fifth, specify processes for prioritizing the importance of different, competing goals—mechanisms which can also be realized by means of opponent-processing so as to make optimization with regards to prioritization possible (e.g., how to prioritize the relevance of competing motivational goals like thirst, hunger, sleep, etc. in a self-organized fashion).

6. Finally, set the agent’s cognitive economy to optimize for reward across various problem domains and various timescales, so that the scale-invariant optimization of the agent’s total economy eventually and flexibly results in the realization of what is “relevant” in a context-sensitive, evolving, and self-organized fashion in relation to the agent’s situated interaction with the environment (i.e., the problem landscape). (p. 353)

Vervaeke et al.’s (2012) theoretical formulation of RR ensures that a substantive definition of relevance is not assumed and that the process of RR is not presupposed in the very
explanation itself. Hence, the theory of RR manages to successfully circumvent the frame problem in its account of how cognition realizes its functionality in the world, a necessary condition for accounting for personality trait functionality theoretically.

Relevance Realization as Optimal Grip

Hovhannisyan and Vervaeke (2022) summarize with the following commentary: “We may refer to Vervaeke et al.’s (2012) approach to the frame problem as an ‘opponent-processing’ approach that replaces the computational metaphor for mental functioning with the metaphor of the mind as a dynamically situated cognitive economy” (p. 353). By advancing a non-representational, non-computational theory of cognitive function, Vervaeke et al.’s (2012) theoretical claims lend themselves rather easily to being conceptualized in enactivist terms, since enactivist theories of cognition are necessarily non-representational and non-computational in their basic commitments (see Varela et al., 1991; Thompson, 2007).

To establish an explicit relation between RR and enactivism, however, Hovhannisyan and Vervaeke (2022) draw a conceptual link between the processes underlying RR—namely the optimization of trade-off relationships between opposing yet complementary learning strategies—and the process of optimal gripping—an inherently enactivist notion of embodied cognition discussed by Merleau-Ponty, whose work “constitutes the theoretical and philosophical backdrop of the enactive approach” (Hovhannisyan & Vervaeke, 2022, p. 356). To illustrate what optimal gripping entails, let us consider the example of reading a book:

Holding a book too far or too close to one’s face renders the text illegible. What one must do is hold the book at the optimal distance from one’s face to render the very act of reading
possible. At times, when a word on a page appears faded, one must draw the book closer to better see the details on the page so as to make sense of what is written. Conversely, when one’s eyes have tired from reading too intently for too long, one must lower the book and create some (but not too much) distance to alleviate the accumulated tension in one’s eyes. (Hovhannisyan & Goicoechea, 2023, p. 11)

The authors elaborate,

The process of reading a book is embodied and enacted through an ongoing process of optimization of holding the book at the right distance from one’s eyes. Moreover, it is world-involving (extended into the world) insofar as the book is a worldly object, and it is necessarily embedded in a meaningful context of interaction (e.g., trying to understand a story or study for an exam). Optimal gripping is thus an inherently embodied, enactive, extended, and embedded act—and hence an enactivist construct. To read the book, one must continually realize the kind of (optimal) grip that is needed to make reading possible. (Hovhannisyan & Goicoechea, 2023, p. 11)

Indeed, Hovhannisyan and Vervaeke (2022) describe Merleau-Ponty’s account of optimal gripping as “a conceptual metaphor that aptly reflects both the embodied nature of cognition as ‘coming to grips’ with worldly tasks as well as the dynamics of optimization that seem to be implicated in processes of this kind” (p. 357). Indeed, Hovhannisyan and Vervaeke (2022) advance the even stronger claim that “optimal gripping entails RR since optimization, which is a necessary condition for the optimal grip, technically requires and emerges from trade-off
relationships, the basic building blocks of RR,” and that “[any] dynamically situated cognitive system that is doing RR, in other words, is constitutively aimed at achieving an optimal grip over its world” (p. 357).

RR and the Trait Hierarchy

Having established the conceptual link between RR and optimal gripping effectively situates Hovhannisyan and Vervaeke (2022) to advance their core claims about the enactive nature of human personality. When we reconsider the trait hierarchy of personality in light of the theory of RR, we come to notice that the structure of personality as described by the FFM aligns elegantly with how we would expect a cognitive economy that is doing RR to be structured. Indeed, Hovhannisyan and Vervaeke (2022) argue that,

the forces that “cause each trait to vary independently of the others” on one level, while also varying “together in patterns described by the next higher level of the hierarchy,” seem to keenly resemble the structural-functional organization of the cognitive economy of RR in which distinct but complementary variables […] are paired in trade-off relationships to optimize for some higher-order constrain. (p. 359)

They continue,

We do not believe this semblance to be merely coincidental or superficial in its meaning. Indeed, we maintain that the statistical relationships among the traits in the hierarchy as
described by DeYoung (2015) actually comprise empirical evidence of RR happening at various levels in the human personality. (p. 359)

On this basis, the authors advance their account of “personality structure and function as a nested system of RR processes aimed at optimization” in which RR can be seen as occurring (1) between the metatraits (Stability vs. Plasticity) vis-à-vis the functioning of their respective trait groupings (Conscientiousness, Agreeableness, Neuroticism vs. Openness, Extraversion, respectively), and (2) within each of the big five as a consequence of the opponent-processing occurring between each of the aspect pairs (Hovhannisyan & Vervaeke, 2022, p. 359). This allows the authors to ultimately formulate their Enactivist Big-5 Theory (EB5T) of personality which defines traits as “dispositional tendencies for how we come to optimally grip our distinctly human worlds” (p. 341). Individual differences in traits thus become understood as differences in styles of optimal gripping with respect to the problem domains associated with the major trait dimensions in the personality hierarchy.

EB5T Circumvents All Three Limitations of CB5T

The categories EB5T uses to explain trait functionality (i.e., opponent processes, the cognitive economy, etc.) map on to the structural understanding of traits provided by the FFM more elegantly than those of CB5T. Rather than invoking the various steps in the cybernetic cycle either in serial form or in parallel to explain how traits realize their functionality, EB5T instead conceptualizes the personality system as a nested hierarchy of dynamically self-organized processes all aimed at optimization. Thus, although its use of the term “cognitive economy” bears metaphorical significance, its conception of the actual processes by which
relevance is realized by the personality as a nested system of trait functions (optimal gripping tendencies) is not metaphorical but concrete and quite literal, and hence more parsimonious than that of CB5T. The first limitation of CB5T is thus circumvented by EB5T.

EB5T circumvents the second theoretical limitation as well, particularly because, unlike in CB5T, its account of the aspect pairs is not merely descriptive but also explanatory. Specifically, in virtue of RR, EB5T explains the existence of each of the aspect pairs in explicitly functional terms. This is to say, whereas in CB5T no particular theoretical explanation is provided as to why there seem to exist only two aspects per trait, EB5T treats this fact as evidence that RR is occurring between the aspects within each pair. In other words, EB5T states that the aspects in each pair are in an opponent-processing relation with one another in which this relation is set to optimize for the goal associated with the superordinate trait (Hovhannisyan & Vervaeke, 2022). In this way, the explanatory reach of EB5T exceeds that of CB5T when theorizing the functionality of the trait structure of personality as a whole.

Finally, EB5T circumvents the third, philosophical challenge posed by the frame problem, because its account of trait functionality is rooted in RR as optimal grip. As we saw, this is sufficient to inoculate EB5T against the frame problem because RR neither assumes a substantive definition of relevance nor tacitly presupposes the capacity for RR in its account of cognitive function.

The Phenomenological Turn in Personality Theory

CB5T explains individual differences in personality as differences in functioning along the five major dimensions described by the FFM. It “offers a powerful theoretical framework for understanding personality because of its appropriation of the FFM, which is descriptively rich,
predictively useful, and constitutes a statistically plausible approximation of the universal structures of human personality” (DeYoung, 2015 as cited in Hovhannisyan & Goicoechea, 2023, p. 11). Moreover, CB5T has “explanatory utility because of its grounding in cybernetics, which affords an understanding of the inherent adaptivity of traits that can readily be theorized in cognitive scientific terms” (DeYoung, 2015 as cited in Hovhannisyan & Goicoechea, 2023, p. 11).

However, as we saw, CB5T confronts three important limitations that need to be overcome to properly explain personality functioning. To this end, we reviewed the enactivist alternative to CB5T and saw how it afforded the means to circumventing these three limitations. The theoretical and philosophical purchase, however, that is brought forth by the Enactivist Big-5 Theory (EB5T) of personality needs further elaboration.

EB5T is the consequence of a disciplined dialogue between the cognitive and human sciences—enactivism and personality theory—that allows us to bridge the phenomenological gap between minimal and human cognitive life, insofar as traits constitute the psychic regions within a person’s life where thought, feeling, action, and perception all become organized in meaningful ways across time. EB5T thus constitutes an enactivist model of human cognitive life that makes it possible to broach the structures of human experience from the timescale of traits. In other words, EB5T models the structures of human significance vis-à-vis personality theory akin to the way that autopoiesis models the normative organization of the cell vis-à-vis the metabolic and motor pathways that allow the cell to survive in its environment. The phenomenological gap is therefore bridged without succumbing to the cognitive scientist’s dilemma because EB5T is based on the FFM, whose descriptions of the trait hierarchy bear a significant degree of cross-
cultural validity and are therefore plausible representations of universal structures of human experience.

Importantly, by borrowing “the same descriptive and functional understanding of the five traits that is central to CB5T” and grounding it in an enactivist account of embodied cognition (i.e., RR as optimal gripping), EB5T affords a phenomenological and non-reductionist interpretation of personality traits as fundamentally embodied and world-involving. Although “CB5T recognizes the contextual nature of traits, EB5T goes further by advancing an explicitly phenomenological understanding of traits” (Hovhannisyan & Goiecoechea, 2023, p. 11). This is because, as an enactivist concept, optimal gripping affords “a technical means of reconceptualizing personality traits from properties that are internal to oneself to ways in which one tends to participate in and experience one’s world” (Hovhannisyan & Vervaeke, 2022, p. 369). Hovhannisyan and Vervaeke (2022) elaborate:

According to EB5T and its world-involving conception of traits, if we wish to better understand who someone is, we must look beyond their personality measures and turn to their world. As we have argued, individual differences in personality do not merely reflect differences in optimal gripping tendencies but also differences in styles of world-enactment—a structural feature of personality that is irreducible and must be taken into account by clinicians wishing to helpfully intervene in persons’ lives. (p. 372)

The implications of EB5T are fundamentally phenomenological in that “EB5T’s world-involving conception of traits necessarily implicates the structural mutuality of self and world that is a cornerstone of phenomenological philosophy” (Hovhannisyan & Goicoechea, 2023, p. 372).

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As Hovhannisyan and Goicoechea (2023) explain, “EB5T’s conceptualization of the phenomenology of individual differences introduces the notion of world-enactment, directly linking person and situation at the level of phenomenological structure” (p. 12). Individual differences, from EB5T’s point of view, “thus become stylistic differences in the kinds of worlds individuals tend to enact, experience, and participate in as situated and embodied selves” (Hovhannisyan & Goicoechea, 2023, p. 12).

Let us now situate ourselves theoretically before we elaborate on the scientific possibilities afforded by the phenomenological turn in the study of individual differences. The problem being tackled concerns the phenomenological gap within enactivism between minimal and human cognition. What does having a human model of enactive cognition provide us? As mentioned, EB5T conceptualizes traits as dispositions for optimally gripping our distinctly human worlds. The phenomenological implication is that individual differences, therefore, correspond to differences in styles of world-enactment. The research question which therefore emerges asks, is there an empirical way to study and understand how the enactment of traits occurs within experience? To address this question in the affirmative is to secure empirical evidence in support of EB5T, a theoretical framework for modelling human cognitive life in enactive terms. If trait measures are indeed descriptions of stylistic differences in world-enactment tendencies, then what we seek, empirically, is to develop a way of disclosing how the enactment of worlds occurs within experience as seen from the perspective of traits. To the extent that EB5T reflects deep existential-phenomenological structures that characterize human experience, the task becomes to disclose how a person’s traits find life within their experience. In other words, what exactly does the enactment of a world from the trait perspective look like? Addressing this question will be
the core focus of this research and specifying the methodological procedures necessary for achieving this aim will be the task of the next chapter.
Chapter 4: Methodological Requirements for Researching Personality as Lived Experience

In the previous chapter, we reviewed a recent model of human personality, EB5T, which has the potential to bridge the phenomenological gap between minimal and human cognition that exists in the enactivist literature. The importance of EB5T lies in its ability to bridge the phenomenological gap by generating a theoretical account of human cognitive life that is able to explain several important aspects of human experience (cognition, emotion, motivation, perception, behavior, etc.) in an integrated and unified fashion, allowing us to circumvent the cognitive scientist’s dilemma that presently confronts most enactivist theories of human cognition (see Chapter 3). This is in large part because traits, a core construct of EB5T, constitute the ontological nexus point where all these various aspects of experience (i.e., cognition, emotion, motivation, perception, behavior, etc.) converge, and EB5T advances a comprehensive account of the trait-structure of human personality that describes human cognitive life along the five major trait dimensions which subsume these aspects: Conscientiousness, Agreeableness, Neuroticism, Openness, and Extraversion.

As an enactivist theory of personality, EB5T advances the notion of traits as dispositions for optimally gripping our distinctly human worlds. An important implication of this enactive conceptualization of traits is that individual differences, when considered phenomenologically, correspond to differences in styles of world-enactment. Accordingly, realizing the phenomenological turn in the study of individual differences requires us to pose the following question for research: what exactly does the enactment of a world from the trait perspective look like and how do individual differences in trait measures correspond to differences in styles of world-enactment? We thus arrive at our present task, namely, to specify the methodological
procedures necessary for disclosing how a person’s traits find life within their experience. Addressing this research question in the affirmative should allow us to secure empirical evidence for EB5T, in particular, and enactivism, in general, as a viable theoretical pathway to broaching questions of human experience non-reductively.

In Search for a Viable Methodology for Disclosing the Phenomenology of Individual Differences

Prior to the publication of the Enactivist Big Five Theory (Hovhannisyan & Vervaeke, 2022), phenomenological understandings of human personality largely focused on addressing questions of human growth and transformation in the clinical domain, as demonstrated by the various contributions found in the existential, phenomenological, and humanistic psychological traditions (e.g., Boss, 1979; Brooke, 2009; Frankl, 1988; Laing, 1967; Maslow, 1962; Orange, 2011; Romanyszyn, 1982; Rogers, 1961, etc.). The question of the phenomenology of individual differences from the trait perspective, however, has never been explicitly raised, despite the fact that both phenomenological philosophy and psychology and the trait approach to personality consider the use of natural language important, if not necessary, for investigating their respective subject matters (C. DeYoung, 2023 in communication). Consequently, as a discipline that is in its nascent stages of development, there currently exist only two published articles on the phenomenology of individual differences from the trait perspective (Hovhannisyan & Vervaeke, 2022; Hovhannisyan & Goicoechea, 2023), neither of which specifies an empirical method of research—or general methodological framework—by which to appropriately disclose the phenomenon of personality as lived experience for research purposes in the sciences of mind. To this end, we are called to creatively synthesize previous efforts and available theoretical and methodological resources to generate a proper methodology—and subsequent method—by
which the study of the phenomenology of individual differences as a psychological research endeavor can be made possible.

The initial steps toward such a task can already be found in Hovhannisyan and Vervaeke’s (2022) discussion of the clinical significance of EB5T (pp. 368-372). The authors begin by advancing the following set of propositions:

First, that as predispositions for skillful coping, all traits are optimal only in some contexts but not in others. And second, that dysfunction—or suboptimal gripping—ensues when situational demands exceed a trait’s (finite) capacity to adapt. (Hovhannisyan & Vervaeke, p. 369)

These two claims make it possible to conceptualize the structure of psychopathology from the timescale of traits, namely as implicating pervasive breakdowns in fit between a person’s traits as dispositions for gripping the world and the situational demands confronted by the person in their context of living. Indeed, Hovhannisyan and Vervaeke (2022) go on to articulate their rationale for such a conception in relation to possible diagnostic uses of the FFM in clinical practice:

Since traits tend to be stable across contexts (McCrae & Costa, 2003), whether they act as functional (optimal) or dysfunctional (suboptimal) depends on how well they fit with and are able to meet the unique demands of the situation. Using tests that are derived from the Big Five (e.g., NEO-PI-R) diagnostically thus requires having working knowledge of the
client’s context and personality traits in order to determine if there is a mismatch of the two. (p. 369)

On this basis, the authors advance a set of testable hypotheses by which EB5T’s phenomenological understanding of traits can be broached empirically:

- **H1**: Mismatches in what a situation calls for (e.g., prudence) and how a trait is designed to function (e.g., opportunistic behaviors motivated by high Extraversion) will lead to dysfunction and cause psychological distress (e.g., the “Lonely Extravert”)

- **H2**: Individuals will form cognitions (e.g., beliefs and judgments) about their experiences of distress (e.g., “I feel alone in this pandemic” or “no one wants to spend time with me”)

- **H3**: Individuals’ cognitions will relate thematically to Big Five traits that are entailed in the underlying mismatch (e.g., Extraverts’ concerns around feeling lonely will naturally reflect a frustration of their need for social engagement), thereby implicating the potential source(s) of dysfunction; and

- **H4**: Sources of trait-situation mismatch can be identified in patients’ descriptions of what is bothering them (Hovhannisyan & Vervaeke, 2022, p. 370)

Although these hypotheses were advanced in reference to possible clinical applications of EB5T, their applicability can be readily appropriated and brought into consideration for the purposes of conducting qualitative psychological research on the phenomenology of individual differences. To this end, we reformulate Hovhannisyan and Vervaeke’s (2022) line of thought in the following terms. First, recurrent forms of distress of the type that typically lead individuals to
seek therapy implicate relatively enduring and stable patterns of cognition, motivation, emotion, and behavior that unfold over longer timescales (e.g., months or years). Second, personality traits constitute descriptions of relatively enduring and stable patterns of cognition, motivation, emotion, and behavior that unfold over longer timescales (e.g., months or years). And third, since both repetitious problems and personality traits refer to patterns of psychological activity occurring over longer timescales, we should expect there to be a meaningful relationship between the two. In this way, explicating the nature of this relationship becomes a viable access point for empirical research on the phenomenology of individual differences, a fundamental methodological commitment of this dissertation.

In a recent clinical case-study, Hovhannisyan and Goicoechea (2023) discuss the first clinical application of EB5T in the literature by using the NEO-FFI-3—a test instrument derived from the FFM on which EB5T is based—“to assess the structure and dynamics of a patient’s lived struggles with anxiety phenomenologically” (p. 2). Their assessment yields a thematization of the patient’s styles of world-enactment based on the patient’s trait measures and data gathered throughout the clinical interview process. To achieve such a thematization of styles, the authors adopt Fischer’s (1994) *individualized approach* to psychological assessment, which finds grounding in phenomenological philosophy, which in turn grounds EB5T’s conception of traits (Hovhannisyan & Goicoechea, 2023). A full review of the basic tenets of individualized assessment is beyond the scope of this dissertation (see Fischer, 1994; Hovhannisyan & Goicoechea, 2023), but a basic summary is nevertheless necessary for contextualizing this study.

Most broadly, the individualized approach to psychological assessment is predicated on a set of (phenomenological) principles “through which a person’s actual life becomes the subject matter of assessment” (Fischer, 1994, p. v). Within the individualized approach, “the primary
data are life events, both as reported and as directly witnessed during assessment sessions […]
Comportment during testing is regarded as a specialized instance of other life events” (Fischer, 1994, p. v). Fischer explains, “Data derived from testing, such as scores and statistical profiles, are tools to help revise and refine one’s direct impressions of the client” (p. v). Put differently, “Test scores, categories, and related research are used as bridges into a particular life, and then as our tools for exploring that life [whereby] the life world is given priority” (Fischer, 2000, p. 3). Indeed, the individualized approach seeks to disclose and thematize the structural unity of “experience, action, body, and environment” that characterizes a person’s situated being, a matter of primary importance in phenomenological thought.

To this end, the present study appropriates the individualized approach to psychological assessment into a method of qualitative research by which to disclose and thematize styles of world-enactment as they are lived. The rationale behind employing the individualized approach as a method of researching the phenomenology of individual differences vis-à-vis EB5T finds justification in the following set of propositions. First, the individualized approach to assessment is fundamentally grounded in phenomenological principles (Fischer, 1994; Hovhannisyan & Goicoechea, 2023), thus its appropriateness as a research method for studying individual differences as lived phenomena is justified theoretically. Second, the appropriateness of using the FFM with the individualized approach is justified methodologically, insofar as both the psycholexical approach of the FFM and the phenomenological approach of EB5T and individualized assessment treat natural language as the proper point of departure for understanding their respective subject matters. Third, EB5T’s phenomenological account of traits constitutes a specialized instance of the kind of thematization of existential structures sought out in individualized assessment, insofar as the individualized approach seeks to thematize the
structural mutuality of self and world as it pertains to clinical patients, and EB5T thematizes the self-world structures that are implicated in particular descriptions of individuals’ traits. Finally, empirically, there is already preliminary evidence for the viability of using EB5T phenomenologically with the individualized approach to assessment to disclose traits as styles of world-enactment in the clinical domain, making its use for the purposes of conducting phenomenological research an appropriate next step (Hovhannisyan & Goicoechea, 2023).

With these justifications in mind, the present study extends existing research by repurposing the individualized approach to assessment into a qualitative method for researching the phenomenology of individual differences using the five-factor model of personality in the service of demonstrating EB5T’s potential for bridging the phenomenological gap between minimal and human cognition. The remainder of this chapter outlines the study design and research considerations of this dissertation, with a brief discussion in the conclusion section as to the expected significance of the study for the empirical sciences of mind.

Study Design

Research Aims

The purpose of the study is to explore and elaborate the enactive potential of the five-factor model (FFM) of personality by investigating the phenomenology of individual differences. The procedure is to assess for styles of world-enactment through an individualized application of the FFM using EB5T’s principles. This is done by appropriating Fischer’s individualized approach to psychological assessment into a method of disclosing the enactive dimension of personality functioning. As mentioned previously in this chapter, the rationale for this methodological step comes from Hovhannisyan and Vervaeke’s (2022) account of EB5T:
Since traits tend to be stable across contexts (McCrae & Costa, 2003), whether they act as functional (optimal) or dysfunctional (suboptimal) depends on how well they fit with and are able to meet the unique demands of the situation. Using tests that are derived from the Big Five (e.g., NEO-PI-R) diagnostically thus requires having working knowledge of the client’s context and personality traits in order to determine if there is a mismatch of the two. (p. 29)

On this basis, the present study employs Fischer’s individualized approach to assessment in a case-study design with the empirical phenomenology method to disclose the ways in which participants’ traits are implicated as styles in the enactment of the problematic lifeworld situations that are depicted in the examples provided by the participants themselves.

Participant Recruitment

Sample Size: n = 4

The present study was conducted on a sample of convenience. Four participants were recruited by distributing digital fliers (Appendix B) through departmental mailing lists in local universities in Toronto, Canada (Toronto Metropolitan University, University of Toronto, York University), as well as various online psychology groups (e.g., APA Div24 Listserv, APA Div32 Listserv) and university groups (e.g., Duquesne University, the University of West Georgia) in the United States. The fliers invited those interested in understanding how their personalities contribute to their behavior to participate in the study, with the indication that the study would consist of a questionnaire and two 1-hour long interview sessions. It was also stated that a $15
Starbucks gift card\(^2\) would be offered upon completion of the study, and a summary report of the findings shared with the participant. Interested participants were asked to email the primary investigator to arrange a time to complete a brief screening interview, which is detailed below.

Screening Interview

The screening interview (see Appendix A for screening questions) was conducted either on a phone call or a Zoom meeting, lasting between 15-30 minutes. The following statement was shared during the screening interview:

*The purpose of the study I am seeking to conduct is to understand the relationship between personality and patterns in life that often cause distress, worry, or confusion. This study will offer you an opportunity to deepen your understanding of how these patterns are related to the complex ways that your own personality traits interact with the unique situations that you face in your life. The study involves completing a questionnaire that typically lasts between 30-45 minutes and two interviews that should last about an hour each. At the completion of the study, you will be offered a $15 Starbucks gift card for your involvement in the study as well as a written narrative report—that is, integrative summary—of how your personality relates to the patterns you wished to learn more about. Learning about yourself might be distressing. Referrals to speak to a therapist will be given in the event that you feel distressed.*

As a non-clinical research study, individuals who disclosed any clinical or psychiatric diagnoses were excluded. Individuals who were able to determine an identifiable pattern of behavior with a

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\(^2\) This was later changed to a $15 Amazon gift card because the investigator learned that the minimum possible amount for purchasing a Starbucks gift card was $25 and available funds were limited to $60.
demonstrable wish to better understand its underlying causes were invited to enrol in the study. They were reminded that although the study draws on ideas and concepts from clinical psychology, the purpose of the study is not clinical. Those who would have demonstrated a wish to receive clinical treatment would be excluded from the study and referred to nearby community clinics, if need be. Individuals who would not have consented to having the video meetings recorded would also be excluded from the study. Finally, to be included in the study, individuals would have had to provide written informed consent (Appendix C).

Those who were selected to participate in the study were invited to two 1-hour-long, semi-structured interviews that were primarily modeled after Fischer’s approach to individualized assessment (the structure of which is detailed below). Participants were notified that although the two meetings would have been scheduled for one hour each, the meeting times could be extended by half an hour if needed (lasting a total of 1.5 hours each).

First Interview

Prior to the first interview, the informed consent form (Appendix C) was either sent to the participant and signed and returned electronically or informed consent was collected verbally and the form was signed and returned after. At the onset of the first interview, the main purpose of the study was restated to the participants:

The purpose of this study is to generate an understanding of how personality traits are reflected in individuals’ general styles (or patterns) of navigating and coping with life events that cause distress, worry, or confusion. The plan will be to use a Big-5 personality test in an individualized manner to (1) generate a description of your style of relating to or navigating
life events, (2) gain insight into how your personality traits might be figuring into your patterns of coping with such types of situations, and, (3) on this basis, to extrapolate and generate theoretical claims about the relationship between personality and patterns in life that lead to distress, worry, or confusion.

For this interview, participants were asked to generate two focal questions about aspects of their pattern that they wish to better understand. Prior to the interview, they were asked to prepare two real-world examples of times when the pattern being investigated was seen. Each focal question will thus have had two real life examples grounding it in the lived experience of the participants. Following Fischer’s (1994) procedures, participants were also asked to produce counterexamples or “when not’s” of the situations in question, whereby a similar situation had unfolded but the participant’s response to it and the subsequent outcome were somehow importantly different.

As the interviewer, I took detailed notes of the participant’s responses and behavioral impressions in a word document (see Appendix E) and audio-recorded the Zoom meeting for future reference and transcription purposes. Participants who struggled to produce examples were prompted until each focal question had two examples to support it, with one corresponding counterexample per question. Participants’ examples were sufficiently detailed so as to outline aspects of their situation (what was happening), their interactions (what those involved in the situation said or did), their thoughts (how they made sense of what was going on), their feelings (how they felt as the situation unfolded), and the outcome of the situation (where they landed). The interviewer was at liberty to prompt the participants for further detail when necessary with such phrases as “what was that like for you?” or “what did you think or feel?” or “what did you do in response?”
**IPIP-NEO Questionnaire**

At the end of the first interview, participants were provided with a link to complete an International Personality Item Pool NEO questionnaire (IPIP-NEO), an instrument for assessing personality traits that is based on the Big Five. The IPIP-NEO is an open-source self-report measure based on the FFM (or the Big Five) that consists of 300 items that can be responded to on a 5-point Likert scale. Although it is not equivalent to the NEO-PI-R, the commercial inventory on which it is based (by McCrae & Costa, 2003), the two are highly correlated. The IPIP-NEO can be completed by adults and children at any education level and most people complete it in 30-40 minutes. The IPIP-NEO has been completed by over half a million peoples since first being posted online and is thus a robust measure of individual differences along the five broad domains of personality, represented in percentiles. Invited participants were instructed to save and email the principal investigator the results of the IPIP-NEO questionnaire within 48 hours of receiving the link, though some required more time to complete this step. Once IPIP-NEO results were received, participants were notified that they would be contacted to schedule the second interview once the integrative summary reports had been produced, wherein the written summary of the findings would be shared with them and their feedback collected (Appendix F).

**Data Analysis**

The basic purpose of the integrative summary was to summarize where in the participant’s examples their particular traits found life and how the participant’s dispositions, as seen from the trait perspective, led them to act in ways that are *stylistic*—that is, as representing who the
participant tends to be in the situations of interest. The task was to then use this information to address the focal questions identified by the participant during the initial interview meeting. The product was an individualized integrative summary that articulates the participant’s patterns or styles of enactment from the trait perspective, which was shared with the participant at the end of the study. The integrative summary represents an individualized understanding of the relationship between the participant’s traits as styles of world-enactment and the patterned ways in which the participant shows up in response to their lived situations as seen through their examples.

