'We' and 'They': Cross-Cultural Conversations on Identity

with Anindita N. Balslev, ""'We' and 'They'": Why Must We Engage in Cross-Cultural Conversation?"; Carolyn J. Love, "Complex Identity: Genes to God"; Andrew B. Newberg, "Identity and the Brain: The Biological Basis of Our Self"; and John Calvin Chatlos, "Adolescent Identity Formation versus Spiritual Transformation."

COMPLEX IDENTITY: GENES TO GOD

by Carolyn J. Love

Abstract. Unraveling the complex notion of "self" and "other" necessitates a layered approach that explores biology, namely genetics; philosophy, namely event phenomenology; and culture, namely religion. This essay examines (1) the latest paradigm shift occurring in the genetic sciences due to the increased knowledge of epigenetic effects on gene expression and how our DNA functions in concert with the cellular apparatus, the body, and the environment; (2) the incorporation of relationality into a philosophical understanding of self; and (3) finally, what religion adds to this exploration of self. Thus, providing a glimpse at how these different approaches to identity help us understand the "self."

Keywords: epigenetics; identity; image of God (imago Dei); morality; other; phenomenology; self

Introduction

When we look in a mirror, how do we see ourselves? How do we understand our identity in relation to the other? How do we unravel the complexity of the "self" changing through time? *Psychology Today* points to memories, experiences, relationships, and values creating a sense of self (www.psycologytoday.com). Traditionally, philosophy addresses the understanding of self or how we distinguish ourselves from another. However, today cognitive science, ethics, and psychology also attempt to unravel the obscurity of the self. I suggest that explaining personal identity or comprehending the self in relation to another extends across many disciplines.

In exploring the self, I will examine three disciplines, biology, philosophy, and theology. These three specialties may seem like an odd

Carolyn J. Love teaches at the Department of Religious Studies, Elmhurst University, Elmhurst, IL, USA; e-mail: fiveloves.cl@gmail.com.

amalgamation for this task. However, each of these three fields contains insight for comprehending identity, and when viewed side-by-side, creates a holistic layered approach. This layered approach recognizes the complexity and the different factors involved in the perception of self. Similarly, this method considers our relationship with the other. Through biology, namely epigenetics; philosophy, namely event phenomenology; and theology, namely morality and soul, I will demonstrate that understanding identity requires a layered relational approach.

Self in Biology: Epigenetics

Comprehending the self within a biological context often begins with the question, what makes us, us? Are we a mind or body, or are we a mind and body? There are two competing views on this in human genetics. The first espouses a classical gene-centered interpretation. Deoxyribonucleic acid (DNA) is the unchanging template of heredity, identical in all somatic cells, and the sole inheritance mechanism (Charney 2012, 331). This view presents a dualistic and a reductionistic perspective in examining identity through a biological lens. The second viewpoint perceives a paradigm shift toward a relational developmental system (RDS) that considers epigenetic regulation¹, DNA variability, and somatic cell mosaicism within a holistic system (Nordgren 2008, 259; Charney 2012, 331; Overton 2013, 41). RDS offers a nondualistic, multilevel, integrative, dynamic, and relational platform for investigating the self (Lerner and Overton 2017, 114). This shift toward RDS renders implications for understanding ourselves and, thus, our identity as mind and body.

The RDS lens supports a vastly complex network of interactions that shape the emergent properties of self, including our genes, cells, organs, selves, physical environment, culture, and history as probabilistic epigenetics. According to Richard Lerner and Willis Overton, human development occurs "through complex relational, bidirectional, and multidirectional, reciprocal and interpenetrating relations among the co-acting part process that the system moves to levels of increasing organized complexity. Thus, epigenesis identifies the system as being completely *contextualized* and *situated*; *time and place matter*" (Lerner and Overton 2017, 114). Epigenetic regulation refers to a histone modification and DNA methylation that modifies gene expression. DNA methylation can extend across generations (Lerner and Overton 2017, 114). This affects the function of our DNA with implications for our progeny that occurs in relation to our whole self, shaping our behavior and understanding of self as mind and body in concert.

The multidirectional relations include a molecular change to our probable epigenome caused by environmental and social changes, which play an essential role in developmental and evolutionary biology (Charney 2012,

331). "...the 'epigenome is historical memory,' the 'molecular archive of past environmental conditions... " (Gregg 2018, 265). However, the fluid nature of epigenetic changes means that they can be reversed. "The goal of much medical epigenetic research is to find ways to reverse pathological epigenetic events" (Francis 2011, loc. 80). With this in mind, we continue to examine how epigenetics contributes to the formation of self through multidirectional relationships.

