

Rediscovering Existentialism in Predictive Processing: Enhancing  
Person-Centered Psychiatry

By

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*BQ is a 65-year-old woman who has struggled with crippling “anxiety” and “panic attacks” since the death of her sister ~5 years ago. Once a successful entrepreneur, she now spends most of her days paralyzed in her apartment and taking multiple anxiolytics to make it through the day. When asked to place her anxiety, she describes an acute awareness of her own mortality and a relentless sense of isolation that is only broken by the serenity of sleep.*

How would you begin to formulate this case and make a diagnosis? While we don’t have all the details in this example, we can calculate that there exist 227 distinct DSM-5 symptom combinations to produce a diagnosis of MDD, 42 combinations for GAD, and 8814 combinations for panic disorder. It is likely BQ would meet criteria for at least one or more of these disorders. Let’s say we make one of these diagnoses and start our biopsychosocial formulation. We follow the tried-and-true path of adjusting anxiolytic/antidepressant medications, recommending CBT, and investigating potential social supports. On to the next patient. What if we are missing something?

Scientific inquiry into the etiology of mental illness has yielded powerful insights such as the combination of midbrain dopamine transmission, temperament, and childhood adversity identifying a lifetime history of DSM-V disorders with 90% accuracy<sup>1</sup>. This is only one side of the truth. As William James reminds us: “Science, however, must be constantly reminded that her purposes are not the only purposes, and... may be enveloped in a wider order, on which she has no claims at all.”<sup>2</sup>.

Although we can abstract biopsychosocial factors from each person to diagnose or formulate, we risk devaluing and destroying what Carl Rogers calls “the subjective individual”<sup>3</sup>. We run the risk of disqualifying the ‘self’ in this process. This begs the question of who we are healing in the first place.

This is where an existential perspective can be valuable. This essay argues that an existential framework, far from being outdated or purely philosophical, is congruent with contemporary neuroscience, specifically the predictive processing framework, and offers our psychiatric practice an essential, humanistic layer for understanding mental illness and reducing stigma.

### *The New You circa 1849*

*“...a self, every moment it exists, is in a process of becoming; for the self is not present actually, it is merely what is to come into existence.” – Soren Kierkegaard, *Sickness Unto Death**

The 19<sup>th</sup>-century Danish philosopher Soren Kierkegaard is considered one of the key figures in existential philosophy. Kierkegaard conceives of the self as ‘potential’, unfolding in a process. Considering the self as action instead of discrete states is reminiscent of the term ‘being’ in existential literature. As a verb, ‘being’ is often used by existential psychologists to denote each person’s unique journey of envisioning and cultivating relationships with the environment (umwelt), others (mitwelt), and oneself (eigenwelt)<sup>5,6</sup>. Rather than keeping the discussion of ‘self’ and ‘being’ in abstract terms and relegate existentialist ideas to the 19<sup>th</sup> century, cognitive neuroscience can shed some light on what the process of ‘self’ or ‘being’ may look like.

### The Brain as the Existential CP-You

*“Our brains create our worlds through processes of Bayesian best guessing in which sensory signals serve primarily to rein in our continually evolving perceptual hypotheses.” – Anil Seth, *Being You: A New Science of Consciousness**

Cognitive neuroscientist Anil Seth argues conscious experience constitutes the continually evolving predictions our brain generates about the environment, refined using sensory input<sup>7</sup>. Our brain is a Bayesian-like machine equipped with beliefs and understandings about the world that narrow down possible causes of sensory information to construct a useful reality.

Should our models and sensory input disagree, we update the models or act such that our new sensory input fulfills the existing models. This action-perception loop is known as active inference<sup>8</sup>. For example, if your brain predicts that a coffee mug is on the table and sensory input confirms it, the model is reinforced. If the mug is not there, a prediction error is generated. The brain may then direct an action, such as directing your gaze to another location, to minimize the error by finding the mug. If repeated action fails to resolve the mismatch, the brain updates its internal model to reflect that the mug has been moved. In this way, we navigate the world by making conditional or counterfactual predictions about our actions<sup>9</sup>. Seth extends his argument to our feeling of a subjective self and our emotions as based in active inference about internal and external causes of changes to our physiological state<sup>10</sup>.

The implication of consciousness as a set of Bayesian inferences is that we see the world and ourselves as it is useful to us and not in an objective way<sup>8</sup>. Kierkegaard’s intuition is hardwired as we can only be conscious, and practically consider an experience “real”, when our brain generates and tests hypotheses about it.

How does this relate to an existential conception of the ‘self’? A bottom-up view of the brain as a stimulus-cognition-response organ inflicts passivity on the self. Predictive processing provides a biologically grounded blueprint for how we change our frameworks about our internal state and actively adapt to the world<sup>11</sup>. In other words, we have a neuroscientific basis for an active, evolving ‘self’ and the existential sense of ‘being’. Our ‘self’ or ‘being’ (at least our perception of it) can be conceived as a dynamic, unfolding series of inferences about the world and ourselves based in a strong prior of a stable physiological state.

Far from being an antiquated set of ideas divorced from modern neuroscience, the predictive processing framework provides a biological basis for the ‘self’ and ‘being’, consistent with the existential perspective. Delving more deeply into the implications for mental disorders will illustrate the value of an existential lens for our understanding of mental health and illness.