In the broadest sense, the research design of this dissertation is an amalgam of a case-study approach, Fischer’s (1994) individualized approach to assessment, and elements of empirical phenomenology (e.g., Giorgi, 2009). This dissertation adopts and appropriates Fischer’s individualized approach to psychological assessment for the purpose of generating individualized understandings of how four individuals’ unique personalities find life in their respective examples. Fischer herself did not outline specific coding procedures in her approach to assessment. Indeed, she would often use test results to enlist assessees as collaborators on the interpretive process toward generating additional lifeworld examples to illustrate the lived and situated meanings of the results (e.g., “where in these scores do you see yourself?” or “how do these scores play out in your life?”). Without a standardizable coding procedure, using Fischer’s individualized approach as a method of qualitative research would have been inadequate. Accordingly, a coding procedure was developed to circumvent this methodological obstacle.

To this end, the NEO framework was used as an interpretive tool for coding for traits in the participants’ experiences to disclose the relationship between personality and experience. Interpreting a participant’s style of behavior as seen in their examples and from the trait
perspective requires having a basic understanding of the traits as outlined by the Big Five model: the kinds of (behavioral, cognitive, affective, motivational) tendencies predicted by the traits, and their corresponding functions. The conceptual categories used for grounding the interpretive process in this study find their basis in Costa and McCrae (2003), DeYoung (2013; 2015), Hovhannisyan and Vervaeke (2022), and Hovhannisyan and Goicoechea (2023).

To begin with, each interview was transcribed verbatim. The transcript was then read meticulously, and relevant traits noted in parentheses and red font alongside their percentiles, following the excerpts in which they are implicated. For example, if a statement read “I feel excited when I learn that my hard work is appreciated,” a note was added that read “(extraversion 85, conscientiousness 83).” Once the entire transcript was coded for traits in each of the participant’s examples, the task became to generate themes which demonstrated how the participants’ trait patterns or “constellations” could be used for understanding how the participants respond to and make sense of situations of a similar kind (as seen through their examples).

To this end, the relevance of a trait for the generation of a possible theme was determined based on the following two criteria. The first criterion was the degree to which a trait measure deviated from the central tendency of its normal distribution as represented by its percentile score. This was treated as an interpersonal marker of relevance of a trait for the generation of a theme, as less probable scores (i.e., very high or very low percentiles) hinted at the presence of structurally significant characterological features that would likely be implicated in the process-dynamics underlying the kinds of global patterns or stylistic features of the personality being investigated. Accordingly, the second criterion was the degree to which trait measures differed from each other within the person either at the level of the big five (e.g., high extraversion and
low neuroticism) or at the level of the facets within each of the big five (e.g., high anxiety and low depression within trait neuroticism). Accordingly, this was treated as an intrapersonal marker of relevance of a trait for the generation of a theme, as vast between-trait differences within an individual hinted at the presence of functionally significant characterological features that would likely be implicated in the process-dynamics underlying more global patterns or stylistic features of the personality being investigated.

Themes were generated by extracting sets of traits that appeared to constellate together and across the example sets (i.e., the set of traits that was common to the examples provided for each focal question) and contrasting these with the characterological and situational variables disclosed in the counterexample illustration (also coded for traits). This process of thematization sought to disclose the relevant (invariant) set of traits (i.e., the structure or constellation) in the individual’s trait-situation dynamics that was implicated in the unfolding of their supposed pattern. As per individualized assessment guidelines (see Fischer, 1994), the task of thematization in this study was to capture, through the use of test scores, the process dynamics underlying the individual’s style of navigating situations of the type in which their problematic behaviors became manifest, in the service of making it possible for them to intentionally “pivot” onto a different path whereby the problematic behavior would be less likely to unfold (Fischer, 1994).

The Structure of the Integrative Summary

The first section of the integrative summary, entitled “Introduction,” contains a statement about the participant, their sex, age, and country of residence, followed by the purpose of the integrative summary, which reads as follow:
This individualized report contains (1) a set of focal questions that were generated collaboratively with the participant during the first interview, (2) the participant’s IPIP-NEO results, (3) a summary of the examples and counterexamples that the participant provided to ground his focal questions in his lived experience, (4) an individualized interpretation of how the participant’s personality traits reflect his style of world-enactment as seen through his examples, and (5) a narrative interpretation of how the participant’s distinct style of world-enactment can shed light on the focal questions generated collaboratively at the outset of the assessment.

The second section of the integrative summary, entitled “Focal Questions,” contains a brief descriptive account of what the participant wishes to learn about themselves. Specifically, it contains the list of two focal questions which the participant identified in collaboration with the interviewer to address using the IPIP-NEO.

The third section of the integrative summary, entitled “IPIP-NEO Assessment Results,” contains a list of the participant’s trait measures (i.e., each trait from the NEO is listed with its corresponding percentile). (See Appendix G for definitions of traits as adapted from IPIP-NEO website).

The fourth section of the integrative summary, entitled “Lifeworld Examples,” states the focal questions of the participant and, under each question, includes a comprehensive narrative account of the examples and counterexamples the participant provided for grounding their focal questions in their lived experience.
The fifth section of the integrative summary, entitled “Lifeworld Themes,” provides a descriptive understanding of the kinds of dynamics reflected in the participant’s examples as seen from the trait perspective. Such a narrative understanding emerges as a consequence of subjecting the transcript of the participant’s examples to the kind of phenomenological analysis described in the “Data Analysis” section of this chapter. Specifically, the task becomes to identify how significant constellations of traits dynamically come together to inform the kind of unfolding of experience that was characteristic of the participant’s lifeworld examples.

The sixth section of the integrative summary, entitled “Summary of Personality Styles and Styles of World-Enactment,” simply translates the themes included in section 5 into styles world-enactment—that is, styles that are characteristic of how the participant tends to bring forth and participate in the very worlds which they experience as distressing or problematic.

Second Interview

At the onset of the second interview, which was arranged within a month of the initial interview, the participant was greeted and informed of the procedures to be undertaken at this time. The interviewer shared their screen and opened the written integrative summary of the assessment findings, letting the participant know that their responses and questions were welcomed throughout the process. The interviewer then ventured to read the integrative summary and collect any (unstructured) verbal feedback from the participant along the way. Once the report had been read in its entirety, the interviewer proceeded to collect feedback about aspects of the research experience by reading the semi-structured interview question set in Appendix F (where the participant feedback can be found). The meeting was also recorded so that the interviewer could later return to the footage to flesh out or fill any gaps in the feedback.
summary. Upon completion of the second interview, the integrative summary was converted to a PDF and shared with the participant for their own reference, concluding all and any possible steps in the research study with direct involvement of the participant.

Finally, the participants’ feedback on their respective reports and overall experience in participating in this research was kept and used in an iterative fashion—as a kind of successive approximation procedure—to shape and guide the researcher’s understanding of how such a research process can be improved or enhanced in future instances (Appendix F).

Methods Summary

A total of four participants were recruited in this study but only three qualitative reports were produced. The reasons for this are discussed in Chapter 6. The empirical portion of this study (i.e., individualized clinical interview, report writing, and feedback session) was used to support the theoretical goals of this project—namely, to theorize human personality in enactivist terms by empirically leveraging EB5T’s potential for bridging the phenomenological gap between minimal and human cognition in the enactivist paradigm. The following chapter, Chapter 5, presents the three individualized reports that were produced as a consequence of the method. Chapter 6 begins with a discussion of the four case-studies and the research findings in reference to the core construct of this study: styles of world-enactment. It then reviews the limitations and effectiveness of this method for disclosing styles of world-enactment in an individualized fashion, as well as possible ways in which this method can be improved for future use. Finally, Chapter 7 returns to and situates the findings of this research in the broader theoretical context where this dissertation originally began: the enactive approach to human experience. It concludes with a discussion of the implications and significance of this research
for cognitive science, personality theory, empirical phenomenology, and the psychological assessment of personality.
Chapter 5: Enactively Individualized Personality Assessment

In the previous chapter, we articulated a manner in which the individualized approach to psychological assessment can be repurposed into a qualitative method of researching the phenomenology of individual differences. The core construct for investigating the phenomenology of individual differences was that of styles of world-enactment. This chapter presents the three individualized enactive personality reports (for Participants X, Y, and Z) that were produced as a consequence of applying the method outlined in the previous chapter (Chapter 4). The presentation of these reports sets the stage for the following chapter (Chapter 6), which discusses the major theoretical findings of this research in relation to the construct of a style of world-enactment and its utility for studying the phenomenology of individual differences, and extracts a number of necessary guidelines to guide research on the phenomenology of individual differences in the future.

**Individualized Enactive Personality Assessment Report**

**Participant: Mr. X**

**Introduction**

Mr. X is a 34-year-old heterosexual African American man living in the United States who agreed to partake in an individualized personality assessment using the IPIP-NEO—an instrument based on the five-factor model (FFM) of personality. This individualized report contains (1) a set of focal questions that were generated collaboratively with Mr. X during the first interview, (2) Mr. X’s IPIP-NEO results, (3) a summary of the examples and
counterexamples that Mr. X provided to ground his focal questions in his lived experience, (4) an individualized interpretation of how Mr. X’s personality traits reflect his style of world-enactment as seen through his examples, and (5) a narrative interpretation of how Mr. X’s distinct style of world-enactment can shed light on the focal questions generated collaboratively at the outset of the assessment.

Focal Questions

Mr. X and I met for 1.5 hours. The purpose of the study was explained to him, the relevant procedures stated, and the limits of confidentiality discussed. He provided his informed consent and we sought to identify two focal questions to guide the assessment process. After approximately five minutes of deliberation, Mr. X identified and phrased the following two questions:

1. *Why do I continue to restrict myself when I am in the company of women that I’m attracted to emotionally or sexually rather than expressing myself directly?*

2. *Why do I avoid expressing my anger towards my mother?*

At the end of the initial interview, Mr. X was instructed to complete an IPIP-NEO questionnaire and forward his results to me in an email, which have been included in the section below.

IPIP-NEO Assessment Results

<table>
<thead>
<tr>
<th>DOMAIN/Facet</th>
<th>Score (percentile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTRAVERSION</td>
<td>39</td>
</tr>
<tr>
<td>.Friendliness</td>
<td>49</td>
</tr>
<tr>
<td>.Gregariousness</td>
<td>53</td>
</tr>
<tr>
<td>Dimension</td>
<td>Score</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>28</td>
</tr>
<tr>
<td>Activity Level</td>
<td>2</td>
</tr>
<tr>
<td>Excitement-Seeking</td>
<td>37</td>
</tr>
<tr>
<td>Cheerfulness</td>
<td>85</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>83</td>
</tr>
<tr>
<td>Trust</td>
<td>42</td>
</tr>
<tr>
<td>Morality</td>
<td>80</td>
</tr>
<tr>
<td>Altruism</td>
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</tr>
<tr>
<td>Cooperation</td>
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<tr>
<td>Modesty</td>
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<td>78</td>
</tr>
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<td>Conscientiousness</td>
<td>48</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>27</td>
</tr>
<tr>
<td>Orderliness</td>
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<td>Dutifulness</td>
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<tr>
<td>Adventurousness</td>
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</tr>
<tr>
<td>Intellect</td>
<td>61</td>
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<tr>
<td>Liberalism</td>
<td>97</td>
</tr>
</tbody>
</table>
Lifeworld Examples

This section contains a summary of the two examples and one counterexample that Mr. X provided for the patterns implicated in each of his focal questions.

**Focal Question 1: Why do I continue to restrict myself when I am in the company of women that I’m attracted to emotionally or sexually rather than expressing myself directly?**

**Example 1**

Mr. X told me about a time he went on a date with a woman in his class from his graduate program 1.5 years ago. He said they went to a restaurant and were “dressed up, looking really good.” Throughout their interactions, he said he was paying close attention to her physique, thinking to himself that she looks very attractive. He said he noticed that, as he wanted to express that he found her very attractive, he would instead resort to talking about safer topics, like the weather, or school classes. He noted he could feel his heart rate increasing. He started to feel anxious, and really wanted to express his feelings of attraction to her but felt afraid that he would get rejected.

**Example 2**

Mr. X told me about another date he went on with the same woman from his graduate program. On this date, she came over to his house and had brought some wine and treats. Once again, Mr. X said he was really excited. He felt particularly comfortable that they were in his home, and he thought she must feel comfortable too. He recalled that there was a moment where there was a kind of stillness, whereby they looked at each other, exchanged glances, and he thought it was an
opportunity to kiss. However, he said at this point he ruminated on the negative impact of what could go wrong and instead resorted to something safe: he asked her if she wanted to go back in and sit on the couch. He tried to get a little closer but at this point, he said, she appeared turned off and confused about what his intentions were.

I asked Mr. X to elaborate on the moment of stillness he experienced with her on the balcony. He recalled that her back was towards him as she was looking out at the view. As the moment of stillness set in, he recalled that she appeared and felt really relaxed. He elaborated, “her body language was very relaxed as though she was saying, touch me and get closer to me.” At this point, however, he noted an incongruence: namely that she appeared relaxed, but he felt very tense. He said, “I saw this moment as a missed opportunity to take charge, to move forward toward something I wanted.” However, at this point he was simultaneously doubting whether he was capable or worthy of bringing the desired outcome to fruition.

When asked to elaborate on what he thinks is holding him back in such moments, Mr. X said although he feels that a woman might be very attracted to him, he ultimately misses the moment because he is “too anxious.” He added, “I think something else that comes with this is a fear of rejection, a ruminating thought that’s in my mind.” Then, he said, he finds himself in “the world of what-ifs,” which leaves him feeling unfulfilled, and so he resorts “back to being safe.”

When asked to elaborate on what rejection is like for him, Mr. X referred to an experience in which he was “friendzoned” by a woman he’d been introduced to through his family. In this example, he and the woman had gone on a date. They were talking and everything felt like it was
going well. When the bill came, they split it amongst themselves, and when it was over, Mr. X sent her a text to make sure she got home. However, the woman replied, “I had a good time but unfortunately I don’t want to meet you again, I don’t feel chemistry with you.” This left Mr. X feeling shut down and really hurt. He later found out she had “friendzoned” him because she preferred a taller man and because he split the bill with her instead of covering it entirely on his own. Mr. X felt really angry in response. He said that he felt anger with the woman’s conduct but also anger with myself: “why does this keep happening? Am I choosing the wrong people?”

*Counterexample 1*

The counterexample Mr. X recalled dated back to sometime between 2016-2017, when he had first moved into an apartment in Washington D.C.. There, he met a woman at the gym who he thought was very physically attractive. After approaching the woman and having a good conversation, the two of them soon went on a date to the movies. During this date, he said to himself, “I’m going to do something different, I’ve got nothing to lose.” Thus, he simply “went for a kiss at the end of our walk, which was exciting and exhilarating.” He recalled how she was surprised at his confidence but that this eventually led to the formation of a relationship between them. He recalled that he did not get rejected, felt confident with himself, and was not thinking “What if?” but rather “why not?” When he kissed her, he said he was quite confident that she felt similarly and wished to kiss him too. He recalled walking away feeling very confident and proud and excited that he actually followed through with it.

When asked to elaborate on what “the moment of opportunity” was like, Mr. X offered the following reflections. He said as they were walking back from the movie, he recalled his
heartrate starting to increase, “my muscles were getting a little tense, and once again that stillness happened again.” He elaborated, “after I gave her a hug, there was that slight pause: what’s going to happen? I said to myself, ‘what are you going to do this time?’ I paid attention to her body language, she didn’t seem tense, she didn’t seem very flat, didn’t seem like she was rushing, was very calm, and I picked up on those cues and felt ‘let’s see what happens? Let’s test my theory in this moment’” As he gave her a hug, he recalled slowly leaning in and kissing her. He said, “I could just feel myself, I felt surreal that I actually did it…I gave myself permission and that’s the best way I could capture that moment for you.”

When invited to share additional reflections on the “moments of stillness,” Mr. X added the following: “what I am assessing for in those moments of stillness is how safe it is.” Specifically, he explained that in those moments he is “seeing how safe it is” for him to lean into the experience more fully. He elaborated that he is paying close attention to his romantic interest’s body language and expressiveness, and comes to feel that it is “safe enough” only when she is open, smiling, and excited, but not tense or reluctant.

Mr. X added that in the Example 1, he did not have much familiarity with the woman he was on a date with. On the other hand, there was already a certain degree of intimacy in place with the woman in counterexample 1, as they had spent more time talking and had broached certain topics, which, Mr. X explained, “is what allows me to feel more comfortable.” He further explained that in this case it is more like “leaning into” the experience because of the felt sense of safety and familiarity as opposed to a kind of “leaping into” it. Mr. X ascertained that he felt a
degree of risk in examples 1 and 2, as he could not fully trust that the woman would not share the outcome of their dates together with mutual friends they had in their graduate program together.

**Focal Question 2: Why do I avoid expressing my anger towards my mother?**

**Example 3**

Mr. X recalled the time when he was approximately 14 or 15 years old and desperately wanted to go to a Catholic high school that a lot of his friends were attending. To this end, he was planning to try out for the school’s football team and his mother told him that she was going to take him to the football tryouts. He explained to me, “you can imagine as a young kid there was lots of excitement…I was sitting at home with my great grandmother, waiting for mom to come, I had my cleats and shoes ready, excited to go to the tryout, and I just remember how the excitement turned to worry and trepidation, when my mom ultimately didn’t show up and I didn’t go to the football tryout.” He continued to elaborate, “I was extremely angry…As you can imagine, a young kid at that age, I was really excited, and my mom did not follow through.”

Growing up, Mr. X accounted, a lot of his anger would get internalized. Namely, he would manage it through reading, journaling, expressing himself to his friends, but he was always afraid of speaking directly to his mother because he expected she would get angry. He added that the anger he felt in the wake of his disappointment was “very very profound for me at that particular age.” He also recounted that his great grandmother tried to console him because she could see the disappointment that he had, and she actually scolded his mom for letting him down. Mr. X explained that he was “extremely disappointed from leaning in.”
Example 4

Mr. X recalled a time, 1.5 years ago, when he called his mother for emotional support and advice about a woman. After the date with the woman in example 2 had occurred, he called his mother to tell her about it, and was excited to hear her feedback. However, during the actual exchange, he said he instead received a “real flat, vapid type of response…I’m telling her this rich narrative of what happened, and her response was just ‘well you know, some people are just like that, you know, move on.’” At this point, he said he became angry and thought to himself, “your son is really upset about what happened, and you’re just responding in a matter-of-fact distant kind of way.” He explained that he felt “a little robbed in that experience,” and wondered why his mother was not expressing concern or did not seem to be very invested in this as he was. He described her response as dismissive of him showing vulnerability, citing an example of what she would say to him: “I don’t know why this affects you so much, move on to the next one.” Thus, he explained, the conversation just moved on to what his mother was saying she would have done, leaving him feeling like the opportunity for attunement was missed with his mother. It strongly upset Mr. X that he felt his mother was not trying to connect with him. Thus, he got upset and got off the phone because he felt like his mother had just completely invalidated what he was trying to say. Having missed the opportunity trying to connect with his mother left Mr. X feeling extremely angry.

Mr. X elaborated that he felt the sense of disconnect or mis-attunement first when he heard a sigh from his mother, which was followed by an increase in the volume of her voice, and she would start to “explain away” what he was experiencing. He also recalled detecting a sense of irritation
in her voice and statements: “I don’t know why you care so much, on to the next one,” or “I
don’t know why you keep feeling this, why it’s such a big deal,” or "that's your problem, you’re
too emotional, you care too much.” Additionally, her moments of silence made her seem
distracted and not very present to him in the moment. Upon hearing statements of this sort, Mr.
X said it felt like a child wanting to be held and comforted by their parent and their parent
rejecting them. When he starts feeling this rejection, Mr. X said, “I start to pull away, to
minimize the damage.”

*Counterexample 2*

Mr. X had just transitioned back to living in America in 2015 from living and working in South
Korea for 2 years as an English teacher. He could not recall what had happened between him and
his mother, but he remembered feeling very angry. He said, “I decided that I was really going to
let my mom know how I felt, and whatever happens, happens.” He continued, “and instead of
talking to her directly, I actually wrote her a letter detailing the things she has done that have
really upset me…Why I feel like our relationship was subpar, why I felt there was no strong
emotional connection in our relationship.” Once he composed the letter, his father dropped him
off and Mr. X slid the letter under her door. As he was writing it, Mr. X said he felt nervous and
exhilarated, and was on the cusp of something he had not done before. He recalled feeling a lot
of anxiety while writing the letter. He said the tension built up on his way to his mother but it
reduced once he dropped the letter off: “it was something very scary but I followed through with
it.” He added, “to my surprise, she didn’t get angry but her response was ‘thank you for saying
this.’”
“At that time,” Mr. X elaborated, “I was in a lot of turmoil, transitioning back from South Korea, had just got out of a tinder relationship, and wasn’t working.” He said that having all of these factors to deal with urged him to confront the issue with his mother because he had been holding it in for a long time, as he thought to himself, “you can’t miss something you’ve never had: if you’ve never really had an emotional attunement with your mom, then you can’t really miss it with her! So, what’s the worst that can happen? Your mom will yell at you? She’s been doing that all your life! I’ll test the reality, this needs to get out of it, she needs to know it, and if she really cares about me, this will be a litmus test for my mother.” Thus, Mr. X described himself as stepping out of his “emotional mind” and into a “logical standpoint instead.” He said he was seeking to test his reality to see if what is inside of him really matches up with what is outside. He said his father also recommended that he directly addresses the issue, reminding Mr. X that that he has been holding these thoughts and feelings for a long time. Mr. X fondly said he has a lot of respect for his father and felt encouraged by him.

Lifeworld Themes

Theme 1: Opportunity as Felt from and Dictated by the World

Individuals who respond similarly to Mr. X on the IPIP-NEO tend to be very enthusiastic (Cheerfulness: 85th percentile), imaginative (Imagination: 94th percentile), and have a very strong appreciation for deep and meaningful conversations (Openness: 99th percentile). Furthermore, they are very readily able to access the world of feelings (Emotionality: 99th percentile), tend to be earnest in their interactions with others (Morality: 80th percentile), and are very attuned to and have concern for the thoughts, feelings, and inner worlds of those around them (Agreeableness:
83rd percentile; Altruism: 93rd percentile; Cooperation: 91st percentile; Sympathy: 78th percentile).

Indeed, these various tendencies come together to form a thematic thread when trying to understand Mr. X’s relationship with felt opportunity for intimacy in the romantic context. In Examples 1 and 2, as well as Counterexample 1, Mr. X’s experience in the felt moments of stillness consisted of judging his sense of “readiness” to initiate a move, such as leaning in for a kiss, by intently observing the body language, expressiveness, and apparent openness he sensed from the woman he was with. In other words, the felt sense of opportunity and “permission” to initiate was largely dictated by the feedback he was receiving from the world, made possible by his strong sense of enthusiasm for opportunity (Cheerfulness: 85th percentile), his strong sense of attunement and attentiveness to others’ worlds (Agreeableness: 83rd percentile; Altruism: 93rd percentile; Cooperation: 91st percentile; Sympathy: 78th percentile), and his powerfully imaginative and emotionally attuned mind (Openness: 99th percentile; Imagination: 94th percentile; Emotionality: 99th percentile).

**Theme 2: Seeking Safety Through Imaginative Cautiousness, Downregulation of Self, and Conflict-Avoidance**

Individuals who respond similarly to Mr. X on the IPIP-NEO have a proclivity to responding to felt uncertainty with a degree of anxiousness (Anxiety: 69th percentile), likely accompanied with strong feelings of confusion, helplessness, or powerlessness (Vulnerability: 89th percentile). Such individuals also tend to take a very cautious approach in situations of this kind, meticulously thinking through a range of possibilities before acting (Cautiousness: 80th percentile), at times even getting lost in the world of their imagined possibilities (Openness: 99th percentile).
percentile; Imagination: 94\textsuperscript{th} percentile) or feelings (Emotionality: 99\textsuperscript{th} percentile). In addition, such individuals tend not to feel very effective, find it difficult to feel confident in their ability to realize their vision (Self-efficacy: 27\textsuperscript{th} percentile), and also tend to withhold their true thoughts or feelings instead of letting them find fuller expression in the world through direct speech or behavior (Assertiveness: 28\textsuperscript{th} percentile). This is further complicated when such individuals find themselves in situations of interpersonal conflict, as they tend to more readily prioritize others’ perspectives, thoughts, and feelings over their own (Sympathy: 78\textsuperscript{th} percentile), with a strong tendency to avoid conflict by wishing not to disappoint, upset, or anger others by expressing their own needs or wishes (Cooperation: 91\textsuperscript{st} percentile).

Indeed, in the felt moments of stillness that Mr. X discussed in Examples 1 and 2, although his attunement to others’ worlds and bodily/facial expressions seemed to call on the part of him that wished to “go in for the kiss” (Openness: 99\textsuperscript{th} percentile; Emotionality: 99\textsuperscript{th} percentile; Altruism: 93\textsuperscript{rd} percentile; Cooperation: 91\textsuperscript{st} percentile; Sympathy: 78\textsuperscript{th} percentile), his feelings of anxiousness (Anxiety: 69\textsuperscript{th} percentile) and cautiousness (Cautiousness: 80\textsuperscript{th} percentile) were never quite quelled and, so, played an important part in holding him back from “leaning in for a kiss.” However, the relevant point of contrast hinted at in Counterexample 1, in which Mr. X did indeed “lean in for a kiss,” was that there was a degree of familiarity, and thus trust, in place between him and the woman he was meeting. This is to say that in the absence of sufficient familiarity and trust, going in for a kiss is felt as too risky and impulsive and like taking a leap, whereas in the presence of trust and familiarity it becomes more a matter of safely and excitedly “leaning in.”

In both Examples 3 and 4, Mr. X’s cautious style of conflict-avoidance found expression when he felt disappointed or let down by his mother’s manner of relating to him (Assertiveness:
28th percentile; Agreeableness: 83rd percentile; Cooperation: 91st percentile; Sympathy: 78th percentile; Vulnerability: 89th percentile; Emotionality: 99th percentile). On the one hand, there was a sense in which her apparent lack of attunement to his own style of entering into and making sense of the world (Openness: 99th percentile; Emotionality: 99th percentile; Imagination: 94th percentile) left him feeling disappointed and hurt, and alone in his experience, wishing but unable to feel joined by her. On the other hand, his sense of anger in response to this disappointment did not find expression but became internalized, presenting partly as a felt difficulty in knowing how to put his unpleasant feelings appropriately into words (Emotionality: 99th percentile; Vulnerability: 89th percentile; Assertiveness: 28th percentile), and partly as a strong concern for not overstepping his boundaries and possibly hurting or seriously upsetting his mother (Agreeableness: 83rd percentile; Cooperation: 91st percentile; Sympathy: 78th percentile; Vulnerability: 89th percentile).

Yet, as evinced by Counterexample 2, finding expression for his own true thoughts and feelings, unpleasant though they might be, is vitally important to Mr. X and became possible when the following three conditions were in place. The first condition was when the possibility of assertion became felt as a need rather than just an option. The second condition was the encouragement he received from a very trusted, admired, and respected figure in his life: his father. The third condition, which followed from the second, was that he intentionally chose to take the time to organize his own feelings and put them into words in the form of a written letter. Functionally speaking, the second and third conditions played a compensatory role as they sought to promote a greater sense of assertiveness in Mr. X in response to his felt disappointment. Whereas the second condition enabled Mr. X to seek fuller expression of his own self than he would normally be inclined to on his own (Assertiveness: 28th percentile), the
third condition afforded his assertiveness an alternative form through which to find expression than that of direct speech: writing.

Summary of Personality Styles and Styles of World-Enactment

What is the kind of world that is being gripped by Mr. X’s trait measures? And how does this world pervasively elude Mr. X’s grasp in situations of the sort typified by the examples we discussed together? To shed light on these questions, the collaborative assessment findings indicated the following personality styles and associated styles of world-enactment.

To begin with, Mr. X displays a highly interpersonal, imaginative, and empathic style of opportunity-seeking in the romantic context. On this basis, in the romantic context, Mr. X will likely exhibit a strong tendency for enacting the woman he is with as someone to be related with through deep and meaningful conversation, as someone whose interest in him will find expression largely through an “openness” in her body language, and as someone whose behavior and actions will speak loudly and directly to her felt emotions for him. Women who are less expressive or open with their feelings might be (pre-emptively) seen by Mr. X as showing little to no romantic interest in him, when this might not necessarily be the case. In this sense, Mr. X might find it worthwhile to consider possible and actual cases in his life where the absence of such expressiveness might not necessarily constitute a clear sign that a woman does not find him interesting or attractive, or see him as a potential partner, or expect him to take initiative in deepening the relationship. Conversely, Mr. X might also find it worthwhile to consider cases where the presence of such expressiveness might not necessarily constitute a clear sign that a woman does indeed find him interesting or attractive, or see him as a potential partner, or even expect him to take initiative in deepening the relationship, such as by leaning in for a kiss.
Mr. X also displays a relatively cautious, vulnerable, and rather conservative (or withdrawn) style of security seeking in the romantic context. This is to say that in the absence of sufficient trust and familiarity, Mr. X will likely exhibit a strong tendency for enacting the woman he is with as someone who should be approached steadily rather than rapidly, and as someone who will possibly let him down by either leaving him or rejecting him should he choose to ignore his own cautiousness by impulsively rushing into a relationship of a more sexual sort by “leaping into a kiss.” Furthermore, in such situations, Mr. X is likely to enact the situation he is in as confusing and in which there is no real way out, whereby he is rendered helpless and powerless to make any real difference in the outcome. To this end, Mr. X might find it worthwhile to give himself permission to take more time with building trust and familiarity with potential partners so that any acts of initiative on his part are felt more like an adventurous and exciting “leaning in” rather than a potentially dangerous “leaping into the unknown.” Put differently, in the presence of sufficient trust and familiarity, Mr. X’s strong feelings of anxiousness, cautiousness, and vulnerability, are likely to be quelled, and his assertiveness given an opportunity to find safer and more appropriate expression in the world.