Environmentally induced epigenetic change may arise as a response to stress, food, pollutants, or social interaction (Francis 2011, loc. 69). For example, Richard Frances notes in his book, *Epigenetics: How Environment Shapes Our Genes*, that maternal stress experienced in the womb increases the cortisol levels experienced by the fetus, which in turn, may "make it more sensitive and hyperresponsive to subsequent stressful events. These permanent alterations in the stress response are often referred to as glucocorticoid, or HPA [hypothalamic-pituitary-adrenal axis], programming" (Francis 2011, 42). These children often exhibit anxiety, depression, or post-traumatic stress disorder (PTSD; Francis 2011, 43). This suggests that the womb environment may influence how someone comprehends themselves as anxious or depressed, shaping their cognitive understanding of identity.

Francis contends that other environmental factors influence the human epigenome, including social interactions. He points to affectionless control where the Parenting Bond Instrument, an index for maternal care, is low and maternal control is high, resulting in a risk factor for depression, anxiety, antisocial personality disorder, obsessive-compulsive disorder, and reactive stress response (Francis 2011, 72). In contrast, high maternal care results in high self-esteem, low anxiety, and a dampened stress response (Francis 2011). "In both rats and humans, maternal style within the normal range can be transmitted transgenerationally. In humans though in contrast to rats and most other mammals, including monkeys and gorillas—fathers, as well as mothers, play an important role in parenting ... Moreover, one recent study² found a correlation between levels of the master hormone CRH (corticotropin releasing hormone) and reported levels of parental, not just maternal care" (Francis 2011, 72–73). The relationship between parenting style and possible epigenetic changes affects our emotional and social behavior and, thus, impacts how we see ourselves.

Answering the question, "how do we understand ourselves?" through the lens of RDS encompasses three points. First, the mind/brain, body, and environment are interconnected. Second, we are a web of interrelationality between our human self and the environment. Third, we are a holistic temporal being situated here at this time. Probable epigenetic changes described above underscore these three aspects.

Self in Philosophy: Event Phenomenology

Yet biology is only one facet of self, even when epigenetic changes affect our behavior and development; memory and experience constitute another component of identity. Event phenomenology addresses the concern of being-in-time and creates a valuable dialogue partner with biology that recognizes us as *situated in time*. As described by Claude Romano, event phenomenology supports our biological understanding of self. Romano uses birth as the source of possibility that opens a person to the events that characterize their being-in-the-world (Romano 2009, 19). The starting point of birth provides a common concern with genetics, a biological study in which birth also opens up the possibility for being-in-the-world (Love 2014, 62).

For Romano, nonlinear significant events and memories create our understanding of self upon reflection. The person's advent opens them to their life events and how they shape their identity nonlinearly. How we understand ourselves often reflects a significant life event outside birth. For example, I understand myself as a mother. A life-changing event that happened in my twenties and continues to play a meaningful role in my identity.

According to Romano, awareness of my identity through my being-in-the-world becomes steeped in my perception of selfhood. He states, "...selfhood signifies an *advent's* [person's] capacity to be open to events, insofar as these events happen to him (sic) unsubstitutably, the capacity to be implicate himself in what happens to him, or the capacity to understand *himself* from history and the possibilities it actuates" (Romano 2009, 92). Selfhood allows the person to be receptive to life-changing events and to distinguish these events as occurring to themself as historically grounded in the event and the opportunities it affords. As these events occur, it is in selfhood that one can comprehend that they have been transformed in each instance at different periods in their history (Romano 2009, 97). Selfhood permits recognition of a life-changing event for "me" whenever it occurs during my lifetime. I am the one whose possibilities open up because I became a mother. My perception of self reflects this momentous event.

This insight into selfhood aligns with an epigenetic alteration that affects my being-in-the-world. If I see myself as anxious, I may attribute it to a significant traumatic event. That event, whether in my lifetime or in my ancestor's lifetime, may have caused epigenetic changes. The possibility that the trauma occurred before my birth raises the question of whether this stretches event phenomenology is beyond its limits? In his explanation of event phenomenology, Romano explains that event applies to one person's being-in-the-world and how events in their life affect that person's self-awareness. While epigenetic change can affect one person's

being-in-the-world, it also can be extended to future generations. However, when epigenetic change arises and influences the originating person or subsequent generations, it affects a specific individual's life world and understanding of self. Reflecting on a probable epigenetic alteration that affects my understanding of self regardless of when it occurred can be a life-altering event. An event from a biological and phenomenological perspective necessitates a durational quality.