### Escaping ‘Nothing But’ - An Existential Perspective on Mental Health and Illness

*“For all the mindfulness and yoga classes today, we have become more skeptical about a certain kind of personal human progress. We think of depression, anxiety, grief, and other disconcerting emotions as inner disturbances to be doused with pills and adjusted with other forms of lifestyle engineering.” – Gordon Marino, *The Existentialist’s Survival Guide**

Mental illness is conceptualized in many ways from “problems in living,” as Thomas Szasz contends<sup>12</sup>, to malfunctioning neurobiological circuits. If we take our previous proposal of the self as the iterative inferential process taking place in our brain, we accept an ‘embodied’ view of mental disorders

as disturbances in interactions between our environment, our neurophysiology (particularly our anterior insular cortex<sup>13</sup>), and subjective experience<sup>14</sup>. If our subjective experience breaks down due to erroneous models of the world and we fail to properly refine them using sensory input, our self enters a state of distress that can manifest as psychopathology<sup>15</sup>. These failures in prediction and error correction likely arise from disruptions in the hierarchical dialogue between cortical and subcortical systems. Biopsychosocial determinants converge in the brain to produce these aberrant circuits, networks, models and, consequently, psychopathology.

This is usually where contemporary discourse around mental health and illness stops. However, this description falls into Frankl's "nothingbutness" trap where we convince ourselves we are *nothing but* neurobiology, psychodynamics, and sociological circumstances. When "...we can no longer find 'the one' to whom this or that experience has happened"<sup>16</sup>, as Rollo May writes, we have biased our view of people as sums of biopsychosocial parts instead of emergent and dynamic selves<sup>17</sup>.

What the existential perspective argues is not all types of what we categorize as 'psychopathology' are *a priori* pathological but can *become* pathological<sup>18</sup>. Commonly diagnosed mental disorders such as depression and anxiety can serve a purpose and may be *meaningful* as they communicate a challenge to our 'being' we need to answer.

Irvin Yalom concisely and pragmatically describes these challenges as death, freedom, isolation, and meaninglessness<sup>19</sup>. Death confronts us with the eventual dissolution of our self, freedom challenges us to take responsibility for our choices and existence, isolation recognizes separateness from the world inherent in the human condition, and meaninglessness threatens an existence lacking in value. Research has shown death anxiety can sit at the core of anxiety and depressive disorders<sup>20</sup> and moderate symptom severity<sup>21</sup>, and meaning in life strongly associates with depression<sup>22</sup>. If we accept an existential formulation, the comorbidity of anxiety and depression is unsurprising<sup>23</sup>. Taken together, anxiety and depression can signal a threat to our 'being' by an insufficient acknowledgement of, and response to, death, freedom, isolation, and/or meaninglessness.

From here, we can infer that mental health is indistinguishable from a process of becoming fully aware of death, freedom, isolation, and meaninglessness and mounting a response by uniquely harnessing anxiety and depression for constructive purposes. This is what the existentialists would call living *authentically*. As Charles Taylor writes, "Authenticity is not the enemy of demands that emanate from beyond the self; it supposes such demands."<sup>24</sup> Living authentically, and maintaining our mental health, requires we acknowledge and confront these ultimate concerns alongside other moral demands placed on us as a condition of having relationships with the world, others, and ourselves.

This has implications for stigma. If certain types or aspects of psychopathology are related to inescapable aspects of existence, we are all in the same boat. We may have different gene expression and childhood circumstances, but we all face death, freedom, isolation, and meaninglessness. In fact, looking outside of a common biological denominator is more effective at reducing stigma<sup>25</sup>. Taking an existential approach creates a common ontological denominator for humanity and in the process destigmatizes mental health issues as a matter of degree instead of kind<sup>26</sup>.

It is worth clarifying the existential approach to mental health and illness is distinct from the biopsychosocial view but not *against* it. For example, clear causative relationships between physiological manipulation (ex. medications or brain injury) and a change in mental condition reinforce the undeniable reality of the brain and body as the substrates that provide us with our experience of the world. Instead of ignoring the power of neurobiological mechanisms of mental illness, the existential perspective adds another level to the analysis<sup>27</sup>. Just like how we can't understand consciousness by

studying a lone synapse, we can't understand what it fully means to be human by studying biopsychosocial determinants alone.

### Enhancing Psychiatric Practice with Existentialism

Instead of an antiquated perspective, the existentialist conception of the 'self' or 'being' aligns well with the dynamic predictive processing framework. When our active inference and adaptation to the environment fail to adequately account for ontological realities such as death, freedom, isolation, and meaninglessness, psychopathology can arise or be exacerbated. By taking this perspective, we find synergy between the brain's inferential predictions and the existential task of becoming. Mental health is not the absence of anxiety or depression, but the ability to relate to these states as meaningful reflections of our condition. They can be understood as emotional responses to the unavoidable facts of existence and are signposts highlighting the need for growth, re-evaluation, or change.

We may become more technically precise in unraveling the biological substrates of the self and inferential processing, but we must not forget about death, isolation, freedom, and meaninglessness lingering under the surface.

What we can do is use an existential lens to enhance our modern scientific conceptions of the brain and mental health as 1) not living without depression or anxiety but recognizing its relationship with the self grappling with existential concerns and 2) a process of confronting these concerns directly through meaningful engagement with the world, other people, and the inferring, evolving self.

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