Similarly, in the context of navigating his relationship with his mother, Mr. X displays aspects of his cautious, vulnerable, and conservative (or withdrawn) style of security seeking. On the one hand, Mr. X enacts his mother as a figure whom he wishes and hopes to depend on for basic interpersonal needs, like being heard, seen, and understood. This is to say, Mr. X enacts his mother as someone who will be able to join him in his experiences of loss and sadness, but, perhaps more importantly, as someone who will be able to join him in and ultimately even witness and appreciate the highly imaginative and emotionally textured world of his inner life.
On the other hand, as seen in Examples 3 and 4, when his mother does not meet his expectations as he would hope, Mr. X enacts her as someone who has deeply rejected him and left him to be alone in his own experiences. Mr. X in turn feels deeply disappointed that his trust has been so utterly betrayed, and consequently enacts himself as someone who must be protected and tended to with care, thereby reacting with strong emotions of anger. However, in these moments, he nevertheless struggles to express the anger he truly feels as he likely enacts his mother as also requiring the same kind of care and protection that he himself does—and thus not as someone who is able to receive or withstand the full extent of his anger. In turn, his anger is enacted as “internalized thought and emotion,” as having no place or belonging in the world, and so it does not find any expression in the world as either speech or behavior.

As evinced in Counterexample 2, it becomes possible for Mr. X to enact his feelings as feelings-to-be-outwardly-expressed as opposed to feelings-to-be-kept-inside, when he enacts the possibility of asserting himself not as one option among many but as a necessity. What also helps him to lean into his assertiveness is when he receives encouragement from a figure whom he respects, trusts, and admires, like his father. It is almost as though receiving such encouragement leverages and ultimately permits Mr. X to enact himself as more assertive than he normally would be, hence making it possible to more readily give expression to his true thoughts and feelings rather than keeping them in. Furthermore, putting his feelings into words in a written letter presents Mr. X with an alternative mode of expressing himself that allows him to enact himself as more assertive than usual, but in a way that is felt as both psychologically manageable and morally permissible. Moreover, in such situations, Mr. X is likely to experience himself as more potent and able to affect the world, and the world as more accessible, available, influenceable, and amenable to the power of his own will and desire, as “ripe for the taking.”
Individualized Enactive Personality Assessment Report

Participant: Ms. Y

Introduction

Ms. Y is a 37-year-old caucasian woman in a heterosexual marriage living in the United States who agreed to partake in an individualized personality assessment using the IPIP-NEO—an instrument based on the five-factor model (FFM) of personality. This individualized report contains (1) a set of focal questions that were generated collaboratively with Ms. Y during the first interview, (2) Ms. Y’s IPIP-NEO results, (3) a summary of the examples and counterexamples that Ms. Y provided to ground her focal questions in her lived experience, (4) an individualized interpretation of how Ms. Y’s personality traits reflect her style of world-enactment as seen through her examples, and (5) a narrative interpretation of how Ms. Y’s distinct style of world-enactment can shed light on the focal questions generated collaboratively at the outset of the assessment.

Focal Questions

Ms. Y and I met for 1.5 hours. The purpose of the study was explained to her, the relevant procedures stated, and the limits of confidentiality discussed. She provided her informed consent and we sought to identify two focal questions to guide the assessment process. After approximately five minutes of deliberation, Ms. Y identified and phrased the following two questions:
1. Why do I shut down on sharing my wisdom in class? And why do I get upset at myself when I don’t share my knowledge or wisdom in a social setting or a class?

2. With my stress and anxiety, why do I procrastinate on tasks that I know will be helpful in the long run?

At the end of the initial interview, Ms. Y was instructed to complete an IPIP-NEO questionnaire and forward her results to me in an email, which have been included in the section below.

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Lifeworld Examples

This section contains a summary of the two examples and one counterexample that Ms. Y provided for the patterns implicated in each of her focal questions.

**Focal Question 1: Why do I shut down on sharing my wisdom in class? And why do I get upset at myself when I don't share my knowledge or wisdom in a social setting or a class?**

**Example 1**

Ms. Y told me about an occasion in an online class she was attending where she wished to share how impactful one of her classmates’ advice had been for her, but instead withdrew into herself and became very quiet. Later, she found herself ruminating on why she did not share her thoughts with the class and felt sad about this. At this point, she also became aware of an “inner critic voice” targeting and filling her with various self-conscious thoughts such as, “even if you did share, you’d sound awkward or stupid.” She said the inner critic voice often hinders her when she wants to help somebody.
She elaborated that sometimes it is uncomfortable for her to share her thoughts in front of groups, noting that she has “always been a kind of introvert,” specifying that she has even more trouble participating and sharing her thoughts in settings that are virtual rather than in-person. At the beginning of the class, she said she enters the virtual meetings already feeling nervous to begin with, anxiously anticipating the professor’s invitation for students to share what is on their mind. She said although she had “very nice things [she] wanted to say,” she was nervous about what the group would think about her. She said she was keenly aware of the inner critic’s voice, which was telling her that the others would “think I am stupid.”

Ms. Y elaborated that she felt “caught or stuck” and “anxious in [her] stomach, shut down.” It was like whatever was happening within her was unable to get out or find expression in the world through speech, and her various thoughts were harshly critical of herself: “nobody likes you, that is a stupid thing to say, no one is going to like what you have to say, you’re going to make it awkward.”

Ms. Y said that she appeared quiet and reserved throughout the whole class, and “a little teary eyed too;” even that she almost cried a couple of times. After the class, she said she ruminated about it, and felt the same inner critic shaming her by saying, “why is it so hard for you to share?”
Example 2

Ms. Y told me about a similar occasion where she felt withdrawn and unable to express herself in class. When her professor invited the students to offer any insights or “aha-moments” to the rest of the class, a classmate expressed feeling disappointed that an intervention she had attempted with a client did not go as expected. At this point, Ms. Y recalled feeling sympathy for her classmate and was wanting to offer her consolation but could not bring herself to do so in class because she was unsure of how her remarks would be taken up by her class. For example, Ms. Y found herself thinking, “you’re going to embarrass [the classmate] or yourself, maybe this is a moment that the teacher needs to help or, you’re not qualified to help her.”

Afterwards, Ms. Y found herself feeling guilty and ruminating on the fact she did not offer her classmate support during the class discussion. Thus, Ms. Y proceeded to email her classmate the following day, which gave her a private forum by which to express herself rather than verbalize herself in a group setting with the voice of the “inner critic” getting in the way.

Counterexample 1

As a counterexample to the rule, Ms. Y recalled a time she was able to express herself rather freely in class during a slideshow. To begin with, Ms. Y found the topic of discussion interesting, and she was able to engage with it through her curiosity. She said it felt easier to ask questions about a topic she was interested in than to share a personal opinion about herself, such as in Examples 1 and 2. Upon sharing her question, Ms. Y said a couple of her classmates joined in and shared their own thoughts, which left Ms. Y feeling validated in her curiosity and that she
had initiated and effectively facilitated a discussion that others participated in. Her inner critic voice was quelled.

I asked Ms. Y to elaborate on the situation, and she provided the following details: “when the slideshow is playing, not everybody’s faces are there…it’s just the professor’s face, so it’s like I’m talking one-on-one almost, which makes it easier.” Ms. Y added, “since I was a kid, I’ve been an introvert and have felt safer in 1-on-1 settings than group settings.”

At this point, Ms. Y recalled a time in her childhood when her teacher made an embarrassing comment about her which made her shut down. She said, “I still remember the comment and how I didn’t say anything, and the critic voice came up and said ‘why didn’t you say anything?’…the teacher had called me ‘the quiet girl who was going to take over the world’…Everyone was watching me, I was very shy, very uncomfortable, I didn’t know what to say, and it stayed with me.”

**Focal Question 2: With my stress and anxiety, why do I procrastinate on tasks that I know will be helpful in the long run?**

**Example 3**

Ms. Y said she has been working on a poetry book she hopes to send to her friends and family as a gift. Specifically, this book project entails compiling and typing up all of her poems from various journals and notebooks from over the years into a word document. Ms. Y said she started this project 5-6 years ago but has not been able to bring herself to “touch it in months” because
of anxiety. She said that sitting at the computer and editing and trying to figure out all the steps for publication overwhelms her with anxiety and causes her to disengage and seek out distractions, such as scrolling on Instagram.

During these moments of anxiety, Ms. Y finds the inner critic voice resurface in the form of critical thoughts that weigh her down: “people are going to think you are stupid or silly, maybe you shouldn’t do it after all,” or “is this a stupid idea, will anybody like it, or want to edit it?”

Ms. Y specified that this pattern tends to unfold usually when she is alone at the office, where she gets easily distracted “by looking out the window…or checking email or facebook.” She said that she feels much anxiety about the unknown, which hinders and discourages her greatly, as publishing a book is something she has never done before.

Example 4
Ms. Y said she is currently “in between jobs” but has been procrastinating on determining what kind of employment opportunity she needs to pursue for herself. Specifically, she forwarded a job posting she saw in her psychology program’s community page to herself to look into later but said she had not done “anything about it for two days now.” Instead, she has found herself “having a hard time sitting down, looking at it, and applying for it.” Further, her inner critic voice has been saying, “you’re not qualified for this, this isn’t right for you, etc.,” thus feeding into her to procrastination.
When asked to elaborate, Ms. Y said she is hesitant to look at the job because she is unsure that it is the best fit for her. Specifically, she feels uneasy, unsure, and anxious that it is a virtual job. At this point, she recounted that her last job was virtual and she did have “anxiety with the job, so I’m probably thinking that I might face the same anxiety working from home like I did at that job.” She specified that she wished to find an in-person employment opportunity but instead worked from home for two years and felt her mental health suffer because of this. Thus, she said, “I am afraid if I did that job again, I’d have a harder time in my mind again.”

Counterexample 2

Ms. Y said she has noticed that when she is surrounded with other people, she is significantly more motivated to complete tasks that she is likely to procrastinate on when she is alone. She told me about a program she has participated in through her positive psychology group, which helped her to work productively. This program entailed joining a group of individuals in her program virtually (on Zoom) for a 3-hour period of time, managed by a facilitator, with a variety built-in features she found to be helpful in motivating her to work (e.g., 35-minute quiet study intervals with breaks in between, stretching and water breaks, gratitude exercises, etc.).

Ms. Y also recounted a time when her husband was able to encourage and motivate her to complete a homebuyer’s course that she was struggling to stay engaged with because of feelings of boredom and of feeling overwhelmed by the workload. Her husband was able to motivate her through “friendly competition.” He playfully said, “who’s going to finish it first? I’m going to finish this in the weekend,” which inspired her and to which she responded, “I’m going to finish
it too!” She felt encouraged by her husband’s comment and supportive presence, felt engaged to the material through her curiosity again, and was able to complete the course in two days’ time.

Lifeworld Themes

**Theme 1: Relating to Others as Judgmental/Rejecting of Self versus Connecting with Others**

**Through Ideas as Curious/Interested in Self**

Individuals who score similarly to Ms. Y on the IPIP-NEO tend to be very imaginative (Imagination: 83rd percentile), inquisitive, open, and interested in ideas (Openness: 88th percentile), very tender-hearted and invested in caring for others (Agreeableness: 85th percentile; Altruism: 89th percentile; Sympathy: 98th percentile), and very cheerful (Cheerfulness: 98th percentile) yet simultaneously reserved in social settings (Assertiveness: 21st percentile; Depression: 59th percentile), treading such settings, especially when unfamiliar, with a considerable degree of caution (Cautiousness: 80th percentile), anxiety (Anxiety: 98th percentile), and critical self-consciousness (Self-Consciousness: 98th percentile) that is deeply felt (Emotionality: 92nd percentile) and often challenging to manage or contain in real-time (Vulnerability: 87th percentile).

Indeed, in the examples Ms. Y provided—namely, Examples 1 and 2—Ms. Y was quite eager to participate in her online classes (Cheerfulness: 98th percentile), particularly through offering words of care and consolation to her classmates (Agreeableness: 85th percentile; Altruism: 89th percentile; Sympathy: 98th percentile), but felt held back (Assertiveness: 21st percentile; Depression: 59th percentile; Cautiousness: 80th percentile; Vulnerability: 87th percentile) and anxious (Anxiety: 98th percentile) about how she would be taken up by the “audience” (Self-Consciousness: 98th percentile; Emotionality: 92nd percentile).
This aspect of her experience seems to be quite aptly reflected by her “inner self critic voice,” which appeared to be very present when Ms. Y felt her audience was too large and anonymous and what she was meaning to share were personal feelings of care toward her classmates. This is supported by Counterexample 1, in which Ms. Y felt quite open and willing to share her thoughts about the course material during a slideshow where only the slides and the professor’s video image were visible on her screen, but not all the other classmates’ faces—which seemed to leave the semblance of a one-on-one interaction rather than a group interaction. In other words, these two situational variables—namely, (a) focusing on the course material as her subject matter rather than others’ feelings, and (b) being aware of fewer of her classmates’ presence (as their video images were hidden during the slideshow in the Zoom meeting)—may have been important in disinhibiting Ms. Y’s goal-seeking potential by encouraging her to give fuller expression to her inquisitiveness (Openness: 88th percentile) in a social setting despite her preference to remain reserved (Assertiveness: 21st percentile; Depression: 59th percentile; Cautiousness: 80th percentile) or to feel held back by feelings of anxiousness (Anxiety: 98th percentile), self-consciousness (Self-Consciousness: 98th percentile), and vulnerability (Vulnerability: 87th percentile) when she finds herself before a larger audience. As a consequence, whereas in Examples 1 and 2, Ms. Y experienced others as potentially judgmental or rejecting of her manner of self-expression, in Counterexample 1, she was able to relate to them as curious and welcoming figures who appeared interested in and open to what she had to say.
Theme 2: The Presence of (Helpful) Others Encourages Discipline and Positive Emotions

Individuals who score similarly to Ms. Y on the IPIP-NEO tend to enjoy being around others (Extraversion: 59th percentile) but are likely to feel reserved with initiating interactions and might prefer that others take the first step instead (Assertiveness: 21st percentile). Moreover, they tend to be relatively punctual, productive, and organized (Orderliness: 62nd percentile), very dutiful (Dutifulness: 92nd percentile), and quite meticulous (Cautiousness: 80th percentile), but might run into difficulty with sustaining their engagement with longer tasks (Self-Discipline: 19th percentile) or organizing their steps when a task becomes too cognitively taxing or feels uninteresting (Imagination: 83rd percentile; Artistic Interests: 87th percentile; Emotionality: 92nd percentile; Intellect: 45th percentile).

Indeed, in both Examples 3 and 4, Ms. Y found herself struggling to stay engaged with the task at hand (Self-Discipline: 19th percentile) and instead found herself caught up in a cycle of avoidance that seemed to be characterized by relatively strong feelings of anxiousness (Emotionality: 92nd percentile; Anxiety: 98th percentile), critical self-doubt (Self-Consciousness: 98th percentile), and uncertainty as to how to engage with the task and advance toward the final goal, whether it be typing her written poems into a word document or choosing a job to apply to (Vulnerability: 87th percentile; Intellect: 45th percentile).

When we contrast the story arcs that characterize the events of Examples 3 and 4 with those of Counterexample 2, we are able to make the following observation: In the absence of supportive others, when confronted with situations that elicit strong feelings of anxiousness (Anxiety: 98th percentile), uncertainty (Vulnerability: 87th percentile), and critical self-doubt (Self-Consciousness: 98th percentile), Ms. Y is likely to feel discouraged and fall into a relationship of stagnation or avoidance with the task at hand (Assertiveness: 21st percentile;
Depression: 59th percentile; Self-Discipline: 19th percentile), encountering what she describes as her “inner critic voice.” On the other hand, we find that when Ms. Y is joined with supportive others—such as the working group or her husband, as discussed in Counterexample 2—she comes to feel more engaged with her work and encouraged to complete otherwise uncertain or burdensome tasks. This important difference likely speaks to two aspects of Ms. Y’s personality style. First, although Ms. Y described herself as an introvert during the interview, her score on trait Extraversion suggests that she is more extraverted than 58 percent of individuals who have also completed the IPIP-NEO—meaning that she does not tend toward introversion, objectively speaking, but the opposite. Indeed, her measures suggest that she is tilted ever so slightly toward extraversion as a general rule, meaning that spending time in the presence of other people is not only going to be felt as relatively enjoyable or fun for her but, at times, as necessary. With respect to how this relates to the question of her procrastination, enlisting supportive others in her process of learning and productivity seems to have a compensatory effect on Ms. Y, allowing her to draw a more robust sense of motivation and disciplined engagement from the outside rather than just internally (Assertiveness: 21st percentile; Depression: 59th percentile; Self-Discipline: 19th percentile), along with the capacity to render otherwise overwhelming tasks more cognitively manageable for herself as she progresses toward her aim (Intellect: 45th percentile).

Summary of Personality Styles and Styles of World-Enactment

What is the kind of world that is being gripped by Ms. Y’s trait measures? And how does this world pervasively elude Ms. Y’s grasp in situations of the sort typified by the examples we
discussed together? To shed light on these questions, the collaborative assessment findings indicated the following personality styles and associated styles of world-enactment.

To begin with, Ms. Y displays a highly timid, cautious, and reserved style of interpersonal interaction with others, particularly in group settings. This is to say, in a group setting, Ms. Y will likely tend to experience her audience as particularly critical or rejecting of her thoughts or feelings when she feels insufficiently welcomed, invited, or encouraged to express herself, and so will approach the situation passively (Assertiveness: 21st percentile; Depression: 59th percentile), with great caution, anxiety, vulnerability, and self-consciousness (Neuroticism: 92nd percentile), and with a strong sense of worry or concern for others’ own thoughts and feelings and their appraisals of herself (Agreeableness: 85th percentile).

As seen in Counterexample 1, the findings suggest that addressing members of the group as individuals rather than as a collective might actually be felt as significantly less intimidating and might allow Ms. Y to show up with a greater sense of confidence, and experience the conversational space not as a stage where she will be judged but as a playground of ideas where she can express her innate sense of openness and inquisitiveness more fully (Openness: 88th percentile), have some fun, and be joined in by those around her not as harsh critics but as curious companions in her process.

In the context of productivity and work, Ms. Y displays a social style of learning and task-completion. This is to say, when Ms. Y is faced with tasks that are particularly challenging and ill-defined, she is likely to experience them as nerve-wracking, cognitively overwhelming, or even boring, and be readily prone to disengaging from and avoiding the task at hand (Openness: 88th percentile; Intellect: 45th percentile; Neuroticism: 92nd percentile; Self-Discipline: 19th percentile). Accordingly, once she has effectively disengaged, she may experience her own
avoidance behavior in a harshly negative light, manifest in the form of the inner critic voice and an overarching feeling of “stuckness.”

The findings suggest that being in the presence of supportive others seems to act as a kind of cognitive augmentation that enables and leverages Ms. Y’s sense of disciplined engagement with the task at hand, allowing her to experience it as more manageable and possibly even fun or enjoyable rather than dreadful and overwhelming. In other words, supports of the kind Ms. Y identified in Counterexample 2 (i.e., the working group and her husband) fulfil a compensatory function that curbs her tendency to pre-emptively disengage when feeling bored (Self-Discipline: 19th percentile; Assertiveness: 21st percentile) or cognitively overwhelmed by the complexity of the task at hand (Intellect: 45th percentile).
Individualized Enactive Personality Assessment Report

Participant: Mr. Z

Introduction

Mr. Z is a 25-year-old heterosexual man of European descent living in Canada who agreed to partake in an individualized personality assessment using the IPIP-NEO—an instrument based on the five-factor model (FFM) of personality. This individualized report contains (1) a set of focal questions that were generated collaboratively with Mr. Z during the first interview, (2) Mr. Z’s IPIP-NEO results, (3) a summary of the examples and counterexamples that Mr. Z provided to ground his focal questions in his lived experience, (4) an individualized interpretation of how Mr. Z’s personality traits reflect his style of world-enactment as seen through his examples, and (5) a narrative interpretation of how Mr. Z’s distinct style of world-enactment can shed light on the focal questions generated collaboratively at the outset of the assessment.

Focal Questions

Mr. Z and I met for 1.5 hours. The purpose of the study was explained to him, the relevant procedures stated, and the limits of confidentiality discussed. He provided his informed consent and we sought to identify two focal questions to guide the assessment process. After approximately five minutes of deliberation, Mr. Z identified and phrased the following two questions:

1. Why is it that when I am faced with new tasks, I tend to underestimate the degree of commitment required to effectively manage and complete the task?

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2. Why do I care about what others think when it negatively affects me?

At the end of the initial interview, Mr. Z was instructed to complete an IPIP-NEO questionnaire and forward his results to me in an email, which have been included in the section below.

### IPIP-NEO Assessment Results

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<tr>
<th>DOMAIN/Facet</th>
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<td>..Gregariousness</td>
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<tr>
<td>..Assertiveness</td>
<td>65</td>
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<td>..Activity Level</td>
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<tr>
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This section contains a summary of the two examples and one counterexample that Mr. Z provided for the patterns implicated in each of his focal questions.

Focal Question 1: Why is it that when I am faced with new tasks, I tend to underestimate the degree of commitment required to effectively manage and complete the task?

Example 1
Mr. Z began by recounting that for most of his life, work had always felt quite easy, but as he grew older and the difficulty of his work increased, he eventually struggled to “keep up.” He recalled a time in his first year of undergraduate studies in a software engineering course he was taking. He said that the first four weeks of the course were especially straightforward, which he described as “disgustingly easy and even insulting to people who had used a computer before.” He recollected how he managed the first assignment of the course, which he found to be relatively straightforward and simple but nevertheless did not approach it in the most efficient way he could. He likened this assignment to moving gravel from one pit to another without considering all the possible difficulties one might encounter along the way, such as spills, how to mix the gravel with the dirt, etc. In other words, the school assignment seemed “like a simple
task but a lot of side-effects to account for…to make a clean program, you have to account for logic bugs, memory allocation.” He continued, “we were also being graded on other aspects too, underlying nuances, that I completely ignored in favor of just finishing the task in as minimal an amount of time as possible.”

Example 2

Mr. Z recalled what the second assignment for the same course was like for him. He said, “in the first one, I at least completed it, but the second one, I had to get a lot of help from a friend.” He added that he underestimated the task by neglecting all the subtasks, and that he couldn’t get beyond just minimally completing the assignment like he did with the previous task. He said he was not prepared to complete the assignment before the due date. He found himself thinking “I don’t know what half of this is, but I’m sure that eventually I will know.” However, he added, “the problem is, I make no effort to eventually find out; considering the rest of it is straightforward, I assume I’m going to know it eventually.” When I prompted him to elaborate on what the “straightforwardness” is like, he said “it feels like I can do it, like confirmation of my own bias that I am good, I don’t need to do much more.”

At this point, another example occurred to Mr. Z, which he chose to share. He recalled a time when he went to a lake with his friends and, while swimming, saw an island off in the distance and thought he could “probably swim there.” He noted, “mind you, I did use to be on the swim team but hadn’t done any major cardio or swimming in years, but nevertheless thought I could swim there.” “So,” Mr. Z continued, “I tried and got out pretty far, farther than I should have, until I realized I can’t do this, which I should’ve realized right from the start.” He clarified that
there was no social pressure on the part of his friends for him to swim to the island. Rather, he had decided to swim to the island just because he saw it and thought to himself, “I want to swim to that island, and I can swim to that island just because I can.”

*Counterexample 1*

Mr. Z began by speaking to what it is like when a situation makes him think, “I can’t do it.” He said, “If I think I can do it, I get comfortable and that’s it. If I don’t think I can do it, I get to go ahead with it and solve it.” He further elaborated that the thought “I can’t do it” leads him to take the situation “a lot more seriously” by putting “a lot more thought into it” and planning. He said his “brain starts looking at avenues it usually wouldn’t be.”

Mr. Z then recalled a math course he took in university in which he “got a nice total of 26%” on the midterm. Up until this point, he said “I thought I could do it.” After that midterm, however, he experienced a kind of “reality check” which led him to realize, “No, I cannot do this.” Mr. Z described the two months following the midterm as the most productive time of his life—he said, “I put more into that course than I put into anything else in my life.”

This was a course on discrete math, a separate branch of mathematics that “most people won’t actually encounter: probabilities and sets of data.” Mr. Z seemed to appreciate the counterintuitive aspect of this branch of mathematics, which engaged his intellect and imagination. After the midterm, he recalled that he started waking up early and spending a lot of time studying by himself, which allowed him to be more productive. He recalled, “for the first
time ever, in third year, I started making use of the TA hours, I spoke with the TA’s and the professor in his office hours and he started recognizing me. This was a course that clicked in place.”

**Focal Question 2: Why I do care about what others think when it negatively affects me?**

**Example 3**

Mr. Z recalled the relationship he had with his “high school sweetheart,” which he saw as part of a pattern in which he stays with a significant other longer than he feels he should because he does not wish to cause them sadness. He recalled that prior to the relationship forming, the girl was helping him with his mathematics schoolwork. He said he was aware that she had feelings for him and that she liked him, but he did not hold any strong feelings for her. He said this state “dragged on” for a bit but he never initiated anything that would deepen or change the nature of the friendship into something “more.” Eventually, however, they went on a camping trip in high school where they spent a nice evening together, at which point he thought to himself, “eh why not?” and asked her out. He said he felt guilty because “she did put all this time and effort in me and I thought I’d make her feel nice.” At the same time, he recalled thinking, “I guess I wouldn’t mind being with her, I know she likes me, no risk there”—and so, he said, “this did not feel like a leap of faith but an informed decision.” Nevertheless, Mr. Z said he had been in love before and knew what love was like, and he knew he did not love her.
Example 4

Mr. Z recalled a similar situation in which the difference was that the girl who was interested in him was the one to make the first move. He said, “I wasn’t the one making the decision but was pushed into it by her.” He recalled that they started spending a lot of time together as co-workers at first, until eventually, while studying together, she voiced her interest in him and they went on a date. Shortly after, Mr. Z felt he did not want to be with her and recalled that he did feel bad but did not want to share his feelings with her so as not to cause her sadness. The entire relationship lasted two years. He said, “it’s not that I didn’t like her, she just had behaviors I didn’t particularly like.” He added, “every time I just thought to myself, you know what, she’s part of your culture, what are your chances of getting with another one?” He remembers thinking to himself, “yeah I can suck it up, no biggie,” until he realized he felt “genuinely unhappy” seeing her.

Counterexample 2

Mr. Z recalled a close high school friend who liked a girl but was too afraid to approach her. Thus, Mr. Z sought to help his friend by “getting them to talk.” He recounted that they were on the sports team together, and so, one day, he suggested they should all stay back and play some more. He said, “it was great till she asked me, instead of him, to stay back and play some more.” At this point, Mr. Z thought he had made “a blunder.” After this point, he said he had to stop talking to her not to risk betraying his friend, even though the girl’s friends were also trying to encourage Mr. Z to talk to her. He explained that he felt somewhat guilty for the girl for shutting her down, but that he felt worse for his friend, who would have felt sad and betrayed because
“this was one of the first girls he had actually shown some interest in as well, and he had been rejected by the previous one.”

When I asked Mr. Z how his friend might have reacted if Mr. Z had chosen to approach the girl instead, he said that his friend would have felt betrayed, angry, and sad, and that his other friendships would have been affected as well. He elaborated that such a scenario “would have made me feel not worthy of friendship, because if I am a friend who does that, then what kind of a person am I?” He explained, “I do value loyalty, this is an obvious example not just of disloyalty, but of breaking loyalty; it would have gone against my own values.”

Lifeworld Themes

Theme 1: Optimistic Confidence and the “I Can Attitude” vs. Reflective Engagement and the “I Can’t Attitude”

Individuals who score similarly as Mr. Z on the IPIP-NEO tend to approach tasks assigned at work or school with a relatively high degree of confidence in their ability to manage and work through such tasks [Self-efficacy: 70th percentile; Modesty: 27th percentile], often readily able to identify and understand the end goal in a task and be moved by it [Extraversion: 79th percentile; Imagination: 87th percentile; Intellect: 84th percentile], typically without feeling anxious [Anxiety: 6th percentile], threatened [Anger: 12th percentile], or emotionally impacted by the possible risks or challenges that might arise in the pursuit of goals [Vulnerability: 9th percentile]. Such individuals are also prone to not taking such negative possibilities (i.e., risks and possible side-challenges) into sufficient consideration [Neuroticism: 12th percentile] and may struggle
with remaining engaged with tasks when they do feel challenged [Self-discipline: 28\textsuperscript{th} percentile; Dutifulness: 45\textsuperscript{th} percentile].

Indeed, in both Examples 1 and 2, when Mr. Z was given an assignment, he saw it as relatively easy and straightforward to complete because he readily understood the end goal that was required of him [Extraversion: 79\textsuperscript{th} percentile; Imagination: 87\textsuperscript{th} percentile; Intellect: 84\textsuperscript{th} percentile]. In turn, he felt quite confident in his ability to reach the end goal [Self-efficacy: 70\textsuperscript{th} percentile; Modesty: 27\textsuperscript{th} percentile] and felt quite poised initially [Anxiety: 6\textsuperscript{th} percentile; Vulnerability: 9\textsuperscript{th} percentile]. However, in both cases, Mr. Z displayed a tendency to omit from consideration possible problems that might arise along the way and demand more work on his part [Neuroticism: 12\textsuperscript{th} percentile], as well as a tendency to disengage from the task once it has (pre-emptively) been apprehended as “doable” [Self-discipline: 28\textsuperscript{th} percentile; Dutifulness: 45\textsuperscript{th} percentile].

However, when we contrast the events as seen in Examples 1 and 2 with those of Counterexample 1, we are able to draw the following observations. To begin with, when Mr. Z’s mindset shifted from an “I Can Attitude” to an “I Can’t Attitude,” he displayed a capacity to thoughtfully and meticulously engage with and take into fuller consideration aspects of the assigned task that he had initially neglected to consider [Cautiousness: 90\textsuperscript{th} percentile; Orderliness: 72\textsuperscript{nd} percentile; Imagination: 87\textsuperscript{th} percentile; Intellect: 84\textsuperscript{th} percentile]. Although this temporarily heightened Mr. Z’s sensitivity to risk and brought up some feelings of discomfort, anxiety, or distress, it nevertheless allowed him to determine an appropriate set of steps by which to effectively tackle the assignment, without necessarily feeling overwhelmed or helpless along the way [Cautiousness: 90\textsuperscript{th} percentile; Orderliness: 72\textsuperscript{nd} percentile]. Part of this entailed “studying alone” for a sustained period of time, whereby Mr. Z was able to concentrate on his
coursework by (1) curbing his innate need for social interaction [Extraversion: 79\textsuperscript{th} percentile] and reducing social distractions [Immoderation: 5\textsuperscript{th} percentile] while (2) seeking and enlisting the help of his teaching assistants/professors during office hours [Extraversion: 79\textsuperscript{th} percentile].

\textit{Theme 2: Caring from a Distance vs. Caring from Up Close}

Individuals who score similarly as Mr. Z on the IPIP-NEO tend to be strongly interested in fostering and maintaining social relationships and being around others and in groups [Extraversion: 79\textsuperscript{th} percentile; Gregariousness: 90\textsuperscript{th} percentile]. Moreover, they are seen by others as emotionally uplifting, positively-minded, friendly, and approachable [Cheerfulness: 77\textsuperscript{th} percentile; Friendliness: 78\textsuperscript{th} percentile], and generally feel emotionally stable, secure, and confident in themselves [Neuroticism: 12\textsuperscript{th} percentile; Modesty: 27\textsuperscript{th} percentile]. Although such individuals enjoy helping others and view such acts as intrinsically fulfilling rather than as constituting self-sacrifice [Altruism: 78\textsuperscript{th} percentile], they are generally able to prioritize their own needs (over those of others) without being moved to strong feelings of guilt or pity [Agreeableness: 28\textsuperscript{th} percentile; Sympathy: 28\textsuperscript{th} percentile].

In spite of this, Mr. Z’s experiences as seen through Examples 3 and 4 displayed states that would not be predicted by his trait measures, in which he found himself “caring” more than usual what others would think or feel even if it affected him negatively. In this way, Examples 3 and 4 reflected stylistic tendencies that constituted the exception to the rule rather than the rule itself. To understand what made these exceptional states possible in Mr. Z’s experiences, we need to consider the relevant differences that obtained between Examples 3 and 4, on the one hand, and Counterexample 2, on the other hand. This allows us to draw the following two observations. First, in Examples 3 and 4, Mr. Z’s relationship with the girls he became romantically involved
with had already been formed prior to their romantic involvement together. In other words, Mr. Z had presumably spent sufficient time with these girls to have developed a more personal bond or attachment with each of them, whereas the relation he held with the girl in Counterexample 2 had been less personal and was thus felt as more distant. We can plausibly infer, therefore, that although Mr. Z is not one to normally be moved to feelings of guilt or pity, these feelings nevertheless become more probable and even normal for him in contexts where he has developed a closer bond or relationship with a potential romantic partner. In other words, we might state, the presence of a more personal bond and closer attachment to an individual fulfills a compensatory function that makes more agreeable behavior on the part of Mr. Z more likely. In addition, in both cases (Examples 3 and 4), once Mr. Z was romantically involved with a girl, he displayed a very strong tendency of paying insufficient attention to [Extraversion: 79th percentile; Neuroticism: 12th percentile] or downplaying or withholding any urges or impulses within himself that might have been of a more disagreeable nature [Immoderation: 6th percentile; Anger: 12th percentile] and would have therefore led to conflict within the relationship he was in—a tendency that he was able to sustain for an extended period of time [Depression: 51st percentile; Self-consciousness: 41st percentile; Morality: 22nd percentile].

The second observation builds off of the first: in contrast to Examples 3 and 4, Counterexample 2 displays how Mr. Z’s tendency to become quite protective of someone else’s needs to the point where he might readily prioritize theirs over his own can nevertheless play an important role in preventing him from merely acting out of guilt. Specifically, although he felt “bad” for refusing to speak to the girl in Counterexample 2, he was mainly concerned with protecting his friendship as well as his positive social image, which he presumably associates
with his capacity to form and maintain friendships, from being lost [Extraversion: 79th percentile; Cautiousness: 90th percentile; Immoderation: 6th percentile].

Summary of Personality Styles and Styles of World-Enactment

What is the kind of world that is being gripped by Mr. Z’s trait measures? And how does this world pervasively elude Mr. Z’s grasp in situations of the sort typified by the examples we discussed together? To shed light on these questions, the collaborative assessment findings indicated the following personality styles and associated styles of world-enactment.

To begin with, Mr. Z displays a confident, poised, and optimistic style of planning and preparing for tasks. On this basis, in similar contexts as those depicted in Examples 1 and 2, Mr. Z will exhibit the following set of stylistic tendencies. First, a tendency to judge the relevance and feasibility of a task based mainly on the facility with which he feels he has apprehended its final goal through his intellect or imagination. In other words, Mr. Z will treat a task as feasible and himself as capable to the degree he has apprehended the final goal with a felt sense of ease. Moreover, a task is seen as a process of goal-pursuit and hardly, if at all, as a process of risk-management, wherefore successful goal-pursuit is taken as something to be realized at a future point and is simply presumed to be inevitable, rather than a consequence of and dependent upon sustained and disciplined, effortful engagement that must begin in the present. Finally, assignments that do not require group work and are to be completed in isolation from others might be seen as particularly tedious and unappealing by Mr. Z, given that the world of the extravert is predominantly organized around and thereby incentivized by social meanings. In light of these stylistic tendencies, Mr. Z might find it worthwhile to consider that the felt sense of having easily apprehended the final goal of a task might actually be creating an illusion of
feasibility and simplicity and thus cannot be so readily trusted but must be checked against the objective requirements for completing a task. Voluntarily leaning into the “I Can’t Attitude” rather than defaulting into the “I Can Attitude” might potentially ameliorate some of the stylistic drawbacks that tend to arise (as seen in Examples 1 and 2) when confronted with more complex tasks that instead demand careful and effortful planning and sustained attention to effectively work through.

Mr. Z also displays a relatively **cheerful and friendly but autonomous style of caring for and relating to others in the social domain.** On this basis, Mr. Z will likely exhibit the following stylistic tendencies. First, a tendency to apprehend the world as a predominantly social world, replete with possibilities for social interaction that call on him to be acted upon and seized. In such a world, Mr. Z will typically feel that he is likeable and approachable to others, and experience others as accessible to himself and as sources of potential connection, acquaintanceship, or even friendship. Moreover, Mr. Z will tend to treat others as deserving of his care when possible or needed, but will generally not lose sight of his own needs and not be easily moved to pity or guilt when deliberating whether to meet his needs or those of others.

However, as seen through Examples 3 and 4, when Mr. Z has developed a closer, more personal bond or attachment to a woman, he begins to display a more **accommodating, protective, and self-sacrificing style of caring for and relating to the woman in question.** In similar circumstances, Mr. Z is likely to experience the woman in question as being in need of care and protection, and being particularly vulnerable to rejection or abandonment, of “being made to feel sad.” In such moments, any thoughts or feelings that Mr. Z comes to within himself as disagreeable or rejecting of her are likely to be held back through guilt, with their potential importance considerably downplayed, finding little to no expression in the world through his
speech or behavior. When Mr. Z finds either his own social image—(and thus his reputation and
capacity to make friendships with others)—or the feelings of a close friend as being seriously
under threat (as in Counterexample 2), only then do any disagreeable thoughts or feelings within
himself gain enough importance to be expressed despite the guilt that might arise from rejecting
a woman who might be interested in him.

In light of these stylistic tendencies, Mr. Z might find it worthwhile to consider that
deliberately maintaining a sense of distance in a relationship might offer him a possible way of
mitigating his tendency to fall into the accommodating, protective, and self-sacrificing style of
caring that has led him to “care about what others think even when it affects him negatively.”
Furthermore, deliberately treating himself as someone whose needs he could care for and seek to
protect as he would a close friend might offer him a possible way of mitigating his tendency to
downplay the importance of his disagreeable and even rejecting impulses but to confidently give
them expression through speech and behavior and to therefore be more true to his “normal self.”
Let us return, once more, to where we first started: the broader theoretical context of this research. Enactivist cognitive science mobilizes a set of theoretical resources drawn from disciplined phenomenologies of lived experience and the sciences of mind to broach the hard problem of consciousness without resorting to (ontological or epistemological) reductionism. Yet, for the most part, enactivism has interrogated the distinctly human realm without a paradigmatic model of human cognitive life at hand, confronting what we have termed the phenomenological gap between minimal and human cognition. The major theoretical claim of this dissertation has been to propose EB5T as a means of bridging this gap, insofar as traits—the basic unit of analysis in personality theory—constitute the ontological nexus point where several essential aspects of human experience (e.g., cognition, emotion, motivation, and action) converge, and the FFM—on which EB5T is based—describes the structure of human personality along the five major dimensions that are thought to be universal: Conscientiousness, Agreeableness, Neuroticism, Openness, and Extraversion. In other words, as we have argued, EB5T promises to bridge the phenomenological gap by modelling the broadscale structures of human significance vis-à-vis personality theory akin to the way the theory of autopoiesis models the normative organization of the cell vis-à-vis the metabolic and motor pathways that allow the cell to survive in its indigenous environment.

Accordingly, the major methodological move for leveraging this theoretical position has entailed re-conceptualizing traits into styles of world-enactment and advancing, on this basis, a novel paradigm for researching the phenomenology of individual differences empirically. The method by which such research can be undertaken, as was proposed in Chapter 4, requires
repurposing Fischer’s (1994) individualized approach to assessment into a qualitative method of thematizing the structural mutualities of self and world that are implicated as *styles* in a problem situation from the point of view of the traits. Thus, if trait measures are descriptions of stylistic differences in world-enactment tendencies, then what a phenomenology of individual differences grounded in EB5T seeks to disclose is how a person’s traits find life within their experience as styles. More specifically, the research question posed by this emerging paradigm is, what exactly does the enactment of a world from the trait perspective look like and how do individual differences in trait measures correspond to differences in the kinds of worlds that are brought forth?

The present chapter seeks to discuss the major findings of this study toward further articulating the central construct of this dissertation, styles of world-enactment, for leveraging future research on the phenomenology of individual differences. The first part of this chapter reviews the theoretical underpinnings of the construct in reference to existing research on EB5T, setting the stage for a discussion of the empirical findings and their implications for theory (i.e., Hovhannisyan & Vervaeke, 2022; Hovhannisyan & Goicoechea, 2023). The second part of this chapter includes a series of propositions drawn from the present research toward articulating what *styles of world-enactment* consist of exactly, and how they can be measured in the context and for the purposes of psychological research. It also discusses the reasons why a fourth report (for Participant O) was not generated and derives a set of necessary guidelines for future research on the phenomenology of individual differences. Finally, the last part of this chapter discusses the limitations of the study.
The Theoretical Underpinnings of the Construct of Interest

The phenomenological turn in the study of individual differences begins with the proposition that individual differences in traits correspond to differences in styles of world-enactment (Hovhannisyan & Vervaeke, 2022; Hovhannisyan & Goicoechea, 2023). In other words, “trait measures as represented on the NEO clue us in [to] ways of enacting or bringing forth our worlds that are stylistic of who we are” (Hovhannisyan & Goicoechea, 2023, p. 17). What this means is, how one measures on the five major traits will correspond to how one generally perceives the world; and how the world is seen is therefore but a reflection of who one tends to be across situations, a feature captured by the traits. Table 1 illustrates this phenomenological mutuality by sketching in broad strokes the kinds of worlds associated with high versus low scorers on each of the five trait dimensions (adapted from Hovhannisyan & Goicoechea, 2023):

<table>
<thead>
<tr>
<th>TRAITS</th>
<th>STYLES OF WORLD-ENACTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSCIENTIOUSNESS</td>
<td>High scorers enact worlds in which the imagined future is more immediately and concretely present, calling to be organized and planned</td>
</tr>
<tr>
<td></td>
<td>Low scorers enact a future that is felt from a greater distance and competes much less powerfully for their attention than do their immediate concerns</td>
</tr>
<tr>
<td>AGREABLENESS</td>
<td>High scorers enact the world as belonging primarily to others in which others’ concerns and personal projects are enacted as most important</td>
</tr>
<tr>
<td></td>
<td>Low scorers enact the world as belonging primarily to themselves, in which their own projects take centerstage</td>
</tr>
</tbody>
</table>

This proposition is rooted in the phenomenological notion that the self and world are co-implicated and mutually bound as part of the same unitary structure: lived experience (Hovhannisyan & Goicoechea, 2023). This notion finds its roots in the phenomenologies of Merleau-Ponty (1942/1963) and Husserl (1954/1970).
NEUROTICISM

**High scorers** enact worlds as hostile, threatening to their livelihood, and needing to be escaped

**Low scorers** enact worlds that feel relatively safe and habitable and inviting

OPENNESS

**High scorers** enact worlds that are organized around what is otherwise invisible to the naked eye and can only be disclosed in thought or the imagination

**Low scorers** enact worlds that are organized around what can be most concretely seen

EXTRAVERSION

**High scorers** enact worlds that ring with exciting possibilities to be explored

**Low scorers** enact worlds characterized by a kind of stability in remaining where one already tends to be

**Table 1.** An illustration of some general differences in the kinds of worlds enacted by high versus low scorers on each of the five trait dimensions.

Let us also recall, as per EB5T, that “each trait corresponds to a domain of psychological functioning that characterizes human reality as it is lived” (Hovhannisyan & Goicoechea 2023, p. 17). Consequently, the phenomenology of individual differences has functional implications as well, which EB5T explains in terms of the optimal grip and the broader evolutionary context of the adaptivity of traits (Hovhannisyan & Vervaeke, 2022).

Hovhannisyan and Vervaeke (2022) explain that individual differences evolved because personality type variation granted our species an important biological advantage, namely a kind of fittedness to the world that individuals cannot attain on their own—thereby maximizing our problem-solving potential on the whole. This is because, rather than making every individual member a *jack-of-all-trades*, and thereby forfeiting a degree of adaptivity that comes with being a specialist, the existence of individual differences within a group makes it possible for the group as a whole to become a *master-of-all-trades* by allowing the members to (1) become specialists
in terms of their own distinct trait profiles and (2) to complement each other's personality differences through means of distributed cognition (Hovhannisyan & Vervaeke, 2022, p. 367-368).

An important consequence of this evolutionary conceptualization is that no personality type is going to be wholly adaptive or wholly maladaptive, but only partially and in relation to the context a person is in—implicating what Hovhannisyan and Vervaeke (2022) conceptualize as the optimal grip that is afforded between a person and their situation vis-à-vis their traits.

The function of gripping necessarily entails that certain styles of grip will be suboptimal in certain situations. For example, when opportunities for socialization become restricted because of a demanding work schedule, an extravert with a strong need to be around others will come to feel lonely. An introverted counterpart, on the other hand, will be relatively unbothered by the fewer opportunities to socialize and will go about business as usual. By extension, the extravert will be more willing to seek out opportunities to socialize, potentially ameliorating their state of loneliness through their own initiative, whereas the introvert might be less willing to initiate and might instead endure the loneliness until something in the environment has changed.

What we notice through illustrations of this kind is that styles of grip and styles of world-enactment both belong to the same underlying (adaptive) structure that is reflected in the traits, and are therefore co-implicated in lived experience. In other words, our styles of world-enactment predispose us to gripping the world in particular ways that are best suited to our individual needs (which are also reflected in our traits). A suboptimal grip occurs when we are grasping but failing to bring the world into an optimal grip based on our style and associated needs. This happens when the kind of world we are predisposed to gripping and the kind of world we are trying to bring into our grip are not the same world. When the world eludes one’s
style of grip, it is felt as distressing and implicates a breakdown in person-situation fit, as in the case of the lonely extravert. Styles of world-enactment therefore fulfil the adaptive function of fitting the person to the world in a particular way, and the world as it is being grasped is the world as seen and encountered in perception.

Empirical Insights on the Nature of the World-Enactment and Optimal Grip

The phenomenology of individual differences is not merely interested in describing what individuals are like, as this is the task of traditional trait psychology. Rather, it seeks to disclose the inherent co-relations between individuals’ trait measures and how these reflect and prefigure the manners in which the world is disclosed in their perception. As a research paradigm that is grounded in EB5T, the phenomenology of individual differences is primarily concerned with disclosing how individual differences in trait measures correspond to differences in how we bring forth and participate in the worlds we experience as “already there.” Accordingly, the access point for the present research thus became the world of repetitious distress, which implicates pervasive breakdowns in person-situation fit that can be readily investigated vis-à-vis trait measures collected through the IPIP-NEO.

Apprehending the Relationship Between Styles and Worlds

In the broadest sense, the results of the present study garnered preliminary empirical evidence in support of the viability of the proposed paradigm. To begin with, the results shed light on the relationship between traits as styles of world-enactment and the world as it is lived, by demonstrating how participants’ various traits found life in their experiences of repetitious distress. A style of world-enactment is a description of how one’s manners of participation in the
world, as reflected by one’s traits, prefigure the world as seen and encountered in perception—and later recalled and reconstructed through language (a point we plan to highlight at the end of this chapter in “Study Limitations”). Simply stated, what one sees is how one is enacting what one sees, which is prefigured by one’s underlying trait structure. For example, recall that Participant X’s interpersonal, imaginative, and empathic style of opportunity-seeking in the romantic context predisposed him to perceiving a woman’s interest in him through the “openness” he senses in her body language: when she behaves in a way that is seen as expressive and welcoming, he will perceive her as being attracted to him. Similarly, Participant W’s highly timid, cautious, and reserved style of interpersonal interaction with others predisposed her to perceiving groups as particularly critical or rejecting of her thoughts or feelings, leading her to adopt a more passive and withdrawn stance when expressing herself. Finally, Participant Y’s confident, poised, and optimistic style of planning and preparing for tasks predisposed him to perceiving tasks as feasible and requiring little to no effort to complete to the degree that their main goal was easily apprehended through the imagination or the intellect.

These examples illustrate that traits help us to disclose stylistic tendencies, which capture how we organize and come to interact with the world of perception at longer timescales; and the world as we encounter it in perception, therefore, thus becomes but a reflection of one’s styles of world-enactment and dispositional tendencies for optimal gripping.

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4 The terms “enacted” were replaced with “perceived” or “seen” or “experienced as” in the final report as per the iterative guideline because “enacted” is not a lifeworld term but rather confusing from a lay perspective.
Disclosing the Underlying Trait Structure of a Style

As an empirically driven research paradigm with a qualitative focus, the phenomenology of individual differences includes procedures that are partly standardizable and, therefore, replicable, and partly not. Fundamentally, by applying the procedures outlined in Chapter 4, the investigator seeks to thematize a participant’s styles of world-enactment by contextualizing their traits in the narrative arc of their experience—which (in the case of this study) was about the repetitious pattern(s) identified by the participant at the outset of the interview.

To this end, the investigator begins by transcribing the participant’s verbal account of the pattern at hand as witnessed in the examples—importantly, the pattern in question is treated as a “type of experience” in the phenomenological sense so as to make phenomenological engagement with the content possible (Giorgi, 2009). This step is relatively straightforward and easily replicable, as it merely entails the transcription of verbal content that is collected during the interview. Then, the investigator codes the entire transcript for traits and ventures to disclose the underlying trait structure of the participant’s styles through a careful process of selection in which overlapping combinations of traits that appear to constellate regularly across examples within an example set are selected and treated as the structural basis implicated in a given style.

Although the application of coding procedures depends partly on the degree of familiarity and proficiency with the various trait categories and their respective functions, the process by which the relevant set of traits is selected to act as the structural basis underlying a given style depends on the application of one simple (and standardizable) rule: the resultant trait substructure of a given style should include only those traits that are found to be common across all the examples in a given example set. Unless this rule is met, no set of traits can be said to

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5 This is methodologically necessary insofar as the subject matter of phenomenology, ultimately, is not experience per se but types of experience.
form the substructure of a given style and should therefore not be used for the purposes of generating themes in later stages of the research process.

Once a given trait constellation has been established as invariant, the interpretive task becomes to thematize how it figures into the pattern at hand as witnessed in the examples provided. Technically speaking, styles are therefore thematizations of the patterned ways in which certain traits constellate together and come to life within experience, structuring how the world and its manners of unfolding are organized, felt, and experienced by the person across a wide range of situations.

Given the degree of hermeneutic complexity entailed in research of this kind, the disclosure of what is properly stylistic about a behavior from the trait perspective is ultimately bound to not only challenge traditional notions of objectivity in research but also confront issues of validity. In the final stage of the research process, therefore, the investigator shares the findings in the form of an individualized report and seeks to collect the participant’s feedback on how well the descriptions included in the report capture the participant’s experiences of their own patterns and styles. Participant feedback in this case is not meant to ameliorate concerns around validity entirely but to add a degree of confidence in the plausibility of the research findings that cannot be ensured by the procedures alone.

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6 After all, there are several hermeneutic obstacles an investigator must contend with when thematizing a participant’s styles of world-enactment: (a) the kind of verbal account that emerges from the dialogue between investigator and participant, (b) the investigator’s familiarity and level of proficiency with the various trait categories and their respective functions, which are to be tagged where applicable in the transcript during the coding phase, and (c) the investigator’s level of descriptive and conceptual competence in capturing how the participant’s behavior is stylistic across a range of similar such situations.
Revealing Compensatory Functions Through Counterexamples

The use of counterexamples is crucial for locating sources of trait-situation mismatch or suboptimal gripping within a participant’s experience. The examples collected from the participant represent instances wherein a repetitious pattern of distress has revealed itself as phenomenon. Conversely, the counterexample corresponding to each example set serves to establish a contrast class in which the pattern was not realized because of the effects of some unknown set of states or variables. The research task then becomes to identify the unknown set of states or variables in question and to understand how their effects on the participant led to a different kind of outcome than what would have been predicted by the pattern at hand. Phenomenologically speaking, this step in the research process constitutes a specialized application of Husserlian imaginative variation in which an eidetic reduction is being performed on the repetitious pattern of distress as it is lived, in the service of disclosing its phenomenological structure as a style of world-enactment.

Once the verbal account of the counterexample has been transcribed, the investigator codes it for traits by applying the same procedures as with the examples. The investigator finds that the emergent constellation of traits in the counterexample resembles but is not identical to the constellation of traits that was shown to be invariant in the corresponding example set. By contrast with the examples in which the repetitious pattern of distress was able to find life, the counterexample denotes an instance in which optimal gripping was achieved and therefore hints at the presence of states or variables that make optimal gripping possible by fulfilling a compensatory function for one’s typical trait deficits or surpluses—that is, one’s stylistic
The states or variables that make optimal gripping possible in this way are disclosed by comparing the relevant characterological and situational conditions in the examples and counterexample and identifying conditions in the counterexample not shared by the examples. Characterological differences are identified by contrasting the emergent trait constellation in the counterexample with that of the example set. Situational differences, accordingly, are identified by contrasting the broader narrative account of the counterexample with those of the example set.

In some cases, the compensatory function revealed is fulfilled by situational states or variables disclosed in the counterexample. For example, recall that in Participant Y’s case, the presence of supportive others fulfills a compensatory role that enables and leverages her sense of disciplined engagement with the task at hand, allowing her to experience it as more manageable and possibly even fun or enjoyable rather than dreadful and overwhelming, preventing procrastination. In other cases, the compensatory function is fulfilled by some of the participant’s own traits that appeared to be absent in the situations discussed in the example set. Recall that in Participant Z’s case, shifting into the “I Can’t Attitude” would allow him to bring his conscientiousness and intellect to bear on an otherwise simple seeming task, effectively curbing the tendency brought about by the “I Can Attitude” to assume that a problem will be less demanding than it actually is.

When considered from the perspective of our theoretical framework, which finds grounding in RR, compensatory functions take on a vital significance. In all cases, a compensatory function is brought in as a kind of opponent process that mitigates the costs of an

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The specialized form of eidetic reduction on repetitious patterns of distress exemplified here essentially acts as a method of disclosing conditions of possibility for optimal gripping in an individualized manner.
individual’s default, “suboptimal” coping strategy. It adjusts the kind of grip that is being realized in their world to afford a more appropriate fit between their manner of being in the world and the adaptive demands of their situation. Compensatory functions and their effects on the person directly tap into and demonstrate one of the core principles of relevance realization theory: optimization.

The investigator’s task then becomes to capture and convey the compensatory functions revealed through the participant’s counterexamples as a way of disclosing a means to “pivoting” onto a more viable pathway wherein optimization of their RR is made possible. The assumption is that conveying the conditions that make optimal gripping possible to the participant affords an opportunity to realize these conditions in the future, bringing forth an optimal grip in spite of one’s stylistic drawbacks.

Primary vs. Secondary Styles

In some cases, the investigator will notice that the participant has identified a stylistic tendency toward a suboptimal grip that does not necessarily reflect their normal trait measures but departs from them. In the present study, this was brought to light when, during the coding phase, the investigator identified a set of states in the transcript (i.e., a strong sense of guilt and desire not to disappoint others) that were not predicted by Participant Z’s normal trait measures (i.e., low agreeableness, low neuroticism). When a pattern identified by a participant in their examples consists of states that are not predicted by their trait measures, this hints at the presence of less pervasive or pronounced but nevertheless real stylistic tendencies—which we may term secondary styles. Whereas trait measures reflect stylistic tendencies that are global and pervasive
in their expression and can thus be said to be *primary* expressions of the personality, secondary styles are relatively more circumscribed and local in their manifestation.

In Participant Z’s case, an interesting reversal of meaning occurred in which the examples given by the participant came to serve as the exception and the counterexample as the rule. This is because, unlike the examples, the counterexample was representative of the participant’s trait profile and was thus reflective of the participant’s primary style of world-enactment, which, instead of the examples, is what hinted at the conditions for achieving an optimal grip (by returning to one’s primary stylistic tendencies rather than augmenting them with compensatory functions). The research task thus became to identify a *decompensatory function* fulfilled in the examples that led to the manifestation of the suboptimal, secondary style over the optimal, primary one, as would normally be expected to be the case. In the case of Participant Z, the presence of a personal bond with the women of interest served the *decompensatory function* of elevating Participant Z’s level of agreeableness to an atypical degree not predicted by his normal trait measures, making him susceptible to feelings of guilt he would not normally feel. Interestingly, achieving an optimal grip in cases similar to Participant Z’s second pattern requires not the presence of a compensatory function so as to mitigate the maladaptive features of an individual’s style of grip (as with Participants X and Y) but the removal of a decompensatory function so as to return the individual to their default, optimal style of gripping the world.

The Phenomenological Structure of Repetitious Distress

In seeking to disclose how our traits find life in our experiences as styles of world-enactment and optimal gripping, the phenomenology of individual differences must ultimately confront and endeavor to understand the phenomenon of repetitious distress. Existing research
on the phenomenology of repetitious distress has sought to elucidate its structure descriptively by articulating a set of themes that characterize its lived meanings. Specifically, such research has demonstrated that repetitious distress is not a phenomenon \textit{per se} but a class of phenomena denoting the type of world that is characterized by a state of ongoing self-renewal, a pervasive loss of future possibilities, and a loss of sense of agency (Craig, 2005). These themes fit well within the framework of this dissertation and are also in line with its findings.\footnote{Renewal implicates the self-organizing and autopoietic structure of the world of repetitious distress which makes it repeat itself.} However, a phenomenology of individual differences grounded in EB5T ventures beyond previous such attempts by seeking to disclose the conditions of possibility of repetitious distress from a trait perspective—and so affords the means to an explanatory rather than merely descriptive account of repetitious distress.

What is the structure of repetitious distress such that makes repetitious distress possible as a style of world-enactment? Our findings suggest that (1) in the absence of compensatory functions (either as found in the situation or as drawn from other traits in one’s personality), (2) when confronted with situations whose conditions exceed the adaptive reach of one’s traits, (3) existing trait deficits or surpluses are bound to make the re-enactment of repetitious problems more likely. Consequently, the resultant sense of distress that follows is bound to be felt as inevitable, implicating the twofold sense of loss in future possibilities and personal agency that was helpfully identified in previous research (Craig, 2005).

In other words, our claim is that conditions (1) and (2) constitute the conditions of possibility for experiences of repetitious distress such that, when jointly present, bring forth a self-organizing system predicated on positive feedback whose overall functioning is constitutively self-renewing and, therefore, repetitious. How well does this conceptualization of
the structure of repetitious distress fit with the empirical case studies of this dissertation? Let us proceed chronologically starting with Participant X.

To begin with, we saw that in the absence of sufficient trust and familiarity (which served as a compensatory function in the case of his first pattern of distress—"*why do I continue to restrict myself when I am in the company of women that I’m attracted to emotionally or sexually rather than expressing myself directly?*"), Participant X’s cautious and imaginative style of relating to a romantic interest (prefigured by High Anxiety, Vulnerability, Achievement Striving, Cautiousness, Openness, and Agreeableness) seemed to lend itself to repetition. The counterexample demonstrated how having trust and familiarity with his date appeared to curb Participant X’s stylistic tendency to worry and withdraw, allowing him to “lean in for the kiss,” thereby disrupting his first focal pattern. With regards to his second pattern, we saw how being encouraged to express what is on his mind and writing his thoughts out on a letter rather than speaking them directly allowed Participant X to compensate for his highly cautious style of security-seeking that was prefigured by low Assertiveness, high Agreeableness, high Cautiousness, and high Vulnerability and Anxiety.

Next, in Participant Y’s case we saw how in group settings, her style of relating was highly timid, cautious, and reserved, frequently resulting in a kind of self-critical withdrawnness from the group. The counterexample revealed that addressing members of the group as individuals rather than as a collective was felt as significantly less intimidating, allowing her to disrupt her pattern of withdrawing by showing up with a greater sense of confidence and experiencing the conversational space not as a stage where she will be judged but as a playground of ideas where she can express her innate sense of openness and inquisitiveness more fully, in relation to interested others. Focusing her attention thus fulfilled the compensatory
function of curbing her strong sense of social anxiousness (High Neuroticism) and leveraging her Openness, Agreeableness, and Extraversion. With regards to Participant Y’s second pattern, we then learned that in the absence of supportive others, her tendency to pre-emptively disengage from tasks or assignments when feeling bored or overwhelmed lent itself to repetition in the form of procrastination, also accompanied with critical self-commentary. The second counterexample thus demonstrated that the presence of supportive others fulfills a compensatory function by seemingly “enhancing” her tendency to Self-Discipline, Assertiveness, and Intellect so that disengagement from and avoidance of a complex task by way of boredom or anxiety becomes significantly less likely.

Finally, we saw how in Participant Z’s case, the failure to lean into the “I Can’t Attitude” lent his stylistic tendency to underestimate the degree of commitment required to effectively manage and complete the task at hand to repetition. In other words, the “I Can’t Attitude” fulfilled a compensatory function by heightening Participant Z’s tendency to Neuroticism, affording him greater sensitivity to track error and possible threat along the way, allowing him to plan for and manage the task at hand more effectively than he normally would when in the “I Can Attitude.”

In the case of Participant Z’s second pattern, however, the analysis revealed what seems to be an interesting variant of the proposed structural account of repetitious distress. First, we saw how a history of mutual interaction with a woman (as seen in Examples 3 and 4) seemed to displace Participant Z from his primary, autonomous style of relating to others—reflected by his trait profile—to a more self-sacrificing one—a secondary style not reflected in his trait measures. Consequently, once this secondary style became Participant Z’s default style in the relational context, asserting the boundaries he prefers became the less likely response, and the tendency to
act in self-sacrificing rather than assertive ways became the more probable response, leading to the undesirable pattern of distress: *caring about what others think even if it affects him negatively*. The individualized findings suggested that the pathway to disrupting this pattern of repetition would entail something akin to promoting a shift from the secondary, self-sacrificing style of boundary-setting to the primary, assertive style of boundary-setting by ameliorating the decompensatory function fulfilled by the attachment bond between Participant Z and the woman he is with (such as by establishing and maintaining a sense of distance between him and the woman he is with).

In light of all this, we find that the structure of repetitious distress can also assume the following form, which, as previously stated, is a variant of the first: (i) in the presence of a *decompensatory function* (e.g., in Participant Z’s case, the attachment bond between him and the woman he is with), (ii) situational demands are bound to exceed the adaptive reach of the resultant, secondary style of personality, (iii) and the re-enactment of a repetitious problem is bound to become more likely.

Both types of repetitious distress—those enabled by the absence of compensatory functions and those enabled by the presence of decompensatory functions—obtain a self-renewing and self-organizing form that necessarily leads to a loss of grip. Although the self-renewing and self-organizing structure of repetitious distress closely mirrors and recapitulates the autopoietic organization of the embodied mind, its immanent teleology—which brings forth a pervasive kind of suboptimal gripping relation with the world—subsequently becomes a perversion of the embodied mind’s constitutive function of realizing relevance in the world.

This conceptualization provides us with a formal understanding of repetitious distress as a kind of dynamical system that unfolds between person and situation that can be made tractable
at the level of traits. Such a dynamical formalization of the structure of repetitious distress affords two key advantages. First, it explicitly demonstrates that repetitious distress—like all psychological phenomena—is not simply within the person but in the relationship between the person and their world, a fundamentally enactivist reformulation of the problem. Accordingly, in the context of clinical assessment, it becomes possible to alleviate feelings of guilt that patients might be carrying about their suffering by allowing them to recognize that without the world’s presence, their experience of repetitious distress would not be possible. And second, by identifying possible compensatory functions that can be added to or decompensatory functions that can be removed from the situation, it becomes possible to adopt responsibility over the situation and to realize a sense of agency by implementing concrete behavioral interventions targeting specific stylistic drawbacks implicated in the problematic patterns at hand.9

The proposed paradigm evidently makes it possible to conceptualize, research, and intervene in the phenomenon of repetitious distress in new and important ways. Specifically, it makes it possible to (a) conceptualize the structure of repetitious distress by disclosing its conditions of possibility, thereby allowing us to explain rather than merely describe the phenomenon as a type of experience; (b) apprehend individuals’ particular experiences of repetitious distress in optimal gripping terms and as a function of their styles of world-enactment through the individualized methodology employed in this study (Chapters 4 and 5); and (c)

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9 The dynamically self-organized structure of repetitious distress resembles the reciprocal narrowing between self and world described by Marc Lewis (2015) in the context of substance use disorders. Reciprocal narrowing is characterized as a positive feedback loop in which a maladaptive response to the situation (e.g., reward-seeking through substances) makes itself more likely through repetition. Accordingly, the kinds of intervention made possible by the individualized approach to repetitious distress at the level of traits (i.e., adding compensatory functions or removing decompensatory functions) afford what Vervaeke (2020) calls “reciprocal opening,” a positive feedback loop between oneself and the world wherein an adaptive response to the situation makes itself more likely through repetition.
identify, in an individualized manner, possible compensatory functions individuals can draw on to ameliorate their stylistic drawbacks (i.e., trait deficits or surpluses) or, conversely, remove extant decompensatory functions that are leading to a loss of grip, to disrupt their patterns of repetitious distress and regain an optimal grip over their world.

Some Necessary Guidelines for the Application of the Proposed Method

All four participants in this study were provided with the same set of instructions throughout their participation in the study. Furthermore, all four completed a qualitative (individualized) interview and an IPIP-NEO test, which they submitted to the principal investigator promptly upon completion. Treatment of participants was thus roughly equivalent across participants. Yet only three reports were generated while the generation of a fourth report, for Participant O, was deemed impossible. We discuss the reasons for this below and extract four necessary guidelines for ensuring the effectiveness of the application of this method.

The raw interview data collected from Participant O initially appeared extensive, deep, and rich with detail. However, during the analysis stage, it became evident that Participant O’s account was severely lacking in necessary pieces of information that made it difficult to generate an intelligible report. First, Examples 1 and 2 referred to an identical set of events and experiences which consequently were distinct only in name. Moreover, the participant did not provide a second example for the second question. This created a problem in the thematization process in both cases, insofar as themes are meant to capture stylistic tendencies and styles are predicated on general, recurrent patterns of activity. On the basis of just one example, therefore, it becomes impossible to thematize what is stylistic about an individual’s behavior because it becomes impossible to show that the behavior in question is present across various contexts, and
therefore invariant and repetitious, like a style. *The necessary set of guidelines here is that (1) each example set must contain at least two examples, and (2) examples within an example set must refer to different events or experiences in order for the type of behavior in question to be sufficiently generalizable as to constitute a genuine pattern that reflects a style.* In the absence of these two conditions, it becomes impossible to thematize what is *stylistic* about a behavior, and therefore to disclose an individual’s *styles of world-enactment* as they are lived.

Second, the participant’s description of the first counterexample was a sentence long and therefore had not been elaborated into a *scene*, while the second counterexample referred to a hypothetical scenario that the participant had planned to later enact rather than a real one that had already occurred. It was not possible to use the first counterexample for the purposes of thematization because the subject matter of thematization is the structural mutuality of self and world as seen through actual lifeworld examples, and the description contained in the first counterexample was simply lacking in any contextual and personal detail so as to disclose important aspects of the structural mutuality as it was experienced by the participant at that time. Relatedly, it was not possible to use the second counterexample for the purposes of thematization because the subject matter of thematization is the structural mutuality of self and world *as it is lived in the world, not as it is lived in thought or the imagination*. To include hypothetical rather than real scenarios as the referents in one’s counterexamples is to beg the question and therefore constitutes an illegitimate methodological move that renders an empirically grounded thematization of an individual’s *styles of world enactment* impossible. This is because what is imagined in a *hypothetical* counterexample will merely presuppose what still needs to be explained or demonstrated—namely, the set of (situational or characterological) variables, as found in the real-world scenario of a counterexample, that might hint at the possibility of a
different outcome than the one typically predicted by the pattern in question. The necessary set of guidelines here is that (3) examples and counterexamples cannot refer to hypothetical future events but real past events, and, further, that (4) these must be articulated as scenes that capture situational and characterological variables in interaction across time so as to possibly disclose the structural mutuality of self and world with its stylistic tendencies as it is lived.

The four guidelines presented in this section are not meant to be sufficient but only necessary for conducting research on the phenomenology of individual differences effectively and in an empirically informed fashion. In their absence, it becomes impossible to generate themes, a necessary component of the proposed method of research. Thematization of the sort proposed here is (at least for now) necessary for researching the phenomenology of individual differences because without it, the path to disclosing what is stylistic about an individual’s manner of enacting a world as a function of their personality becomes unclear—particularly in the absence of any alternatives to the proposed method.

Study Limitations

Although the four guidelines presented above are arguably necessary, they are nevertheless only minimal and so can possibly be improved through various adjustments made in future iterations of this research. For instance, one important limitation of the current design was that each theme was generated based on a rather limited number of examples (i.e., two examples per question). However, there is no a priori reason to suppose that the use of just two examples is sufficient for apprehending the full, necessary trait substructure of a given style. Indeed, we might hypothesize that as the total number of examples in an example set increases, the total number of non-overlapping (contingent) traits that are erroneously included in a given
constellation, mistakenly treated as a necessary part of its structure, also decreases. This in turn should lead to a reduction in the amount of “noise” that is potentially distorting our subsequent (thematic) understanding of the individual’s corresponding style of world-enactment. Simply stated, as the total number of examples in an example set increases, we should expect the final constellation of overlapping traits to contain a fewer number of (irrelevant) traits, consequently approximating the “true” structure of the style implicated in the pattern. Accordingly, the question becomes whether there is a point after which increasing the total number of examples in an example set no longer makes a significant difference in “purifying” the underlying trait structure of a style to its minimum necessary elements. Future research can employ variations of the design outlined in Appendix X to test this hypothesis.

Another limitation concerns the fact that the proposed paradigm makes use of self-report data (i.e., the verbal accounts and the trait measures). Indeed, this research seeks to articulate participants’ styles of world-enactment not directly but through the verbal accounts they are able or willing to provide during the interview process. Use of this method is therefore not appropriate for populations that are prone to deceit or display severe deficits in self-understanding or language use.

A third limitation concerns the qualitative coding process. In the present work, the transcripts were coded by one individual. For best practices, two independent coders, who are blind to the study hypotheses and procedures, ought to be trained to code participants’ transcripts (in accordance with the methods outlined in Chapter 4).\(^{10}\)

Relatedly, a fourth limitation concerns the small sample size. As a qualitative pilot study, the results of this research are promising. Nevertheless, future iterations of this research should

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\(^{10}\) This is for ensuring the integrity of the research process and is therefore not necessarily a step to be undertaken by clinicians applying this method in psychological assessment.
seek to replicate its method of researching styles of world-enactment with a larger sample of participants.

A fifth limitation concerns the accessibility of findings. At the final stage of research, the findings are shared with the participants in the form of a narrative report that contains a discussion of their styles of world-enactment. The accessibility issue arises from the fact that what needs to be conveyed to the participants is information about how they tend to enact themselves, others, and the world in the situations of interest. Yet including technical phrases in the report, such as “in similar situations, the participant tends to enact others as welcoming,” might be felt as confusing and reduce their impact on the participant. Following Fischer (1994), it is recommended that summaries be deliberately phrased in regular lifeworld language so as to be relatable and maximize impact—for example, “in similar situations, the participant tends to perceive others as welcoming.”

A sixth limitation concerns the cultural scope of the instrument used in this study, which is based on the FFM, given that replicating the factor structure of the FFM has been unsuccessful in “smaller-scale societies, low-income country samples, or across a more inclusive set of natural lexicons” (Smaldino et al., 2019, p. 1276). Moreover, in some cases, it is possible to rotate the factors differently in the factor space so as to produce a six-factor model instead of the FFM, *HEXACO*: honesty-humility, emotionality, extraversion, agreeableness, conscientiousness, and openness (Smaldino et al., 2019). Future research on the phenomenology of individual differences should therefore proceed with these limitations in mind so as to avoid generalizing findings to contexts and populations that possibly fall outside of the FFM’s scope.

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11 This is especially important when implemented in a therapeutic context, where it very much matters how the findings are communicated to the patient.
A final limitation concerns the fact that, whereas EB5T was originally generated based on the trait structure outlined by the BFAS, which includes two aspects in each trait dimension, this study employed the IPIP-NEO, which includes six facets in each trait dimension. The decision to employ the IPIP-NEO instead of the BFAS was motivated on the following grounds. First, use of the IPIP-NEO for researching EB5T was deemed appropriate, at least as an indirect tool, because the aspects of the BFAS are correlated with the various facets in the IPIP-NEO. And second, the IPIP-NEO was chosen over the BFAS because it provides a more variegated description of personality due to its reliance on a higher number of factors, which is particularly helpful for generating highly detailed individualized reports as we have produced in this study. Nevertheless, future research should seek to address this limitation by exploring the effectiveness of using the BFAS as the instrument of choice instead.

Having reviewed the significance and limitations of the research findings regarding the construct of styles of world-enactment, we can now advance to the final chapter of this dissertation where we discuss its theoretical and methodological merits and outline directions for future research in relation to cognitive science, personality theory, empirical phenomenology, and psychological assessment.
Chapter 7: Conclusion

At the core of most theoretical and empirical issues in the cognitive sciences lies the notorious mind-body problem, the deepest of mysteries surrounding human experience. The enactivist vision heralded by Varela et al. (1991) some thirty years ago sought to bridge the mind-body gap in an original way. Whereas most other accounts to date had bought into the idea that the mind functions to represent an objectively pregiven world through symbolic means, enactivism followed suit with the phenomenological tradition and claimed that the mind was in fact a procedural and participatory process through which all meaningful worlds are “enacted” or brought forth.

This dissertation has sought to extend the intellectual and existential horizon of the enactive approach by bringing forth an enactivist understanding of human cognitive life as it is lived from the perspective of the traits. Let us summarize the narrative path traversed in this dissertation and consider some future directions as we take our final steps.

Relevance for Cognitive Science Research

Our enactivist wanderings, motivated by the wish to understand human experience as it is lived, led us beyond enactivism and into the domain of the empirical human sciences (Chapters 2 and 3). Our goal was to salvage a viable means of bridging the phenomenological gap that has beset the enactive approach since its inception, brought on by the continued absence of a paradigmatic model of human cognition. Since wandering into this largely unexplored domain, engaged in a back-and-forth circulation between enactivism and personality theory, we have come to reflect on a whole new set of ideas and research findings that make it possible for us to
bridge the phenomenological gap—thereby advancing enactivism beyond the life of a cell and into the mind of a person. To explore the distinctly human dimension from the enactive point of view, we repurposed Fischer’s (1994) individualized approach to psychological assessment into a qualitative method of researching traits as styles of world-enactment (Chapter 4). This allowed us to draw on EB5T’s conception of individual differences to make sense of three lives (and worlds) as lived from the perspective of the traits. We presented our empirical findings in the form of three personalized reports in which we summarized three participants’ styles of world-enactment in relation to their experiences of repetitious distress (Chapter 5).

The theoretical discussion of our empirical findings and their significance (presented in Chapter 6) highlights how EB5T bridges the phenomenological gap in enactivism by modelling the broad structures of human significance vis-à-vis personality theory akin to the way that autopoiesis models the normative organization of the cell vis-à-vis the metabolic and motor pathways that allow the cell to survive in its indigenous environment. A number of enactivist theorists following Varela et al.’s (1991) autopoietic account of cognition have sought to explain embodied cognitive agency in terms of the teleological properties that emerge from an autopoietic system’s dynamical coupling with its surrounding environment (Barandiaran & Egbert, 2014; Barrett, 2017; Di Paolo, 2005; De Jesus, 2016; Hovhannisyan, 2022; Thompson, 2007; Weber & Varela, 2002). The basic theoretical logic of such accounts has maintained that autopoietic systems dynamically adapt to the world by regulating their boundary conditions to match the evolving demands of their situation. When successful, this allows these systems to satisfy their viability conditions, perpetuating their structural-functional organization over time through autopoietic self-renewal.
Hovhannisyan and Dewey (2017) advanced the first theoretical account that directly links the theory of autopoiesis in enactivism with Vervaeke et al.’s (2012) theory of relevance realization. In preparing their argument, the authors distinguished between two kinds of dynamical coupling that can possibly characterize an adaptive autopoietic system’s relation to its environment: natural and normative dynamical coupling (Hovhannisyan & Dewey, 2017). The authors claimed that an autopoietic system is normatively coupled to its environment when it is satisfying its viability conditions through its interactions with the environment—a necessary condition for survival. Conversely, they claimed, when a system fails to satisfy its viability conditions, it loses its normative coupling with the environment and becomes “naturally coupled” instead, now at the mercy of the second law of thermodynamics, entropy, a state which, if left uncorrected, eventuates in death. Hovhannisyan and Dewey (2017) sought to ground the notion of normative coupling in the theory of relevance realization, explaining the loss of normative coupling in terms of a failure on the part of a system to effectively do RR (see also Hovhannisyan, 2018a; 2018b).

Our claim is that optimal gripping, when considered from the point of view of the traits, stands as the human analogue to the autopoietic account of normative coupling at the level of the single-celled organism. The loss of an optimal grip over one’s world thus reflects a state of being naturally coupled, a constitutive problem for any autopoietically embodied cognitive agent—whether a cell or a human. EB5T thus allows us to salvage the onto-normative continuity needed between the minimal and human phylogenetic levels to advance enactivism beyond the life of a cell and into the mind of a person by demonstrating both theoretically and (at last) empirically how the processes of RR are implicated at the level of trait functioning in cases of repetitious distress. Repetitious distress therefore stands as the paradigmatic case example of natural
coupling at the level of human behavior. Accordingly, compensatory and decompensatory functions as revealed through the various counterexamples in the enactively individualized assessment process constitute a practical means toward optimization by adjusting one’s style of grip to regain normative coupling with the world in and through perception.

When considering the relationship between personality and the world of perception, EB5T demonstrates that information about our styles of world-enactment can be used to generate individualized accounts about our umwelten at the highest levels of their organization. To this end, we believe that EB5T also stands as a theoretical analogue to the sensorimotor approach to cognition that is espoused by enactivists like O’Regan and Noë (2001; see also Noë, 2009). Except whereas the sensorimotor approach explains the processes of enactment that underlie our perception of spatiotemporal objects and events at the timescale of moment-to-moment interaction with the environment, EB5T explains the processes by which we bring forth our worlds at the timescale of months, years, or even decades, processes which subsequently feed into and structure our taken-for-granted, felt sense of the world as encountered in perception.

EB5T accordingly bears relevance to another highly esteemed and distinguished area of study in the cognitive sciences that has been in dialogue with enactivism in recent years: predictive processing. Predictive processing is committed to the idea that cognition achieves functional action in the world by generating predictions about the world while concurrently managing the degree of error or uncertainty generated by its predictions based on situated feedback. Practically speaking, the predictive processing framework states that perception is
predicated on (often implicit) anticipatory motivational sub-structures that prefigure what is brought forth as relevant in the field of perception.12

Safron and DeYoung’s (2020) work has interfaced the predictive processing framework with CB5T (EB5T’s predecessor), reformulating the five trait dimensions into domains of problem-solving in which uncertainty is thought to be regulated in a cybernetic (self-organized) fashion: threat (neuroticism), reward (extraversion), attachment (agreeableness), goal prioritization (conscientiousness), and framing scalability (openness). Each trait on this account models a domain of uncertainty that needs to be managed through self-organized means to achieve adaptive functioning in the world. EB5T can benefit this dialogue by affording an account of trait adaptivity based on relevance realization to inoculate it against the frame problem while demonstrating, through the individualized methodology of this dissertation, a way of modelling how a person’s unique traits find life in the world of their perception. Importantly, recent work by Anderson, Miller, and Vervaeke (2022) has done well to advance a theoretical synthesis of the predictive processing and relevance realization frameworks that can be drawn to facilitate a dialogue between EB5T and predictive processing. A synthesis between EB5T and predictive processing vis-à-vis optimal gripping falls outside the scope of this dissertation, but at some point will become necessary for the predictive processing approach if it should seek to model human cognition in a theoretically robust and non-circular fashion.

12 Participant X’s highly empathic and imaginative style of opportunity seeking in the romantic context does well to illustrate the anticipatory structure of perception from the predictive processing perspective. Specifically, by enacting the woman he was with as someone to be related with through deep and meaningful conversation, Participant X came to simultaneously perceive and prepare to interact with her as someone whose interest in him would find expression largely through an “openness” in her body language. Perception was thus prefigured by the anticipation of the kind of (goal-directed) fit between self and other in which the other as an interested other was expected to be an expressive and open other.
Relevance for Personality Theory and Phenomenological Research

EB5T has made it possible to advance not only a paradigmatic model of human cognitive life for cognitive scientific research, but a novel paradigm for researching the phenomenology of individual differences as styles of world-enactment and optimal gripping. This bears relevance to both personality psychology and empirical phenomenological research. For starters, the trait approach to personality psychology is arguably already phenomenological to begin with, in that it treats natural language as the entry point to thematizing the structures of human personality, and measures of traits are collected through self and observer reports using rating scales (C. DeYoung, 2023 in communication). Despite the implicit connection between these two traditions, a direct link between the trait approach and phenomenology has never been explicitly established or discussed (see Hovhannisyan & Vervaeke, 2022; Hovhannisyan & Goicocechea, 2023). This dissertation has sought to extend existing work that treats person and situation as “mutually inseparable parts of the same dynamical whole” through an individualized methodology by which such a treatment can be systematically undertaken (Hovhannisyan & Vervaeke, 2022, p. 369). Indeed, the three reports generated here should serve as a template for any future work seeking to explore and further articulate the mutuality between the embodied self and the world from the perspective of the traits.

Relatedly, the phenomenology of individual differences has rather interesting and important implications for empirical phenomenological research. Whereas most empirical phenomenological research has sought to understand what is *invariant* about certain types of experience (e.g., anxiety), the central construct of this dissertation—i.e., styles of world-enactment—makes a different kind of phenomenological undertaking possible. Specifically, the proposed paradigm allows researchers to study not what is invariant across individuals with
respect to certain types of experience but how experiences of *types* (e.g., anxiety) meaningfully vary as a function of individual differences in traits. For example, whereas previous empirical phenomenological studies of anxiety have sought to extract the invariant features of the experience of anxiety *as such* by subjecting different participants’ verbal accounts to a formal process of thematization, a study based on the current design might seek to understand how individual differences in measures of a trait, like extraversion or conscientiousness, might mediate the way in which the experience of anxiety is brought forth as a stylistic feature of the world. Indeed, to the degree that differences in styles of world-enactment are shown to be mediators for certain types of experience, like that of anxiety, then it becomes necessary to approach the meaning of such experiences in an individualized fashion as well, instead of simply presupposing homogeneity in their overall structure as has traditionally been done. The phenomenology of individual differences paradigm is evidently well-suited for undertaking this kind of research in the future.

Relevance for Psychological Assessment

Psychologists rely on personality assessments to design rigorous and evidence-based therapeutic interventions. Personality assessment is not only considered standard practice in clinical settings, but also forms a core competency in CPA\textsuperscript{13} and APA-accredited\textsuperscript{14} training programs in clinical psychology (the governing accreditation bodies in Canada and the United States, respectively). Of all the available personality models for predicting human behavior, the most widely used and well-researched among psychologists is the FFM, which, as we have discussed extensively, describes human personality along five major dimensions—

\textsuperscript{13} The Canadian Psychological Association.

\textsuperscript{14} The American Psychological Association.
Conscientiousness, Agreeableness, Neuroticism, Openness, and Extraversion (McCrae & Costa, 2003).

The phenomenological procedures used in this dissertation for exploring participants’ experiences of repetitious distress from the trait perspective can be drawn to research the effectiveness of this method in the context of psychological assessment. Although the FFM is a useful predictive tool, its use as a *diagnostic* tool for treating psychopathology has been limited (see Hovhannisyan & Goicoechea, 2022). This is due to the fact that, unlike other instruments that directly assess abnormal traits and behavior (e.g., the *Minnesota Multiphasic Personality Inventory*-3 or the *Rorschach*), the FFM is designed to measure normal personality (Costa & McCrae, 1992; McCrae & Costa, 2003; DeYoung, 2015), and thus has not typically been used for diagnosing psychopathology. Moreover, existing research on the FFM and psychopathology has either been strictly descriptive rather than explanatory (e.g., Kotov et al., 2017) or theoretical rather than applied (e.g., DeYoung & Krueger, 2018). Thus, clinical use of the FFM has been limited to making general predictions about behavior or illustrating generic guidelines for case conceptualization purposes (e.g., neuroticism is associated with internalizing disorders, whereas both low conscientiousness and low agreeableness are associated with externalizing disorders; Kotov et al., 2017), leaving the FFM’s potential as a diagnostic instrument in clinical assessment settings unrealized. This is unfortunate given that the FFM is already widely adopted by psychologists and is highly efficient to both administer and score in clinical settings (as little as 10 minutes unlike other instruments; e.g., the *Rorschach* takes two hours to administer and several more to score; Meyer et al., 2011).

By conceptualizing individual differences as differences in styles of world-enactment and optimal gripping, EB5T can inform psychological assessment practices by locating
psychological distress in areas of significant trait-situation breakdown. If used as a clinical paradigm, therefore, the phenomenology of individual differences should generate new diagnostic possibilities for the FFM—specifically to assess psychological dysfunction in a theoretically rigorous and evidence-based, yet novel and individualized way. Future research on the clinical utility of this approach should seek to demonstrate how trait measures from the FFM can be used for informing personality assessment reports and case conceptualizations in an individualized fashion. The general idea behind the optimal grip construct—namely that traits consist of distinct cognitive systems whose functioning is adaptive in some contexts but can become maladaptive in others—will be particularly important in this context for making interventions aimed at optimal functioning possible (DeYoung, 2015; Hovhannisyan & Dewey, 2017; Hovhannisyan & Vervaeke, 2022; Vervaeke et al., 2012).

In this way, the phenomenology of individual differences also has clear benefits for the practice of collaborative and therapeutic assessment (CTA), an increasingly popular and evidence-based approach to assessment that significantly draws on the phenomenological principles of Fischer’s (1994) individualized approach. As an alternative to mainstream approaches, which assume that assessment instruments should collect objective data about patients’ psychological profiles in a way that is free from the assessor’s own perspective and biases (Fischer, 1994; Finn, Fischer, & Handler, 2012), CTA maintains that patients’ lived experience constitutes a primary source of data for assessment (Fischer, 1994; Finn et al., 2012). Furthermore, it states that assessor and patient should collaborate to form meaningful and individualized understandings of the patient’s lifeworld together and that the assessment, rather than preceding the process of therapeutic intervention, is actually part of the therapeutic process itself (Fischer, 1994; Finn et al., 2012).
CTA has been adopted and used with a broad range of tools like the Thematic Apperception Test (TAT), the Bender-Gestalt, the Rorschach, and the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Fischer, 1994; Finn, Fischer, & Handler, 2012), but literature on its use with the NEO is virtually non-existent (e.g., Hovhannisyan & Goicoechea, 2023). This is unfortunate, given the NEO’s widespread use as an assessment instrument within the mainstream literature. Developing a standardized procedure of administering the NEO in a CTA fashion that is guided by the principles outlined in this dissertation will thus advance research on CTA by interfacing it with one of the most widely used and researched instruments available in personality assessment—the NEO.15

To summarize, we anticipate that this research will have important implications for the practice of psychological assessment, in general, and CTA, in particular. First, it will advance our understanding of personality assessment by adding to our understanding of how to diagnose sources of dysfunction using the FFM—an assessment tool that has already been widely adopted but is underutilized as a diagnostic tool. Second, it will enable us to design individualized understandings of (repetitious) distress by revealing what is at their root through an application of the individualized methodology proposed here: the underlying mismatch of trait and situation. As a result, use of the FFM can be extended to identify, target, and ameliorate the psychological distress of clients in novel ways.

15 This dissertation can be thought of as a precursor to any future clinical utility studies on using CTA with the FFM. From the EB5T perspective, enactively individualized personality assessment using the FFM is itself a kind of compensatory function that seeks to promote through distributed cognitive means an optimization in the assessee’s functional self-understanding of the repetitious distress to make effective intervention possible (see Hovhannisyan & Vervaeke, 2022).
Closing Remarks

The last step is often the most difficult to take because it punctuates the end of a story. We are now at the end of our story. When Francisco Varela, Evan Thompson, and Eleanor Rosch (1991) first proposed the enactive approach to human experience in *The Embodied Mind*, they predicated it on the back-and-forth circulation between disciplined phenomenologies of lived experience and the sciences of mind. Thus, it should be fair to say they did not envision enactivism as the ultimate destination point but as the necessary point of departure for understanding what it truly means to be human. In a similar vein, we present the findings of this dissertation as a continuation of the back-and-forth circulation that lays a path in walking—not as a final step but, indeed, as a new beginning in the quest to understand human experience as it is lived.

If there is but a single takeaway for the reader of this dissertation, it should be this: A fruitful cognitive science is one that is able to breathe life into its categories, demonstrating how theory and praxis, the transcendent and the immanent, can be married to produce deep transformative insight into “how, through our patterns of *doing* and *being* in the world, our experiences *become* the phenomena that they *are*” (Hovhannisyan & Goicoechea, 2023, p. 5, emphasis in original). By simultaneously bridging down into the processes of relevance realization and bridging up into the phenomenology of traits through EB5T, we have sought to bring forth such a cognitive science.
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APPENDIX A

SCREENING ELIGIBILITY QUESTIONS

1. Are you over the age of 18?
   Please indicate your age: ____

2. Are you fluent in English? (yes/no)

3. Have you ever been diagnosed with or are you currently experiencing any of the following? (yes/no)
   - Schizophrenia
   - Bipolar Disorder
   - Major Depression
   - Anxiety Disorder
   - Borderline Personality Disorder

4. Are you able to identify any pattern of behavior in yourself that puzzles you and leads to unwanted distress? (yes/no)
APPENDIX B
RESEARCH PARTICIPATION FLIER

Title: A Demonstration of Enactivist Personality Assessment Using the Five-Factor Model

Principal Investigator: Garri Hovhannisyan, M.A., M.A., Doctoral Candidate, Clinical Psychology, Duquesne University

Purpose of Study: The purpose of the study I am seeking to conduct is to understand the relationship between your personality and patterns in your life that often cause you distress, worry, or confusion.

What you get out of it: This study will offer you an opportunity to deepen your understanding of how these patterns are related to the complex ways that your own personality traits interact with the unique situations that you face in your life.

Participants must:
• Be fluent English speakers
• Not have been diagnosed with a serious mental illness (such as schizophrenia, or bipolar disorder)
• Be able to identify a pattern of behavior that has caused repeated distress
• Be able and willing to provide personal (real life) examples of times when this pattern has unfolded

If you qualify, please send an email to hovhannisyang@duq.edu
APPENDIX C

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Title: A Demonstration of Enactivist Personality Assessment Using the Five-Factor Model

INVESTIGATOR
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SOURCE OF SUPPORT

This study is being performed as partial fulfillment of the requirements for the Doctoral degree in the McAnulty College and Graduate School of Liberal Arts at Duquesne University. This study is also supported by a doctoral fellowship from the Social Sciences and Humanities Research Council of Canada.

STUDY OVERVIEW

This study seeks to understand the relationship between personality and patterns in life that often cause distress, worry, or confusion. This study will offer you an opportunity to deepen your understanding of how these patterns are related to the complex ways that your own personality traits interact with the unique situations that you face in your life. The study involves completing a questionnaire that typically lasts between 30-45 minutes and two interviews that should last about an hour each. There are minimal risks associated with participating in this study, but no greater than those encountered in everyday life. This study is not meant to provide clinical treatment or advice but can possibly deepen your understanding of yourself in important ways. Learning about yourself might be distressing. Referrals to speak to a therapist will be given in the event that you feel distressed.

PURPOSE

You are being asked to participate in a research project that is investigating the way personality traits find life in and contribute to the patterns of distress that are experienced in life.

In order to qualify for this study, you must:
• Be over 18 years of age
• Be a fluent English speaker
• Not have been diagnosed with a serious mental illness (such as schizophrenia, or bipolar disorder)
• Be able to identify a pattern of behavior that has caused you distress
• Be able to provide real life examples of times when you have noticed this pattern unfold in your life

PARTICIPANT PROCEDURES

If you provide your consent to participate, you will be asked to partake in two 1-hour long interviews that will be recorded and to complete a personality questionnaire online (IPIP-NEO). The interviews will be recorded in video and audio format and fully transcribed for the purposes of research. In the first interview, you will be asked to formulate 2 focal questions about aspects of yourself that you would like to learn more about (e.g., “Why do I get so angry when I feel like I’m being taken advantage of?”). Furthermore, you will be asked to provide several examples and counterexamples of times when the pattern you specified unfolded in your life. After the first meeting, you will be asked to complete an IPIP-NEO questionnaire, which takes approximately 30-40 minutes, and send the results to me via email. The questionnaire asks you about how you tend to think, feel, and act in various everyday situations, and it consists of 300 items. Finally, you will be asked to meet 10-14 days upon completion of the test for a debriefing where an integrative summary will be read to you.

RISKS AND BENEFITS

There are minimal risks associated with participating in this study, but no greater than those encountered in everyday life. During the first interview, you will be asked about experiences that you may have found difficult in your life. This may lead you to feel some distress. You may not benefit from participating in this study, but we hope that your participation can increase our knowledge about how personality traits are implicated in patterns of distress experienced by individuals and possibly help others in the future.

COMPENSATION

There will be no compensation for the study. However, at the completion of the study, you will be entered into a raffle to win a $15 Starbucks gift card for your participation. In addition, you will be offered a written narrative report—that is, an integrative summary—of how your personality relates to the patterns you wished to learn more about. There is no cost for you to participate in this study.

CONFIDENTIALITY

Your participation in this study, and any identifiable personal information you provide, will be kept confidential to every extent possible, and will be destroyed 3 years after the data collection is completed. Your name will never appear on any survey or research instruments. All written and electronic forms and study materials will be kept secure. Any responses you provide to the
survey questionnaire will be de-identified and kept in a password protected file on a password protected computer. In addition, your data will be deidentified before used in any publications or presentations about this research; therefore, no one will be able to determine how you responded.

**RIGHT TO WITHDRAW**

You are under no obligation to start or continue this study. You can withdraw at any time without penalty or consequence by choosing to not complete the questionnaires and closing the survey window. Incomplete surveys will not be used in data analysis and will be erased. If you choose to withdraw your consent to participation after the study ends, you may contact Garri Hovhannisyan at hovhannisyang@duq.edu.

**SUMMARY OF RESULTS**

A summary of the results of this study will be provided to you at no cost. You may request this summary by contacting the researchers and requesting it. The information provided to you will not be your individual responses, but rather a summary of what was discovered during the research project as a whole.

In addition, an individualized integrative summary of your personality traits and focal questions will be provided to you at no cost. You may request this summary by contacting the researchers and requesting it.

**FUTURE USE OF DATA**

Any information collected that can identify you will have the identifiers removed and be kept for use in future related studies. Your data may be used in the future for other studies or to compare with data collected in future related studies.

**VOLUNTARY CONSENT**

I have read this informed consent form and understand what is being requested of me. I also understand that my participation is voluntary and that I am free to withdraw at any time, for any reason without any consequences. Based on this, I certify I am willing to participate in this research project.

I understand that if I have any questions about my participation in this study, I may contact Garri Hovhannisyan, M.A. at hovhannisyang@duq.edu or Dr. Russ Walsh at walshr@duq.edu. If I have any questions regarding my rights and protections as a subject in this study, I can contact Dr. David Delmonico, Chair of the Duquesne University Institutional Review Board for the Protection of Human Subjects at 412.396.1886 or at irb@duq.edu.
One possible way to settle this question empirically is to implement the following design, which constitutes a mild variation of the present study. In this hypothetical alternative, similar recruitment procedures and inclusion criteria can be adopted as in the present research. However, instead of collecting just two examples and a counterexample per question, this time the investigator seeks to collect a total of six examples and three counterexamples per question. Recall that in the original design, once transcription of the interview was completed, the investigator was instructed to implement the following set of steps:

1. First, code the examples in the transcript with the relevant trait categories using the criteria of relevance and procedures outlined in Chapter 4 (Data Analysis);
2. Second, treat the combinations of traits that appear to constellate together within each example as discrete structural units that hint at the possible constitutive trait structure implicated in a style;
3. Third, compare structurally similar constellations across examples within an example set and, through a process of selection, determine the common set of factors or traits shared by the constellation class by omitting any traits that are not shared by all of the constellations of the same set from the final constellation (i.e., the common factor set);
4. And, fourth, treat the common factor set as the (constitutive) structural basis of the overarching themes and underlying styles of world-enactment implicated in the repetitious pattern being investigated;

Thus, in the alternative design (which consists of six examples and three counterexamples), in order to test the hypothesized relationship between the total number of examples in an
example set and the total number of traits implicated in a given style, the researcher is instructed to implement the following set of steps instead:

- First, subject the entire transcript (consisting of six examples and three counterexamples) to Steps 1-2 from the original design;

- Second, in order to establish control over the independent variable (i.e., total number of examples), partition the contents of the transcript into the following three example-counterexample groupings: (a) Examples 1-2 and Counterexample 1, (b) Examples 1-4 and Counterexamples 1-2, and (c) Examples 1-6 and Counterexamples 1-3;

- Third, subject each of the example-counterexample groupings—(a), (b), and (c)—to step 3 from the original design to produce common factor sets relative to each grouping;

- Fourth, calculate a sum value for each grouping by counting the total number of traits included in the common factor sets in each of the groupings—(a), (b), and (c);

- And, fifth, determine if the values corresponding to the common factor sets vary between groupings—if the value decreases with each subsequent grouping, then there is evidence in support of the hypothesized relationship between the total number of examples in an example set and the total number of traits implicated in a given style.
APPENDIX E

CODED PARTICIPANT INTERVIEW TRANSCRIPTS

Below are the coded transcripts for Participants X, Y, and Z. When referenced in the transcripts, participants’ traits are included in parentheses along with their percentile in red font. At the end of this appendix is Participant O’s transcript, which has been included for the reader’s reference only, as it was deemed unusable for the study.

Mr. X

Focal Questions:
(1) Why do I continue to restrict myself when I am in the company of women that I’m attracted to emotionally or sexually rather than expressing myself directly?
(2) Why do I avoid expressing my anger towards my mother?

Question 1: Why do I continue to restrict myself when I am in the company of women that I’m attracted to emotionally or sexually rather than expressing myself directly?

Example 1. I went on a date with a female in my class. When I was in my MA program 1.5 years ago. We went to a restaurant and we dressed up, looking really good. We were talking, I was paying attention to her physique, her hair, internally I was thinking that she looks really attractive/good (Cheerfulness 85). I noticed as I wanted to express “you’re really attractive” I would resort to talking about safer topics, like the weather, or school classes, etc (Neuroticism 41, Anxiety 69, Vulnerability 89). I could feel my heart rate increasing, I started to get anxious, I really wanted to express this but I was afraid that I would get rejected, unrequited affection (Anxiety 69, vulnerability 89, assertiveness 28).

Example 2. Next date, she came over to my house, brought some wine and treats, once again I was really excited (cheerfulness 85), this is in my home, this is a place where I feel comfortable, and she must feel comfortable too. There was a moment where there was a kind of stillness, we looked at each other, exchanged glances, I thought it was an opportunity to kiss, but in my head I ruminated on the negative impact of what could go wrong (assertiveness 28, vulnerability 89, anxiety 69). I resorted to something safe, I asked her if she wanted to go back in and sit on the couch. I tried to get a little closer but at this point she appeared turned off and confused about what my intentions were (sympathy 78, cooperation 91).

The moment of stillness was on the balcony, her back was towards me as she was looking out at the view. There was a moment of stillness, she felt really relaxed, we weren’t talking. Her body language, was very relaxed as though she was saying, touch me and get closer to me (emotionality 99, imagination 94, adventurousness 89; sympathy 78, cooperation 91). Incongruence: she was relaxed but I was very tense (cautiousness 80, anxiety 69, vulnerability 89). I saw this moment as a missed opportunity to take charge, to move forward toward
something you wanted. Doubting whether I’m capable or worthy of bringing it to fruition (self-efficacy 27, anxiety 69, vulnerability 89). Other examples when women are saying “I’m ripe for you to get close to me, but I miss those moments because I’m too anxious.”

I think something else that comes with this is a fear of rejection, a ruminating thought that’s in my mind (self-efficacy 27, vulnerability 89, anxiety 69). It’s safer, I resort back to being safe. You live in the world of what-ifs, leaves me feeling unfulfilled (emotionality 99, imagination 94, self-efficacy 27, anxiety 69, vulnerability 89, achievement striving 79, self-efficacy 27).

The rejection: going on dates, during and post-pandemic, in these moments I’ve been friendzoned. I don’t think this is gonna work, you’re a nice guy. One example: I went on another date with a girl that I met through my mother’s boyfriend, we were talking, everything is going well. The bill comes, we split the bill, and when it was over, I sent her a text to make sure she got home, but the girl said “I had a good time but unfortunately I don’t want to meet you again, don’t feel chemistry with you” and later I found out it was because I was too short and I split the bill with her. I felt shut down, that really hurt. Then I felt really angry in response. Anger with the girl but anger with myself, “why does this keep happening? Am I choosing the wrong people?” Unfortunately, negative self-talk is what I use to understand this pattern and its causes.

**Counterexample 1.** This happened all the way back in 2016/2017, when I first moved into an apartment in Washington DC. Met a girl at the gym, thought she was very physically attractive. Talked to her, had a good conversation (Openness 99), ended up going on a date to the movies. I said to myself that I’m gonna do something different, got nothing to lose, I went for a kiss at the end of our walk, it was exciting and exhilarating. She was taken aback but we went through it and it eventually turned into a relationship. I didn’t get rejected, I felt confident with myself, I wasn’t thinking “What if?” but rather “why not?” I kissed her and felt confident, I knew how she felt about it. I walked away feeling very confident and proud and excited that I followed through with it.

The moment of opportunity. As we were walking back, idk if I had my arm around her, my heart rate started to increase, I started to—my muscles were getting a little tense, and once again that stillness happened again (high opportunity, low risk situation). After I gave her a hug, there was that slight pause: what’s gonna happen? I said to myself, what are you gonna do this time? I paid attention to her body language, she didn’t seem tense, she didn’t seem very flat, didn’t seem like she was rushing, was very calm, I picked up on those cues and felt “let’s see what happens? Let’s test my theory in this moment” (agreeableness 83, sympathy 78, emotionality 99) I said, let’s see what happens, why not? Let’s have a different experience. I gave her a hug, slowly went in, she didn’t turn away, kissed her, and she went off. I could just feel myself, I felt surreal that I actually did it. I gave myself permission and that’s the best way I could capture that moment for you.

What I am assessing for in those moments of stillness is how safe it is (cautiousness 80, anxiety 69, vulnerability 89). When people think about ambivalent attachment, I get close and pull back, etc. In those moments, I’m seeing how safe it is for me to go through with it. Specifically, what I’m looking for is the body language open, is she smiling, does she seem tense? (mirroring the other: sympathy 78, emotionality 99, cautiousness 80, anxiety 69) I’m assessing all those
things, and I feel if it is safe enough, just because of her body language. In the first example, I
didn’t have that much familiarity with her too. But the kiss I went for in the counterexample, we
had had more time together, spent time talking, there was already a certain amount of intimacy,
I’d broached certain topics with the girl, what that does is it allows me to feel more comfortable,
compared to “hey, I’ve already engaged with you and know what I’m leaning into, rather than
just jumping to it.” That was present in the case where I went through with the kiss. (anxiety 69,
vulnerability 89, openness 99, cautiousness 89, agreeableness 83, cheerfulness 85; when she
might be wanting or expecting a kiss, he might feel pressure to indulge but unsafe to
proceed in the absence of sufficient familiarity)

Definitely a little bit of risk as well with example 1+2, her and I know mutual people, so what if
something goes wrong, will it be shared with others too? How safe is this person, if something
goes wrong, is she gonna tell another mutual friend?

This has been a salient theme, my father has even said how I squander opportunities with women
because they put themselves in my space/orbit while I’m so fully entangled with my own
insecurities so I don’t make myself as present as I can.

**Question 2. Why do I avoid expressing my anger towards my mother?**

**Example 3.** I had to be about 14 or 15 years old and I had just graduated from a catholic school
in Washington DC, and I desperately wanted to go to a catholic high school, a lot of my friends
at the time went there, I thought it would be great to still be with my friends, and I wanted to try
out for an American football team, and I never forget that my mom told me that she was going to
take me to the football tryouts, and you can imagine as a young kid there was lots of excitement,
was sitting at home with my great grandmother, waiting for mom to come, I had my cleats and
shoes ready, excited to go to the tryout, and I just remember how the excitement turned to worry
and trepidation, when my mom ultimately didn’t show up and I didn’t go to the football tryout. I
was extremely angry. As you can imagine, a young kid at that age, really excited, and my mom
did not follow through.

Growing up, a lot of my anger would get internalized, I would read, journal, express to friends,
but I was afraid of telling to my mother because she would get angry. The anger from the
disappointment was very very profound for me at that particular age. (assertiveness 28,
agreeableness 83, cooperation 91, sympathy 78 that holds back the anger; vulnerability 89,
emotionality 99)

I remember at that time, my great grandmother tried to console me because she could see the
disappointment that I had, and my great grandmother actually scolded my mom about that. I
didn’t tell it to her directly. (What was the deciding moment here where he could have
expressed his anger but chose to withhold it instead)

“I was extremely disappointed from leaning in.” (cautiousness 89, anxiety 69)
Example 4. When I called my mom, 1.5 years ago, and I wanted to get two things from her when I called: emotional support and advice about a female. The context was that after the date happened in which the girl wrote me off, I called my mom and wanted to tell her about it, I was excited once again to see what my mom had to say, and when I was talking to her, it was just this real flat, vapid type of response, I’m telling her this rich narrative of what happened, and her response was just “well you know, some people are just like that, you know, move on.”

(openness 99, emotionality 99, cheerfulness 85, altruism 93, cooperation 91) And I became angry, thought “your son is really upset about what happened, and you’re just responding in a matter-of-fact distant kind of way.” I felt a little robbed in that experience, wondered why my mom wasn’t concerned or seemed to be invested in this as I am. This was me being vulnerable, and her response was dismissive, “I don’t know why this affects you so much, move on to the next one,” and the conversation just moved on to what she would do, so that attunement was missed with my mom. It made me really upset that she wasn’t trying to connect with me.

(vulnerability 89) I got upset and had to get off the phone because I felt like she’d just completely invalidated what I was trying to say. Missed opportunity trying to connect with my mother. Extremely angry. (assertiveness 27)

The disconnect/misattunement first happened when there was a sigh, my mom would have a sigh, she started to increase the volume of her voice, and she would start to explain away what I was experiencing. And so, it would then be statements like she was annoyed, “I don’t know why you care so much, on to the next one.” She does a lot of downregulating at times with her own emotions, “I don’t know why you keep feeling this, why it’s such a big deal.” Her moments of silence, seeming distracted, didn’t seem really present. That’s how I knew that the disconnect was happening, as I was searching for answers or advice from her, it was just extremely surface-level. (emotionality 99, imagination 94, vulnerability 89, agreeableness 83, cooperation 91, assertiveness 28) “That’s your problem, you’re too emotional, you care too much.” Once I started hearing that, it felt like a child wanting to be held and comforted by their parent and their parent rejecting them (vulnerability 89). That’s exactly what it felt like. You can imagine a little child wanting to jump in their parents’ arm and their parent saying I don’t have time for this, why are you such a burden. It felt like I’m not a priority in this moment.

When I start feeling this rejection, I start to pull away, to “minimize the damage.” (assertiveness 28, vulnerability 89)

Counterexample 2. Back in 2015, I had just transitioned back to living in America, I had previously lived in South Korea for 2 years as an English teacher. Can’t remember what had happened between my mom and I but something had made me really angry. I decided that I was really gonna let my mom know how I felt, and whatever happens, happens. And instead of talking to her directly, I actually wrote her a letter detailing the things she has done that have really upset me. Why I feel like our relationship was subpar, why I felt there was no strong emotional connection in our relationship. I wrote it and slid it under her door, my father dropped me off. As I was writing it, I was nervous and exhilarated, I was on the cusp of something I hadn’t done before, a lot of anxiety writing the letter, the tension built up on my way to her but it reduced once I dropped the letter off: “it was something very scary but I followed through with it.” To my surprise, she didn’t get angry but her response was “thank you for saying this.”

(compensatory function: higher assertiveness despite the vulnerability and anxiousness)
At that time, I was in a lot of turmoil, transitioning back from S. Korea, just got out of a tinder relationship. Wasn’t working at the time. All of these factors, and I remember that I was dealing with all of these other things and felt I really had to deal with the issue with my mom because I was holding it for a long time. Something stimulated the urge in me to address it, “you can’t miss something you’ve never had: if you’ve never really had an emotional attunement with your mom, then you can’t really miss it with her!” So I stepped out of my emotional mind and stepped into a logical standpoint instead. (compensatory function: lower emotionality) So what’s the worst that can happen? Your mom will yell at you? She’s been doing that all your life! I’ll test the reality, this needs to get out of it, she needs to know it, and if she really cares about me, this will be a litmus test for my mother. I have to test my reality to really see if what’s inside of me really matches up with what’s outside of here. So I decided I wanted to see what’s going to happen. I did a cost-benefit analysis. What’s it gonna cost me? My mom was already angry at me, upset at me. My father also recommended that I do too, said that I’ve been holding it for a long time, and I have so much respect for my dad and felt encouraged by him.

Ms. Y

Focal Questions:
3. Why do I shut down on sharing my wisdom in class? And why do I get upset at myself when I don’t share my knowledge or wisdom in a social setting or a class?
4. With my stress and anxiety, why do I procrastinate on tasks that I know will be helpful in the long run?

Question 1: Why do I shut down on sharing my wisdom in class? And why do I get upset at myself when I don’t share my knowledge or wisdom in a social setting or a class?

I’m taking a certificate of applied positive psychology.

Example 1: I wanted to share how impactful one of my classmates’ advice was (cheerfulness 97), instead I shut down and became very quiet (assertiveness 21, vulnerability 87), later I was ruminating on why I didn’t share with the class (neuroticism 92, anxiety 98), then I got sad, then inner critic voice said what’s wrong with you? (self-consciousness 98) But also that “if you did share, you’d sound awkward or stupid or wrong.” That inner critic voice hinders me when I want to help somebody.

We were in a Zoom class, everybody’s faces were on the screen, so sometimes that’s uncomfortable for me to share in front of groups, always been a kind of introvert, virtually is different than in person now. I have trouble sharing in groups. (self-consciousness 98, vulnerability 87, anxiety 98, agreeableness 85, cooperation 72, cautiousness 80) Class that’s twice a week on zoom for about two hours. My classmate was sharing on the Zoom class. Usually at the beginning of the class, professor asks us what’s good, and that’s when I wanted to share that I’d felt an impact by a fellow student, but instead I was quiet. (assertiveness 21)
Always kind of nervous to begin with, at the beginning of class, anticipating the professor’s invitation to share. I was nervous about sharing it with the group and what they would think about me (self-consciousness 98, vulnerability 87, cautiousness 80, emotionality 92), although there were very nice things I wanted to say (cheerfulness 97, openness 88). The inner critic was talking to me as I was trying to decide as I was going to share it, “they’ll think you’re stupid.” (anxiety 98, self-consciousness 98, vulnerability 87)

I feel caught or stuck, in my stomach I feel nervous, shut down. Anxiety in stomach. (anxiety 98, emotionality 92) Whatever is happening inside can’t get out or find expression in the world. (depression 59) My thoughts in that state, “nobody likes you, stupid thing to say, no one is gonna like what you have to say, you’re gonna make it awkward.” (neuroticism 92, anxiety 98, self-consciousness 98, vulnerability 87)

The whole class, I was kind of quiet and reserved, little teary eyed too, feeling pretty emotional, I almost cried a couple of times, I didn’t engage and say anything for the rest of the class. (depression 59, emotionality 92, assertiveness 21) I listened and didn’t say anything. (assertiveness 21, vulnerability 87, cautiousness 80, depression 59) After the class, I ruminated about it, why didn’t you do that? Same inner critic voices, “why is it so hard for you to share?” (self-consciousness 98)

When the professor asks, he kind of looks around to see if anybody raises their hand to unmute to share, so people were sharing. I always have admiration for people who like to share in groups, because it’s more challenging for me, I like to hear what they have to say too. We’re all interested in the same field, nice way to build camaraderie, know the classmates, I like to listen. (openness 88)

The feeling of being shut down did carry over, though I did listen to what they were saying.

Example 2: When one of my classmates shared, she was doing this workshop and didn’t get the results she wanted, she had tested it out on us, I wanted to tell her that it made an impact on me, but I was afraid of sharing in the group my support to her. (Cheerfulness 97, agreeableness 85, sympathy 98, altruism 89, assertiveness 21, self-consciousness 98) So my inner critic was like, “why can’t you support her in the group?” so I shut down again when I wanted to give her kudos. (self-consciousness 98, vulnerability 87, depression 59, emotionality 92)

Similar context, usually on the Tuesday class the prof asks “any Aha’s! That you wanna share?” and my classmate said about a positive psychology intervention she tried but didn’t get the results she wants and was disappointed. I’m an empathetic person and my heart was feeling for her, and some of the exercises we practiced earlier that I felt could be relevant to her, I wanted to offer her consolation (agreeableness 85, sympathy 98, altruism 89) but couldn’t share this with her in class (assertiveness 21, self-consciousness 98, cautiousness 80). I did end up emailing her later on but not in the class. (self-consciousness 98, cautiousness 80)

My inner critic held me back again, “you’re gonna embarrass her or yourself, maybe this is a moment that the teacher needs to help her, you’re not qualified to help her,” (anxiety 98, self-consciousness 98, cautiousness 80, emotionality 92) even though I have a big heart, I want to
help people out when I see them suffering or in pain. (agreeableness 85, sympathy 98, altruism 89) Hard for me not to help, I feel bad or guilty that I didn’t offer her some support. Rumination again. (sympathy 98, altruism 89, assertiveness 21, vulnerability 87, self-consciousness 98, depression 59) That’s why I ended up emailing her the next day. (self-consciousness 98, anxiety 98, vulnerability 87, cautiousness 80) I had to tell her what I had, I felt very deeply that I had to tell her that. (immoderation 77, self-discipline 19) I wish I could do it in group support. It’s hard to do it in a group setting, I like to verbalize but don’t because of my inner critic. (self-consciousness 98, anxiety 98, vulnerability 87, cautiousness 80)

Counterexample 1: one time that I actually did share in the class was when we were talking about something neuroscience and gender that was really interesting to me, so I shared some really interesting information in the question, after I asked, it facilitated a discussion, so I’d initiated a discussion others jumped in on, so I felt validated in having started a conversation, so it had silenced the inner critic, (cautiousness 80 was curbed, self-consciousness 98 was also curbed) so I did say the right thing and have the potential to do that.

This was in the same class, it was the next class, after that one, I struggle sometimes with sharing in the group, but I find it’s easier when I ask questions, (openness 88) easier for me to share than sharing about myself, (neuroticism 92, anxiety 98, self-consciousness 98, vulnerability 87, cautiousness 80) I asked a question about neuroscience and gender studies, and I felt it was a positive question to ask, I didn’t feel stupid, then two more classmates after piggybacked off my question and facilitated the question the teacher was talking about. So I felt validated for initiating that question, was a very different feeling than when I feel the inner critic, this time I shared the question and it went well, evidence that I could keep doing this. I felt encouraged. (as others meet her openness, she feels encouraged and safe to explore)

Leading up to the question, I felt curiosity, I’m learning about a field I’m very interested in. (openness 88) I’ll always ask a lot of questions to myself, I always want to know answers to things, I was curious about neuroscience, I thought it would be an interesting question to ask that wasn’t exactly in the homework but could start an additional conversation to add to what we were learning. (openness 88, imagination 92) I just felt it was a valid question to ask, so I felt more secure about asking it in the group. Didn’t feel it was a stupid question. (neuroticism, self-consciousness was curbed)

I felt secure, confident, when I was reading the slideshow and listening, I got curious, when I’m being curious and in a safe environment to ask questions that I feel will help with my learning and with other people’s learning, I feel it’s the right time to ask the question. When the slideshow is playing, not everybody’s faces are there…it’s just the professor’s face and just the slideshow, it’s like I’m talking 1-on-1 almost, that makes it easier. Since I was a kid, I’ve been an introvert, 1 on 1 makes it easier, feels safer, group settings don’t feel as safe. (others’ faces are enacted as possibly judgmental and harshly rejecting, neuroticism 92, agreeableness 85)

There was a sense of nervousness when you share in the group, but I felt safe enough and validated by the question I was gonna ask that I felt better to share. (openness 88, curbs anxious/withdrawn self) I also just remembered about my childhood, an experience I had when
I was a young kid in my biology class, I had a teacher who made a comment to me in front of the whole class that made me shut down and not say anything. I still remember the comment, didn’t say anything, and the critic stayed and said “why didn’t you say anything?” the teacher called me “the quiet girl who was gonna take over the world,” everyone was watching me, I was very shy, very uncomfortable, I didn’t know what to say, and it stayed with me. (anger 77, assertiveness 21, self-consciousness 98)

Question 2: With my stress and anxiety, why do I procrastinate on tasks that I know will be helpful in the long run?

Example 3. I’ve been working on this poetry book, I’m a writer and a poet, since I was a little kid as well. (openness 88) I’ve been typing all the poems, piling them, from all my journals and notebooks, into a word document. I have this idea of making a book for my family and friends to send as a gift. (agreeableness 85, altruism 89, cheerfulness 97) I haven’t touched it in months and I actually started this project years ago, 5-6 years, taking a long time to do it. (self-discipline 19) Sometimes my anxiety, I get anxious about it, because of the steps that I have to take, how am I gonna publish it, protect it with copyright, or what? (anxiety 98, vulnerability 87, emotionality 92) Then the inner critic part comes out and says “people are gonna think you’re stupid or silly, maybe you shouldn’t do it.” (self-consciousness 98) So I just wait on it, it makes me anxious, (assertiveness 21, depression 59) but something I would really like to do to give to my family and friends, a part of my self and experiences that I would want to share with them.

Follow-up: I get overwhelmed by sitting at the computer and editing and trying to find a publisher, I get overwhelmed by the tasks, it’s easier to scroll on Instagram or something else instead of that task. I find that something else would be easier. (self-discipline 19, anxiety 98)

Overwhelmed: I feel like there’s too many things to do, I don’t know if I have the confidence in myself as well. Start doubting myself, “is this a stupid idea, will anybody like it, want to edit it?” (self-consciousness 98, anxiety 98, vulnerability 87) then I get overwhelmed that there’s so many steps to take as well (anxiety 98, vulnerability 87, emotionality 92). Stressful, I get anxious, is this what I should be doing right now, something else more important? (anxiety 98, vulnerability 87, self-discipline 19, emotionality 92, intellect 45, imagination 83)

Environment: usually it’s just me at the office, on the laptop, sometimes I get distracted by looking out the window, because you have the computer open it’s easy to check your email or Facebook instead, easy to distract myself.

Anxiety about the unknown, something it’s something I’ve never done before, discourages or hinders me. (Neuroticism 92) I don’t know how to deal with it, so I get anxious and this finds life in my imagination. (anxiety 98, intellect 45, imagination 83, emotionality 92) Ironic because I’m expressing myself in the poetry but it’s hard for me to get it out and share with people. (assertiveness 19? Imagination 83, intellect 45, self-consciousness 98, anxiety 98, vulnerability 87)
I like the sound of drawing my curiosity into the process to focus on the positive instead of the negative.

Example 4. I’m in between jobs right now, been procrastinating because I’m stressed about applying for jobs because I keep thinking that the best job for me is in the park system because I used to work in the parks so I keep comparing them and saying, that’s not a park job, you don’t need to apply for that. (neuroticism 92, anxiety 98, imagination 83, emotionality 92, assertiveness 19) So I procrastinate on applying for jobs when I need a job. I get into the anxious stressful state and I just don’t apply when I should.

- Dilemma: a part of you needs to apply for a job to make money, but another part of you won’t apply to anything that’s not a park job.

Follow up: Environment: in the community that I’m in with my positive psychology program, somebody posted a job in the opportunity section, I got curious and thought I could apply for it. I sent it to myself as an email, I haven’t done anything about it for two days now. It’s in my emails but I haven’t looked at it. Having a hard time sitting down, looking at it, and applying for it. The anxiety critic voice is saying “you’re not qualified for this, this isn’t right for you, etc.” So that inner critic helps me procrastinate as well. (anxiety 98, self-consciousness 98, vulnerability 87, emotionality 92)

I have the email app on my phone, I just go to my inbox, I have a folder called Jobs, it’s in the job folder, I just need to click in it and read it again, but I have not. (avoidance)

Hesitation/reluctance: I’m hesitate to look at the job because I don’t know if it’s the best fit for me. Unease, unsure, anxiety, it’s a virtual job—my last job was virtual and I did have some emotional anxiety with that job, so probably I’m thinking that I might face the same anxiety working from home like you did at that job (vulnerability 87, anxiety 98, cautiousness 80)—cuz I thought I wanted to do a face to face job instead (Extraversion 58, cheerfulness 97), working from home for two years, despite the benefits, some parts were hard on my mental health because I couldn’t engage face to face with people (Extraversion 58, cheerfulness 97). I’m afraid if I did that job again, I’d have a harder time in my mind again. So I’m trying not to be in my mind so much.

Counterexample 2: I noticed when I am with a coach or a family member or the positive psychology class I’m taking, which has a group called “get tough, get stuff done”, I notice that when I’m with other people, I’m motivated to get tasks done that I’m usually procrastinating when I’m on my own (extraversion 58). Recently, I felt motivated and positive from a class I took there, and ended up doing things.

Follow-up: It's a free program with the positive psychology group, the flourishing center, get tough stuff done, one facilitator, 3 hour period of time, small group where I felt comfortable and safe to share, (extraversion 58, neuroticism 92) so I guess the safety theme came up, so she kind of facilitates quiet time but we’re together through our screens (zoom call), tasks in 35 minute intervals with breaks in between, stretching and water breaks, she had us do a gratitude exercise one time, it was focused time—the intention was to focus and do some tasks—so I felt like I could sit on my computer. I did a homebuyer course, my husband and I are buying a house
and I was procrastinating on that, I felt motivated and inspired to be part of this group of people who are working on themselves, and after this three hour period, I applied to a few jobs, felt motivated by these people, had self-confidence and security to do the tasks.

I would have procrastinated on the applying for jobs part Homebuyer class, I was procrastinating on that too, was doing a little bit at a time, but this focused time allowed me to do a bigger chunk.

Pull it up on my laptop, it’s kind of boring, so I disengage from that (openness 88 not being appeased), that overwhelming feeling, there’s 9 chapters, oh gosh this is gonna take me a long time, will disengage, I don’t have time to do 9 chapters today. (self-discipline 19) So I just do a little at a time, unless somebody encourages me to do more (extraversion 58, assertiveness 21). So in this class I was able to do 2 chapters. My husband motivated me to finish it, in a weekend we did it together, so he did the rest. I was able to get it done because he was motivating me to do his. (self-discipline 19, assertiveness 21)

My husband was motivating me through a friendly competition, “who’s gonna finish it first?” so just seeing him do it too was just inspiring. I started it first, but I’d only worked a little bit bc I was procrastinating till the workshop. He started the conversation and said “I’m gonna finish this in the weekend,” so I said “I’m gonna finish it too!” I felt inspired in response to his comment, gave me some confidence that I could do it too (compensatory for assertiveness 21, self-discipline 19, openness 88, vulnerability 87). Then we finished it in two days. Inspired state was like learning, my curiosity again, it’s like a whole new language for me, so the curiosity to learn was motivating and inspiring for me too. (extraversion 58, openness 88)

Mr. Z

Focal Questions:

(1) Why is it that when I am faced with new tasks, I tend to underestimate the degree of commitment required to effectively manage and complete the task?

(2) Why do I care about what others think when it negatively affects me?

Question 1: Why is it that when I am faced with new tasks, I tend to underestimate the degree of commitment required to effectively manage and complete the task?

I think I am more than capable when in reality I am not, which leads to procrastination (Extraversion 79, Self-efficacy 70, Neuroticism 12, Intellect 84)...the tasks that I am able to do if I were to do them properly. School as an example. I would get an assignment, would look at it, think this is fine, but put it off till the end, and get to it the night before. What happens is I think this is easy and doesn’t require much of me (Self-efficacy 70, Neuroticism 12), and then I shoot myself in the foot because of that thought process.

Why is it that I think that I am able to do tasks that I haven’t previously engaged in based on my own thinking that I am in fact able to do them?
Example 1: Most of my life, things have been pretty easy, but as I grew older, the scope and range of tasks had to increase, but I did not keep up with it thinking since it was easy getting to it, it will be easy going on. First year, sys 1500 for a degree in software engineering, the first four weeks of the course were dirt, disgustingly easy and even insulting to people who had used a computer before (agreeableness 28, modesty 27, self-efficacy 70). The first assignment was in and of itself pretty easy. I kind of did it not in the most efficient way; you could either use an if statement to try looping through different consequents, which is extremely inefficient with processing time. What I could have done was use a switch case, which actually checks the actual situation that is happening. This builds up to the actual assignment for the course, which required me to pursue a lot of help from a friend in the course. The first assignment was easy and set expectations that it will be easy when the time comes.

What was the thought process of why it was so easy?
Say you have to move a bunch of gravel from one pit to another pit, sounds easy right? But a lot of other difficulties are gonna come along the way, things will spill, how will you mix it with the dirt, etc.? Same thing with this assignment. Seems like a simple task but a lot of side-effects to account for. It was a dice game. To make a clean program, you have to account for logic bugs, memory allocation, we were also being graded on other aspects too, underlying nuances, that I completely ignored in favor of just finishing the task in as minimal amount a time as possible. (Neuroticism 12, Self-discipline 28, Dutifulness 45)

Example 2: In the first one, I at least completed it. But the second one, I had to get a lot of help from a friend. I underestimated the task and neglected all the subtasks, but I couldn’t get beyond just minimally completing it. I was not ready to do this before the due date. “I don’t know what half of this is, but I’m sure that eventually I will know.” (Neuroticism 12, Anxiety 6, Vulnerability 9) Problem is, I make no effort to eventually find out. (self-discipline 28, dutifulness 45) Considering the rest of it is straightforward, I assume I’m going to know it eventually.

The straightforwardness feels like “I can do it,” feels actionable. Feels like confirmation of my own bias that I am good, I don’t need to do much more. (extraversion 79, neuroticism 12)

The “I can’t do it,” makes me start planning, in a way. Unfamiliar territory, if it’s something I know I can’t do, then that makes me start taking it a lot more seriously, a lot more thought into it. (cautiousness 90, orderliness 72) My brain starts looking at avenues it usually wouldn’t be. (imagination 87, intellect 84) As an example of another course I took in university, it was a math course. The midterm, I got a nice total of 26%. Up till that point I thought I could do it. After that midterm, that was a bit of a reality check. No, I cannot do this. So the two months following that midterm were the most productive time of my life, put more into that course more time than I put into anything else in my life. (immoderation 5, orderliness 72) This was discrete math, a separate branch of math that most people won’t actually encounter: probabilities and sets of data. And a lot of it can be, if you’re looking straight at it from a layperson perspective, it can feel illogical, until you prove it mathematically. The professor would say something that seemed pretty weird, like how many people would you need in a room for them to share a birthday.
Another example: we went to the lake, Simcoe, there was an island off to the distance, and I thought I could probably swim there. Mind you, I did use to be on the swim team but haven’t done any major cardio or swimming in years, but nevertheless thought I could swim there. (extraversion 79, self-efficacy 70, neuroticism 12) I tried and got out pretty far, and farther than I should’ve, and realized I can’t do this. Though I should’ve realized that right from the start. Maybe I should take better care of my cardio, it made me think.

No social pressure, just saw the island and thought I want to swim to that island, I can swim to that island, just because I can. (extraversion 79, neuroticism 12, self-efficacy 70)

Optimistic confidence.

School, procrastination started in the past, self-directed learning. A lot of tasks, like building a server, but I just sat down half a day of googling, and it worked fine. Problem-solving, enjoys and feels good at.

Counterexample 1: The number is counterintuitive, and then he would go and prove it. After that midterm, I started waking up early and spending a lot of time studying by myself so I was more productive (immoderation 5 compensatory for Extraversion 79). For the first time ever, in third year, I started making use of the TA hours, I spoke with the TA’s and the prof in his office hours, he started recognizing me. This was a course that clicked in place.

If I think I can do it, I get comfortable and that’s it. IF I don’t think I can do it, I get to go ahead with it and solve it.

Question 2: Why do care about what others think when it negatively affects me?

Pattern 2: Trying to make others happy at my own detriment.

Example 1: A recurring one, something actually major, staying with a significant other who I knew I wouldn’t be with because if I wasn’t with them, they’d be sad. (Morality 22, Altruism 78? State Sympathy, Trait Sympathy only 28) My highschool sweetheart. I shouldn’t have gotten with her in the first place, essentially what was happening was, she was helping me with math. Was really funny, made one tweet, damn this math course really sucks, and she reached out and offered to help. I found out that she liked me. I didn’t hold any strong feelings for her, was pretty and smart, but I just didn’t like her that way. That dragged on for a bit (immoderation 6). She’d always get really close, drop hints, but never actually went out of my way, despite knowing that she liked me for a long time. Eventually we went on this camping trip in high school, grade 12 gym class. We went and spent a nice evening together. That’s when I thought, eh why not? And I asked her out. As you said, I did feel guilty (state Sympathy). She did put all this time and effort in me and I thought I’d make her feel nice (got close together over a long period of time, beginnings of attachment). We were sitting by the campfire, we were in the same chair, it was hella cold, raccoons kept trying to steal our marshmellow bag, and I remember thinking, “I guess I wouldn’t mind being with her, I know she likes me, no risk
there,” (Neuroticism 12, Extraversion 79) and it was pretty much an informed decision, it wasn’t a leap of faith type of thing (cautiousness 90). Smart, pretty, but I had been in love before that and I knew what love was like and I knew I didn’t love her.

Example 2: Another girl, after that one, pretty much very similar situation. Except this one, I wasn’t the one making the decision, was pushed into it by her. We started spending a lot of time together, were first co-workers, we went to study and she asked what are we, then I said we’re friends, and she said I want to be with you, and we went on a date after she said let’s try it out (morality 22). We spent a little more time with each other. Then I decided that I don’t want to be with her. I did feel bad, so I didn’t say that. We spent two years together. It’s not that I didn’t like her, but she had behaviors that I particularly didn’t like. Every time I just thought to myself, you know what, she’s part of your race and culture, what are your chances of getting with another one? (immoderation 6, anxiety 6, anger 12, depression 51, vulnerability 9, extraversion 79) I thought to myself, yeah I can suck it up, no biggie. Then went on for a while till I realized that maybe I should tell her because I realized I felt unhappy seeing her, genuinely unhappy.

Counterexample 2: A friend of mine liked this girl, he was a bit of a coward. I thought I could get them to talk (altruism 78), we were on the sports team together, I suggested we should all stay back and play some more. They agreed, we played. It was great till she asked me, instead of him, to stay back and play some more. Then I thought I had made a blunder (state neuroticism). So, I had to stop talking to her, and even her friends tried getting me to talk to her, but I still shut it down because of my friend (agreeableness 28). I felt bad for the girl for shutting her down, not the exact same kind of bad because it wasn’t someone who I was with already, but I did feel guilty. “I feel bad, poor thing,” but “I do feel worse for my friend.” I’m imagining her feeling sadness, “oh no, I put myself out there and I got rejected and it’s not, unlike with problem-solving, it’s not something you could problem-solve for.” So there is no science to it, completely out of your hands, can’t change how you feel. The friend would have felt betrayed and also sad, probably worse, because this was one of the first girls he had actually shown some interest in as well, and I know he had been rejected by the previous one. He would have said, what the hell, why would you do that, I can’t believe you would do that, and that would have also affected my other friendships. Angry, betrayed, sad. It would have made me feel not worthy of friendship, because if I am a friend who does that, then what kind of a person am I. I do value loyalty, this is an obvious example not just of disloyalty, but of breaking loyalty. Would have gone against my own values.

In one case, you feel bad for the other person. It’s not you being disloyal. In the other case (with just the girl), what it does reflect is I just made someone sad and I would feel guilty for being someone who made someone else feel sad.

Ms. O (Omitted from data set)

Focal Questions:

1. Why don’t I walk when I have the ideal conditions or opportunity to walk?
2. What is it that holds me back so strongly from going for what I want for myself?
Question 1: Why don’t I walk when I have the ideal conditions or opportunity to walk?

Example 1. I have this goal, which is to walk in the morning, the ideal time I like to walk. I want to get more exercise, my doctor says I need to exercise, so I often wake up and I open up my backdoor and it’s beautiful, it’s cool, it’s a cloudless day, and I have all these reasons to go and walk, and this part of me comes in and says I just won’t do it (assertiveness 30). I know I should just do it, but I don’t (dutifulness 66). Instead, I do something typically, which is: I’ll make some coffee first. Maybe that means, have a bite too. Well then, the inner voice says, you won’t feel as much like walking (immoderation 68). Then I say, I know. I have this conversation in my mind (orderliness 39, self-discipline 13). And then it’s kind of like, oh well. Then I close the door, I proceed to make coffee. Sometimes the argument continues, it says, you know, you will feel so much more invigorated and clear-minded if you walk now, you’ll be able to write and read and study better, everything will be better. It’s as though I’m putting up a wall saying I will have nothing to do with that. (assertiveness 30) It’s weird. That’s the example I have where. I don’t have a counter-example at this point. And this happened just last Saturday after the last time you and I just talked. Suddenly you came into my mind and entered the argument and was like “oh, here is a good example of a pattern.” (agreeableness 93?)

Example 2. I listen to a woman on the web talking about exercising and she was trained in exercise and she said the best time to walk is first thing in the morning when the air is fresh. It was the next Saturday that I woke up and opened the backdoor, I saw and smelt and felt that fresh air, and thought it would be ideal to walk in the morning (assertiveness 30). At first it was: “the beach is not close, I’m not going walk in this neighbourhood.” Yes, it is a perfect time to walk but the other parts of the situation are not ideal, like the neighbourhood. I tend to tell myself it’s a scary neighbourhood (anxiety 2?). Like, there’s an alley behind me that I’ve walked along many times. And in the morning there are bicycles that ride up and down it, and I’ve never had a problem with it, yet I choose that moment to raise a possibility that there might be shady characters in that alley. (fear) It’s not even an ally, it’s a street. But I took that opportunity as a time to raise that as a possibly scary place to go. Then, basically, concluded that there really was no safe place to walk in my neighbourhood, even though I had the ideal fresh air now. So I had to give it up. (assertiveness 30)

Counterexample 1. Before I used to live by the beach and would walk every day. Now I live in a neighbourhood where there’s just homeless people and I would have to encounter them, so the environment is not so beautiful anymore.

Before I heard about this notion of the ideal air being the first air in the morning, I have walked in this neighbourhood in this neighbourhood in the five years I have lived here. There are some things that bother me. Sometimes I’ll notice a lot of labourers in my neighbourhood. Sometimes I’ll be walking along the sidewalk and will notice somebody’s shirt is in the gutter. I then think to myself, I wonder whose shirt this is, should I pick it up, did they forget it, does it belong to a homeless person? And then I start thinking, oh these poor people, maybe they’re not even aware they dropped it, and I start feeling kind of negative and pessimistic about the conditions of the people in this neighbourhood. Maybe they’re uneducated, maybe they’re so overworked that they just drop their clothes and don’t even notice, they’re so weak and over-taxed. (agreeableness 93,
trust 92, altruism 70, sympathy 80) And then I might walk the next day, and there’s the shirt again, and Oh my god, not only are these people so stressed that they drop their shirt, but they don’t even notice it. I just start spiraling down this negativity that this is a hopeless neighbourhood, it turns me off from wanting to walk. So, the shirt becomes really significant. (agreeableness 93, trust 92, altruism 70, sympathy 80, cautiousness 53)

Every once in a while, I’ll have a breakthrough. I don’t know what I have to do, but I’m getting so tired of not walking. Now I’m thinking maybe if I try walking later in the morning, it’ll work better. Some people say drive to the beach, but I find that ridiculous, I don’t find that to be rational, to drive 2 miles just to walk for half an hour. It’s like I can’t find any solution that really satisfies me. (assertiveness 30, vulnerability 58, orderliness 29, self-discipline 12, achievement striving 13) And yet I have to do something here. I love being outside, and that’s the best exercise. (cheerfulness 66, activity level 49)

I think this is the perfect feeling. This was the ideal opportunity for walking. All systems go. It reminds me of my mother, that’s kind of how she would be the big irrational block in my childhood. But apart from that…it was just ideal but it was just like a brick wall in front of me, none of the perfection or idealism could penetrate or influence the decision. Now I got her on my mind.

I used to think of my mother, that feeling, she used to always—it’s very interesting now that I’m talking about it—I have a couple of scenes where I was at the door looking outside with her. It makes me tear up a little bit. But in the morning when I’d go to school, I was really very active in school and a good student, I was very popular, and as I was getting into adolescence into puberty, I got elected as president, but she would always stop me at the door as I was trying to catch the bus, she would tell me to change the way I was dressed. I don’t know why, there was nothing rational about it, but ultimately she would appeal to god and say god doesn’t like girls who are smart or too beautiful, he likes mediocre. That being at the door and I’m about to leave and she’s there saying goodbye to me but in the process stops me and changes something about me and discourages me or something. (extraversion being stifled with neuroticism and agreeableness and low conscientiousness?) (achievement-striving 13, modesty 75, trust 92, sympathy 80, cooperation 72, agreeableness 93, extraversion 30, assertiveness 30, self-consciousness 68)

This other scene, I’m only about 3 and we are staying at her brother’s home. My sis and brother are going to school, she and I are standing at the door and saying goodbye to them, I’m standing and thinking oh I wish I could go to school with them, I want to be out there (adventurousness 50?), but I’m with her and this sense of getting caught up in her.

This whole thing is bringing all of this up because the reason I want to exercise and doctor says I have to, is because I’m overweight and my bloodpressure is too high. That’s the thing with my mother, when I was in puberty and adolescence, I had an ok weight, but she right after this period of puberty when I got elected president of my class, she somehow arranged for somebody from our church, some young man, for me to go with him in the mornings where we would go to a farm where we would cross-polinate corn, and every morning he’d come and pick me up, I’d
go in the farm, and in the afternoon he would drive me home, I don’t even know who he was, but that summer I gained 35 pounds, so I went back to school in the fall, I was so disoriented. I remember going back to school and walking up the stairs on the first day of school, I was thinking who the hell am I who are these people, my identity with these students was discombobulated, I was 35lbs heavier, I felt like a 45 year old woman, didn’t have an identity anymore. So she really had destroyed my beauty and I’m still fighting to get it back 50 years later, and my intellect, I used to be an A student and really loved math in high school, only in the last five years I came to realize that I was in many accelerated classes in high school and didn’t even know it. The other part of gaining 35lbs, when I brought home As, she would just tell me not to show to my brother because it would make him feel bad. She would say god doesn’t like beautiful or smart women. So I sacrificed my intellect and my beauty with her, somehow. And I’ve been fighting to get it back. So this idea of me wanting to walk and exercise…

QUESTION 2

For almost 60 years I’ve been trying to regain my composure with my body that I had before my big adolescence. So I’ve been dieting, but every so often, every decade, I’ll get into a relationship with a man and—the relationships I get into with men, what that means is, I have to repress and suppress my own interests and I become resentful and hold back my feelings and try to help him develop, and then my frustration starts to develop and I start developing anger, and I start some kind of emotional eating and start getting weight and then I become more and more uncomfortable and pretty soon the whole thing falls apart. In the wake of it all, I turn back and see I gained 15lbs, and then it’s the big struggle to lose the 15lbs again. Once I lose it, I regain it once I get into another relationship. ← Can’t Use

I’ve been dieting but what happened about a week ago is I had a dream. The dream was, you need to organize your house so you clearly have a spot in your Self, os you hvave to put your computer in one room, your school computer in another room, move everything accordingly and make clear demarcations for yourself. I woke up and felt like yeah, so I started moving some stuff around and along with that came this clear sense of, I’m gonna clearly follow my diet today too. And I didn’t want any sense of blurriness, I wanted to clear everything. That lasted for about 3 days, where I was eating properly, feeling good, losing weight, feeling energized, getting things moved out and cleared out, but then yesterday I think it was—oh what happened yesterday—so yesterday I helped the neighbour boys, I’ve been offering to pick them up from Karate twice a week. Yesterday, I had not yet eaten lunch or dinner, and I picked up the boys and took them to their home, and I don’t know we were talking, and I found out Mars was going to pop out behind the moon, so the boys said they wanted food, pasta, so the person suggested that if Julia wants to eat the pasta, he’ll make it. Then I indulged in it because it would have been convenient, saving time. (achievement-striving 12, self-discipline 13 + immoderation 68) But this morning I woke up feeling like I’d blown it, why did I do that? I felt bad that I ate these things. I could have eaten lunch, done it differently, prepared for that, but I didn’t, (conscientiousness 31) instead I set myself to feel bad. Sure enough, someone then invites me for coffee, I again indulged, so I had a cup of coffee and a biscuit that they made there, and I didn’t need to eat that (I had a smoothie for breakfast), or spend that
money, so here I am wondering, OK are you gonna go back on your diet now or just continue? *(conscientiousness 31)* It’s like I’m in this position, ok now you’re no longer following the perfect path, now you’re in a kind of anything goes mode, so what are you gonna do? straighten up and eat right or stay in the anything-goes mode?

Which pattern am I gonna choose, the one I ideally want or the one my mother and God would want me to continue on? All my life I was gonna distinguish myself in some way, and if I go her route and God’s route, I don’t get to distinguish and I don’t get to do my creative intellectual work, cuz I’m a good writer. Now I’m thinking once I fully retire in the spring, I can When I eat right, I have the most energy to do good work, and if I start walking first thing fresh in the morning. It’s like right there waiting for me to grab it.

**Question 2:** What is it that holds me back so strongly from going for what I want for myself?

I’m assuming that I’ll be a better person if I sacrifice myself, don’t walk, don’t eat, etc. That was my mother’s whole life story, that she sacrificed for her kids. My parents weren’t happy, they would fight and argue, and my mother and father would say they stayed together for us kid. And this was part of the Christian vision, the more you sacrifice, the better god likes you, you’ll go to heaven, etc. There’s this sense of if you’re the victim, you’re sacrificing, you are being a better person. In fact my father used to say, if people were too rich or too smart or too beautiful, he’d say we’re not like *those* people, if people were too rich, that meant they’d stepped on other people to get that, if women were too beautiful, it meant they were some kind of prostitutes or bad people. People who were too excellent were considered ungodly, so in my family, if you were good, you were actually bad. So for me to seriously pursue excellence, like I knew I could or have, is really heretical.

So when I shut that door, I feel like I’m staying in the fold of the church and mediocrity.

If I were to do my writings, I would ultimately implicate the whole Christian tradition as undermining our whole civilization. But somebody’s got to do it. Somebody’s gotta call the spade the spade here. I see the horrendous effects it’s had on my life. Any kind of excellence or truth, it’s just hypocrisy, what I grew up with, total hypocrisy, and in my mind that’s gotta be called out. That’s just not acceptable, in my book. I’ve been teaching it for 34 years, and I’m just going through a lot of reflection, especially today, when I get my final, I found students saying to me no they can’t talk to their parents, their parents basically wouldn’t tolerate their bringing up the notion that there is a difference in their in how they view things, and in my mind I’m going, what kind of civilization or culture are we living in that children can’t even talk to their parents about their difference in viewpoints? Is every family a dictatorship? Pay lipservice to democracy.

When I was growing up under the Christian church, the view was, it’s either my way or the highway. I’ve been studying Plato for 50 years and Buddhism for 50 years, and studying psychology for 50 years, and I want to do some writing now that incorporates all 3 into some statement about how I see our intellectual world. And I’m sure I’ll step on a few toes and I’ll gladly do that.
In my family, being serious was not allowed because that meant you thought something was meaningful. You weren’t supposed to show anything is meaningful, you’d be laughed at, oh isn’t that cute, you’re a baby or something. So you could be heretical but it would always have to be like, you’re joking or being a comedian, just telling a joke. So to be heretical would mean that I am taking myself seriously, I am taking something other than my mother’s god seriously, and I don’t even think my mother knew what god she was talking about when she talked. But in my family, nothing mattered. Nothing ultimately matters, was the other corollary. Even though we all wanted to do things like take ice skating lessons or get clothes, ultimately it would be, it doesn’t really matter what you want, because the good is bad and the bad is good.

Shame…

I remember when I got back from my masters degree ceremony, I called my sister in Florida, I said I’m now officially a masters, my brother was visiting her and got on the phone and said, if you’re so smart why don’t you come and fix your sister. Nobody ever said congratulations, sent a card, this might have even been when I got my PhD, their response was, well clearly if you’re that great, you should be helping us, not tooting your own horn here. And I don’t even know what he meant by come and fix your sister, I didn’t even know she was broken, but I imagine that it was something they were saying that was asking me to say oh im sorry I stopped thinking about you guys, so it seemed like he was asking for some shame on my part with a rhetorical question like that. But I have not had…I was also part of a research team studying language in the department of psychiatry in UCI, back when Reagan was running for president we did an analysis of his language, we wrote publically that he was already off the charts in his cognitive impairment, and it took 8 years for him to announce that…but in the meantime, there were news articles demeaning what our research was showing, meant to make us feel shame or like we should feel shame.

The language studies I did do, one of the scales we used, shame was defined as a sense of inadequacy on one’s part as judged from within, as opposed to guilt which was judged from without.

Counterexample 2. I am going to go back to my refrigerator when I get off here, stay with my deit today. Today, like yesterday, is a day where I pick up the boys from Karate. Normally on Thursday what I do is the father says let’s go have pizza, and it’s always delicious. One thing I could do is I could eat dinner myself before I go so I’m not hungry, and furthermore, when I do go with them when I do go, I could order a salad, which he always loves to do but he always waits for me to take the lead to order the salad, but I cave in and say I’ll have the boys’ pizza, but tonight I’ll say, let’s eat a salad, stay rational for my own ideals.
APPENDIX F

FEEDBACK INTERVIEW CONTENT

Below is a list of questions that were posed to participants at the end of the feedback interview to collect data for future use.

(1) What was your experience of this research process?
(2) Do you have any thoughts or reflections about these findings?
(3) Does this report capture you?
(4) Is it useful to learn about how your personality relates to the problematic patterns that you identified at the start of this research?
(5) Are any of the things you learned through this process applicable to your life above and beyond the patterns we have discussed together?
(6) Have you learned anything new about yourself through this report?
(7) Moving forward, is there anything I should do differently?
(8) Is there anything you want to add?

Below are the responses provided by Participants X, Y, and Z to the above questions, in conjunction with unstructured feedback (when given).

Mr. X

Response to Individualized Report:

“Question 1 – captures what I said when we had the initial interview, nothing to add, high congruence.

Question 2 – really captures the experience for me at that time, and the meaning I was deriving from those experiences.

Theme 1 – after I receive this, it’ll force me to reflect a lot. Just seeing this stuff on paper really allows me to see myself from a different light, right now I’m just in the state of curiosity to see how you conceptualize these themes based off of what I said and how it relates to the NEO.

Theme 2 – what you were saying about avoiding the conflict and making sure that something is safe is interesting to think about how masculinity is typically presented in US and expecting men to be very forthcoming, take charge, lead, impulsive, and that really doesn’t hold true for me, when women expect you to take charge most of the time, but I’m assessing how safe it is, reflecting, and I think sometimes it calls women to say does this guy really like me? Why isn’t he verbally saying he wants to make love to me? They are looking for that and my process is to really try to assess and see if it’s safe first through bodily cues and responses, anxiety is really because I’m trying to assess, and this can lead to in-action. This is really in-depth.
I know when I’m under stress, I can become really logical, critical, and it becomes the opposite of me tapping into my assertiveness. With women, maybe I’m not as comfortable as I think I am, mind is going really fast, overanalyzing things, and when it is time for me to be assertive, I start doubting myself and ruminating on the possible consequences.

Condition 1 – internal capacity for overclocking assertiveness
Condition 2 – external capacity for overclocking assertiveness
Condition 3 – defense against conflict

Styles of world-enactment
First Style
- First description, very very true, undeniably true.
- I’m thinking about this as, other times when I may say that because she’s not being emotionally expressive, that means she doesn’t like me, and how sometimes that can be false, and the opposite when a woman might be smiling or giving you a hug.

Second Style
- I am really looking to see how the other person is experiencing me and I know in taking attachment style quizzes I came up as anxious preoccupied, a little bit of which was reflected in this style thematically how I’m attuned to the other person that so much of their energy takes space in me…and I am really cautious, that is true, I think for me, I feel that I do give in a relationship, I am really trying to assess how that’s going to be received…wow this is some good stuff, I really will be reflecting on this. This is getting me excited for qualitative work, so much depth in this, and I do like that.

Third Style
- I think it is allowing me to be reflexive about how I exist in the world and interpersonally what’s really alive for me when I’m engaging with people, and I just think I’ve definitely seen how these themes have played out with women, and really getting to that place where I want to be more assertive, and setting healthy boundaries and so forth, but understanding how I do struggle with that assertiveness. You talked about it when I do see it as a need in the situation or my autonomy is being threatened in a relationship, a situation where I don’t see being assertive as a challenge, I can get really resolute on my choice or decisions, when I feel like it’s restricting me. But I think it was just beautiful how you wrote it about women who aren’t very emotionally open or expressive, that runs counter to me. Gender roles in this country, I don’t believe it has to be one way or the other, but for me it’s a dealbreaker if a woman isn’t emotionally expressive, doesn’t make me feel emotionally safe in the relationship, I may slowly drift away. What I take away from this report is, I see who I am is reflected through the traits and I see how what’s alive for me, or the failure to express certain things, can keep me stuck in those feelings of vulnerability, my tendency to overthink and feel trapped, I’m really starting to see that I can look at situations from different perspectives and can become empowered by my ability to make a choice, and thinking about what my needs are, what the report alluded to, my attachment style. I think there’s a lot of things to take away from this assessment.”
Response to Semi-Structured Interview:

1) What was your experience of this research process?

It was really enlightening, I learned what qualitative research looks like, and it was just also a little bit anxiety provoking, what’s gonna come out of this? But overall I’m glad that I did it because I feel like I did learn some things about myself.

2) Moving forward with this research, is there anything I should do differently?

For me, no, I think I had a background with the NEO, I was familiar with a lot of the terms, so no. I think it was a very well-designed study, it was explained. Nothing to add.

3) Is it useful / insightful to learn about how your personality relates to the problematic patterns you identified at the start of this research?

Hundred percent. I think that there are so many things we are not aware of that regulate our behavior and choices moment to moment, I think we try to get those met in healthy and unhealthy ways, and such a study really prompts us to become more aware of what is really alive for us when we are interacting with people. Hundred percent agree with that x 2.

4) Are the things you learned through this process applicable to your life above and beyond the patterns we have discussed together?

Absolutely, they reflect things I’m constantly thinking about with myself or with my therapist, they are salient challenges I feel like I need to directly address to reach my full potential and have the types of relationships that I want to experience. E.g, the assertiveness piece, not looking at that quality as something you need to repress but as an expression of who you are to achieve safety in relationships by having boundaries with people. Prompts me to be aware of how I’m engaging with other people and what my needs are.

5) Do you have thoughts or reflections about these findings?

First, it’s very helpful, helped me to be aware of my own emotional needs and how I show up in the world.

6) Have you learned anything new about yourself through this report?

Yes, I think just that when a situation, that I basically really value emotional safety and security in relationships, and I think that’s why I’m so cautious, and that I do value emotional safety. That’s something I gleaned from this. And the other thing is when I allow myself, give myself permission to test things out, I usually surprise myself by what happens, I’m often surprised by what the outcome is, which runs counter to what I expect. I think girls are gonna reject me, let’s see what will happen. Maybe I’m keeping myself back in certain situations.
7) Does this report capture you?

I think that it does, big salient pieces of me, there are always other pieces that no report captures anything, but I think it does.

8) Is there anything you’d like to add? / Is there anything you’d like the research team to know?

I really think that studies like this can really help people learn about the mechanisms that are at play when they are trying to relate to other people, and I think such a study can help people improve their relationships and how they experience themselves. I feel like we’re in a stage where a lot of people are dealing with loneliness and loss of in depth connection, and such studies are able to empower people, because you can keep engaging in repetitive behaviors that stifle growth, such a study allows people to course-correct such repetitive behaviors.

Ms. Y

Response to Individualized Report:

“Accurate as I recall

Theme 2 – makes sense how I want to connect with others to do work, even though I identify as an introvert, it’s interesting

At the end: It all kind of connects and makes sense. I think that’s exactly how I feel, especially if I spend a lot of time alone—the stuckness feeling. That’s why I look for opportunities to be with safe and trusting people. Since I was a kid, my mom would say ‘just give her a little time, she will trust you’. It’s been good to realize this about myself, seeking group activities is helpful. I’ve actually been feeling really good, not anxious for over a month now because I’ve been working face-to-face with people.

Sounds accurate, can relate to it.
Thank you for getting the acknowledgement. Sometimes when you’re depressed or anxious, you don’t know why it’s happening. Now I know why, thank you for reminding me.”

Response to Semi-Structured Interview:

(9) What was your experience of this research process?
It was very interesting. I’ve never done anything like it. It helped to learn more deeper about myself. So I’m very grateful.

(10) Do you have any thoughts or reflections about these findings?

They sound accurate, and again, it’s nice to have it all in words even though you think it in your mind, to actually see it with science and psychology.

(11) Does this report capture you?

Yes.

(12) Is it useful to learn about how your personality relates to the problematic patterns that you identified at the start of this research?

Yes, very useful.

(13) Are any of the things you learned through this process applicable to your life above and beyond the patterns we have discussed together?

Yes, I think so. Like I said, it helps with my job, and just overall mental health. I know my tendencies, so I know what I can do to stay more balanced with everything. Very helpful for many different areas.

(14) Have you learned anything new about yourself through this report?

I didn’t really realize what a big impact that childhood event had had on my group encounters, so it’s nice to now know that when those feelings come up, I know it’s coming from that Little version of me who was really embarrassed and afraid of what other people would think. It kind of gives me some grace and sympathy for myself when it comes up.

(15) Moving forward, is there anything I should do differently?

It was great, nice to get to know you, the questions, to go over the report, seemed good to me.

(16) Is there anything you want to add?

Thank you and your colleagues for letting me participate and learn more about myself. Wish you the best with your program and everything.

Mr. Z

Response to Semi-Structured Interview:
1. What was your experience of this research process?

What I felt was, I had to recount some things I never really thought much about, which isn’t really difficult per se but things you never think about unless you’re prompted to. It’s like the number of stairs that go into a staircase, take a step back and reflect on more what these questions were asking about all other aspects.

2. Do you have any thoughts or reflections about these findings?

It seems pretty close, some of the conclusions I would personally say are a question mark to me but more along the lines of what you are saying, it does make sense but my self-perception it doesn’t. The extraversion: what you’re saying, straight up I would say I’m an introvert. I don’t like being around people too much, I prefer to stay alone. But from what you said and what you wrote, your descriptor, this guy would go to a party, that’s right. I disagree with the conclusion that I’m an extravert.

3. Does this report capture you?

It’s probably close, a lot of it, as I said, most people they don’t really think about things they do, did I ever do any self-reflection? Let’s say the university examples, yeah I self-reflected but not in the ways you described here. Does it fit? Yeah it probably does, there’s no doubt there. Would I say it captures everything? Maybe not, but once again since I didn’t do my own self-reflection at the time, I can’t say yes or no either way, now can I?

4. Is it useful to learn about how your personality relates to the problematic patterns that you identified at the start of this research?

Yes.

5. Are any of the things you learned through this process applicable to your life above and beyond the patterns we have discussed together?

*Prompted…it does make you take that step back in other aspects, any other behaviors that I identify, it starts making you question, not question but take more introspective look at things from what appear to be simple behaviors, this guy just chucked down a 13 page report.

6. Have you learned anything new about yourself through this report?

No.

7. Moving forward, is there anything I should do differently?

The link: specify instructions to save.

8. Is there anything you want to add?
Process was pretty interesting, as I said a lot more introspection there. It’s like a pretty different thing than the type of analyses I do for my work, cuz it’s a lot less concrete and certain, you’re kinda just grabbing sand and gas clouds and trying to fit it in a box, which does make sense from your discipline’s point of view. Definitely really interesting. Maybe just me, I would say it feels like people who might not know what stuff like this is, they would expect some sort of paradigm shift to accompany it, it feels like this was less of something that might give you a paradigm shift but explains the reasons for why you do things the way you do, and some possible solutions to it. You don’t really go too much into possible solutions, but that could be a potential thing to add on. It’s basically like avoid the situation, which I don’t really think is the solution.
APPENDIX G

IPIP-NEO TERMS AND DEFINITIONS

(Adapted from a sample report based on the International Personality Item Pool
Representation of the NEO PI-R)

A note on terminology. Personality traits describe, relative to other people, the frequency or intensity of a person's feelings, thoughts, or behaviors. Possession of a trait is therefore a matter of degree. We might describe two individuals as extraverts, but still see one as more extraverted than the other. This report uses expressions such as “extravert” or “high in extraversion” to describe someone who is likely to be seen by others as relatively extraverted. The computer program that generates this report classifies you as low, average, or high in a trait according to whether your score is approximately in the lowest 30%, middle 40%, or highest 30% of scores obtained by people of your sex and roughly your age. Your numerical scores are reported and graphed as percentile estimates. For example, a score of “60” means that your level on that trait is estimated to be higher than 60% of persons of your sex and age.

Please keep in mind that “low,” “average,” and “high” scores on a personality test are neither absolutely good nor bad. A particular level on any trait will probably be neutral or irrelevant for a great many activities, be helpful for accomplishing some things, and detrimental for accomplishing other things. As with any personality inventory, scores and descriptions can only approximate an individual's actual personality. High and low score descriptions are usually accurate, but average scores close to the low or high boundaries might misclassify you as only average. On each set of six subdomain scales it is somewhat uncommon but certainly possible to score high in some of the subdomains and low in the others. In such cases more attention should be paid to the subdomain scores than to the broad domain score. Questions about the accuracy of your results are best resolved by showing your report to people who know you well.

John A. Johnson wrote descriptions of the five domains and thirty subdomains. These descriptions are based on an extensive reading of the scientific literature on personality measurement. Although Dr. Johnson would like to be acknowledged as the author of these materials if they are reproduced, he has placed them in the public domain.

Extraversion

Extraversion is marked by pronounced engagement with the external world. Extraverts enjoy being with people, are full of energy, and often experience positive emotions. They tend to be enthusiastic, action-oriented, individuals who are likely to say “Yes!” or “Let's go!” to opportunities for excitement. In groups they like to talk, assert themselves, and draw attention to themselves.

Introverts lack the exuberance, energy, and activity levels of extraverts. They tend to be quiet, low-key, deliberate, and disengaged from the social world. Their lack of social involvement should not be interpreted as shyness or depression; the introvert simply needs less stimulation than an extravert and prefers to be alone. The independence and reserve of the introvert is
sometimes mistaken as unfriendliness or arrogance. In reality, an introvert who scores high on the agreeableness dimension will not seek others out but will be quite pleasant when approached.

**Extraversion Facets**

- *Friendliness.* Friendly people genuinely like other people and openly demonstrate positive feelings toward others. They make friends quickly and it is easy for them to form close, intimate relationships. Low scorers on Friendliness are not necessarily cold and hostile, but they do not reach out to others and are perceived as distant and reserved.
- *Gregariousness.* Gregarious people find the company of others pleasantly stimulating and rewarding. They enjoy the excitement of crowds. Low scorers tend to feel overwhelmed by, and therefore actively avoid, large crowds. They do not necessarily dislike being with people sometimes, but their need for privacy and time to themselves is much greater than for individuals who score high on this scale.
- *Assertiveness.* High scorers Assertiveness like to speak out, take charge, and direct the activities of others. They tend to be leaders in groups. Low scorers tend not to talk much and let others control the activities of groups.
- *Activity Level.* Active individuals lead fast-paced, busy lives. They move about quickly, energetically, and vigorously, and they are involved in many activities. People who score low on this scale follow a slower and more leisurely, relaxed pace.
- *Excitement-Seeking.* High scorers on this scale are easily bored without high levels of stimulation. They love bright lights and hustle and bustle. They are likely to take risks and seek thrills. Low scorers are overwhelmed by noise and commotion and are averse to thrill-seeking.
- *Cheerfulness.* This scale measures positive mood and feelings, not negative emotions (which are a part of the Neuroticism domain). Persons who score high on this scale typically experience a range of positive feelings, including happiness, enthusiasm, optimism, and joy. Low scorers are not as prone to such energetic, high spirits.

**Agreeableness**

Agreeableness reflects individual differences in concern with cooperation and social harmony. Agreeable individuals value getting along with others. They are therefore considerate, friendly, generous, helpful, and willing to compromise their interests with others'. Agreeable people also have an optimistic view of human nature. They believe people are basically honest, decent, and trustworthy.

Disagreeable individuals place self-interest above getting along with others. They are generally unconcerned with others' well-being, and therefore are unlikely to extend themselves for other people. Sometimes their skepticism about others' motives causes them to be suspicious, unfriendly, and uncooperative.

Agreeableness is obviously advantageous for attaining and maintaining popularity. Agreeable people are better liked than disagreeable people. On the other hand, agreeableness is not useful in situations that require tough or absolute objective decisions. Disagreeable people can make excellent scientists, critics, or soldiers.
Agreeableness Facets

- **Trust.** A person with high trust assumes that most people are fair, honest, and have good intentions. Persons low in trust see others as selfish, devious, and potentially dangerous.
- **Morality.** High scorers on this scale see no need for pretense or manipulation when dealing with others and are therefore candid, frank, and sincere. Low scorers believe that a certain amount of deception in social relationships is necessary. People find it relatively easy to relate to the straightforward high-scorers on this scale. They generally find it more difficult to relate to the unstraightforward low-scorers on this scale. It should be made clear that low scorers are not unprincipled or immoral; they are simply more guarded and less willing to openly reveal the whole truth.
- **Altruism.** Altruistic people find helping other people genuinely rewarding. Consequently, they are generally willing to assist those who are in need. Altruistic people find that doing things for others is a form of self-fulfillment rather than self-sacrifice. Low scorers on this scale do not particularly like helping those in need. Requests for help feel like an imposition rather than an opportunity for self-fulfillment.
- **Cooperation.** Individuals who score high on this scale dislike confrontations. They are perfectly willing to compromise or to deny their own needs in order to get along with others. Those who score low on this scale are more likely to intimidate others to get their way.
- **Modesty.** High scorers on this scale do not like to claim that they are better than other people. In some cases this attitude may derive from low self-confidence or self-esteem. Nonetheless, some people with high self-esteem find immodesty unseemly. Those who are willing to describe themselves as superior tend to be seen as disagreeably arrogant by other people.
- **Sympathy.** People who score high on this scale are tenderhearted and compassionate. They feel the pain of others vicariously and are easily moved to pity. Low scorers are not affected strongly by human suffering. They pride themselves on making objective judgments based on reason. They are more concerned with truth and impartial justice than with mercy.

Conscientiousness

Conscientiousness concerns the way in which we control, regulate, and direct our impulses. Impulses are not inherently bad; occasionally time constraints require a snap decision, and acting on our first impulse can be an effective response. Also, in times of play rather than work, acting spontaneously and impulsively can be fun. Impulsive individuals can be seen by others as colorful, fun-to-be-with, and zany.

Nonetheless, acting on impulse can lead to trouble in a number of ways. Some impulses are antisocial. Uncontrolled antisocial acts not only harm other members of society, but also can result in retribution toward the perpetrator of such impulsive acts. Another problem with impulsive acts is that they often produce immediate rewards but undesirable, long-term consequences. Examples include excessive socializing that leads to being fired from one's job, hurling an insult that causes the breakup of an important relationship, or using pleasure-inducing drugs that eventually destroy one's health.
Impulsive behavior, even when not seriously destructive, diminishes a person's effectiveness in significant ways. Acting impulsively disallows contemplating alternative courses of action, some of which would have been wiser than the impulsive choice. Impulsivity also sidetracks people during projects that require organized sequences of steps or stages. Accomplishments of an impulsive person are therefore small, scattered, and inconsistent.

A hallmark of intelligence, what potentially separates human beings from earlier life forms, is the ability to think about future consequences before acting on an impulse. Intelligent activity involves contemplation of long-range goals, organizing and planning routes to these goals, and persisting toward one's goals in the face of short-lived impulses to the contrary. The idea that intelligence involves impulse control is nicely captured by the term prudence, an alternative label for the Conscientiousness domain. Prudent means both wise and cautious. Persons who score high on the Conscientiousness scale are, in fact, perceived by others as intelligent.

The benefits of high conscientiousness are obvious. Conscientious individuals avoid trouble and achieve high levels of success through purposeful planning and persistence. They are also positively regarded by others as intelligent and reliable. On the negative side, they can be compulsive perfectionists and workaholics. Furthermore, extremely conscientious individuals might be regarded as stuffy and boring. Unconscientious people may be criticized for their unreliability, lack of ambition, and failure to stay within the lines, but they will experience many short-lived pleasures and they will never be called stuffy.

Conscientiousness Facets

- **Self-Efficacy.** Competence describes confidence in one's ability to accomplish things. High scorers believe they have the intelligence (common sense), drive, and self-control necessary for achieving success. Low scorers do not feel effective, and may have a sense that they are not in control of their lives.

- **Orderliness.** Persons with high scores on orderliness are well-organized. They like to live according to routines and schedules. They keep lists and make plans. Low scorers tend to be disorganized and scattered.

- **Dutifulness.** This scale reflects the strength of a person's sense of duty and obligation. Those who score high on this scale have a strong sense of moral obligation. Low scorers find contracts, rules, and regulations overly confining. They are likely to be seen as unreliable or even irresponsible.

- **Achievement-Striving.** Individuals who score high on this scale strive hard to achieve excellence. Their drive to be recognized as successful keeps them on track toward their lofty goals. They often have a strong sense of direction in life, but extremely high scores may be too single-minded and obsessed with their work. Low scorers are content to get by with a minimal amount of work, and might be seen by others as lazy.

- **Self-Discipline.** Self-discipline—what many people call will-power—refers to the ability to persist at difficult or unpleasant tasks until they are completed. People who possess high self-discipline are able to overcome reluctance to begin tasks and stay on track despite distractions. Those with low self-discipline procrastinate and show poor follow-through, often failing to complete tasks—even tasks they want very much to complete.
- **Cautiousness.** Cautiousness describes the disposition to think through possibilities before acting. High scorers on the Cautiousness scale take their time when making decisions. Low scorers often say or do first thing that comes to mind without deliberating alternatives and the probable consequences of those alternatives.

**Neuroticism**

Freud originally used the term *neurosis* to describe a condition marked by mental distress, emotional suffering, and an inability to cope effectively with the normal demands of life. He suggested that everyone shows some signs of neurosis, but that we differ in our degree of suffering and our specific symptoms of distress. Today neuroticism refers to the tendency to experience negative feelings. Those who score high on Neuroticism may experience primarily one specific negative feeling such as anxiety, anger, or depression, but are likely to experience several of these emotions. People high in neuroticism are emotionally reactive. They respond emotionally to events that would not affect most people, and their reactions tend to be more intense than normal. They are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. Their negative emotional reactions tend to persist for unusually long periods of time, which means they are often in a bad mood. These problems in emotional regulation can diminish a neurotic's ability to think clearly, make decisions, and cope effectively with stress.

At the other end of the scale, individuals who score low in neuroticism are less easily upset and are less emotionally reactive. They tend to be calm, emotionally stable, and free from persistent negative feelings. Freedom from negative feelings does not mean that low scorers experience a lot of positive feelings; frequency of positive emotions is a component of the Extraversion domain.

**Neuroticism Facets**

- **Anxiety.** The “fight-or-flight” system of the brain of anxious individuals is too easily and too often engaged. Therefore, people who are high in anxiety often feel like something dangerous is about to happen. They may be afraid of specific situations or be just generally fearful. They feel tense, jittery, and nervous. Persons low in Anxiety are generally calm and fearless.
- **Anger.** Persons who score high in Anger feel enraged when things do not go their way. They are sensitive about being treated fairly and feel resentful and bitter when they feel they are being cheated. This scale measures the tendency to feel angry; whether or not the person expresses annoyance and Hostility depends on the individual's level on Agreeableness. Low scorers do not get angry often or easily.
- **Depression.** This scale measures the tendency to feel sad, dejected, and discouraged. High scorers lack energy and have difficult initiating activities. Low scorers tend to be free from these depressive feelings.
- **Self-Consciousness.** Self-conscious individuals are sensitive about what others think of them. Their concern about rejection and ridicule cause them to feel shy and uncomfortable around others. They are easily embarrassed and often feel ashamed. Their fears that others will criticize or make fun of them are exaggerated and unrealistic, but
their awkwardness and discomfort may make these fears a self-fulfilling prophecy. Low scorers, in contrast, do not suffer from the mistaken impression that everyone is watching and judging them. They do not feel nervous in social situations.

- **Immoderation.** Immoderate individuals feel strong cravings and urges that they have difficulty resisting. They tend to be oriented toward short-term pleasures and rewards rather than long-term consequences. Low scorers do not experience strong, irresistible cravings and consequently do not find themselves tempted to overindulge.

- **Vulnerability.** High scorers on Vulnerability experience panic, confusion, and helplessness when under pressure or stress. Low scorers feel more poised, confident, and clear-thinking when stressed.

**Openness to Experience**

Openness to Experience describes a dimension of cognitive style that distinguishes imaginative, creative people from down-to-earth, conventional people. Open people are intellectually curious, appreciative of art, and sensitive to beauty. They tend to be, compared to closed people, more aware of their feelings. They tend to think and act in individualistic and nonconforming ways. Intellectuals typically score high on Openness to Experience; consequently, this factor has also been called Culture or Intellect. Nonetheless, Intellect is probably best regarded as one aspect of openness to experience. Scores on Openness to Experience are only modestly related to years of education and scores on standard intelligent tests.

Another characteristic of the open cognitive style is a facility for thinking in symbols and abstractions far removed from concrete experience. Depending on the individual's specific intellectual abilities, this symbolic cognition may take the form of mathematical, logical, or geometric thinking, artistic and metaphorical use of language, music composition or performance, or one of the many visual or performing arts. People with low scores on openness to experience tend to have narrow, common interests. They prefer the plain, straightforward, and obvious over the complex, ambiguous, and subtle. They may regard the arts and sciences with suspicion, regarding these endeavors as abstruse or of no practical use. Closed people prefer familiarity over novelty; they are conservative and resistant to change.

Openness is often presented as healthier or more mature by psychologists, who are often themselves open to experience. However, open and closed styles of thinking are useful in different environments. The intellectual style of the open person may serve a professor well, but research has shown that closed thinking is related to superior job performance in police work, sales, and a number of service occupations.

**Openness Facets**

- **Imagination.** To imaginative individuals, the real world is often too plain and ordinary. High scorers on this scale use fantasy as a way of creating a richer, more interesting world. Low scorers are on this scale are more oriented to facts than fantasy.

- **Artistic Interests.** High scorers on this scale love beauty, both in art and in nature. They become easily involved and absorbed in artistic and natural events. They are not necessarily artistically trained nor talented, although many will be. The defining features
of this scale are interest in, and appreciation of natural and artificial beauty. Low scorers lack aesthetic sensitivity and interest in the arts.

- **Emotionality.** Persons high on Emotionality have good access to and awareness of their own feelings. Low scorers are less aware of their feelings and tend not to express their emotions openly.

- **Adventurousness.** High scorers on adventurousness are eager to try new activities, travel to foreign lands, and experience different things. They find familiarity and routine boring, and will take a new route home just because it is different. Low scorers tend to feel uncomfortable with change and prefer familiar routines.

- **Intellect.** Intellect and artistic interests are the two most important, central aspects of openness to experience. High scorers on Intellect love to play with ideas. They are open-minded to new and unusual ideas, and like to debate intellectual issues. They enjoy riddles, puzzles, and brain teasers. Low scorers on Intellect prefer dealing with either people or things rather than ideas. They regard intellectual exercises as a waste of time. Intellect should not be equated with intelligence. Intellect is an intellectual style, not an intellectual ability, although high scorers on Intellect score slightly higher than low-Intellect individuals on standardized intelligence tests.

- **Liberalism.** Psychological liberalism refers to a readiness to challenge authority, convention, and traditional values. In its most extreme form, psychological liberalism can even represent outright Hostility toward rules, sympathy for law-breakers, and love of ambiguity, chaos, and disorder. Psychological conservatives prefer the security and stability brought by conformity to tradition. Psychological liberalism and conservatism are not identical to political affiliation, but certainly incline individuals toward certain political parties.