Another feature of an event, according to Romano, appears in how one encounters another and how that event intertwines the person's lifeworld with another's, reconfiguring possibility. The encounter becomes more significant than a memory because it cannot be reduced to the moment of introduction since it transcends the introduction by reconfiguring the person's world, whether they recognize it or not. It may even occur against the person's will (Romano 2009, 123). Romano sees encounter as escaping reduction to an instant phenomenon but as establishing a beginning that never ends, opening ceaseless new possibilities as "continuing encounter" (Romano 2009, 123). The true encounter takes place as a life-changing event that exceeds the moment of introduction in the memory and takes on the perpetual possibility of changing one's being-in-the-world (Romano 2009, 127). Therefore, encounter with the other impacts how we comprehend ourselves in our daily lives and how we perceive our own identity.

Encounter entwines people's lifeworld and changes how someone understands their day-to-day life. For Romano, "an encounter signifies the irruption of another world in an *advenant's* own world" (Romano 2009, 128). Encounter opens up the world of another by permitting the person to appropriate the other's possibilities and redeploying them as their own. Thus, encounter opens the possibility of reconfiguring our world and its possibilities differently by accessing another's world (Romano 2009, 129). In encountering another, the person becomes open to the endless possibilities the other affords, shaping how they distinguish themselves. As a mother, my lifeworld and understanding of self constantly ebbs and flows in the encounter with my children. They open me to greater possibility and a new awareness of self-ascribable to our different worlds entwined nature.

As ascribed by Romano, the intertwined character of encounter enables a connection with a probable epigenetic understanding of self. An encounter that sparks epigenetic changes occurs when the physical or social environment reconfigures their lifeworld, causing new ceaseless possibilities regarding one's identity of self. Our epigenome and DNA transmission connect us to our being-in-the-world and, thus, to those who came before us. We encounter the other in our present now and in our immemorial past. The biological description of encounter requires an

expansion of Romano's thinking to include our social, physical, and deep historical environment.

Answering the question, "how do we understand ourselves?" through a biological and a phenomenological lens requires a holistic picture of the self. A self-interpretation emerges and creates an interdependent relationship between the other, the environment, and the biological history. Mind/brain, body, other, and environment become biologically and philosophically interconnected. We are not a mind without a body that never interacts with the other and without an epigenetic/genetic past. One discipline does not overshadow the other but must come together to form a cohesive understanding of self. Our identity is a series of nonlinear events that, upon reflection, creates a sense of self, while an encounter with the other opens up new possibilities for comprehending ourselves. The environmental effects, social and physical, that shape our epigenome must come together with our life-altering events and memories to illuminate our identity.

Self in Theology: Morality and Soul

The vital role biology and philosophy play in comprehending identity does not address the question, "what do we consider the most essential part of the self?" According to Nina Strohminger and Shaun Nichols in their article, The Essential Moral Self, moral traits prevail as the most important factor in personal identity, "the self, and the soul" (Strohminger and Nichols 2014, 159). "The...most basic point is that not all parts of the mind are equally constitutive of the self, challenging a straightforward view of psychological continuity. Identity does not simply depend on the magnitude of retained mental content...Moral traits are considered more important to personal identity than any other part of the mind" (Strohminger and Nichols 2014, 168). Thus, the layperson understands the self as an expression of moral sensibility, not the sum of cognitive faculties (Strohminger and Nichols 2014, 169).

Strohminger and Nichols point out that the place of privilege for morality may arise from its centrality in defining what it means to be human and its necessity for cooperation and affiliation (Strohminger and Nichols 2014, 169). They also extend the concept of the soul as a placeholder for the moral self regardless of explicit belief in God (Strohminger and Nichols 2014, 160). They found that people without religious belief still attributed spiritual properties to the soul. The relationship between our inner essence or soul and morality "may not be coincidental, but part of the natural tendency to associate moral traits with the most essential parts of the self" (Strohminger and Nichols 2014, 169). Thus, our spiritual self—the soul is linked to our moral self, which grounds our humanity.

In Christianity, the *imago Dei* establishes our humanity and our inner being in a relationship with God as moral agents. Professor Emeritus of Molecular and Cellular Biology Martinez Hewlett asserts, "if the human person is, in some sense, in the image of the Creator, then there exists some present and active relationship between each of us and that Creator." Thus, "we are creatures who are creative, who can love and be loved, and who can fall out of relationship with the Creator. In all of these aspects, we are free to choose. As a result, our relationship with God is as a moral agent" (Hewlett 2010, 161). Here, as a moral agent made in God's image and likeness, we comprehend ourselves (Genesis 1:27). Our identity becomes more significant than our body, mind, memory, or event to include our essence or soul.

When we add this last piece to the identity puzzle, a picture that encompasses the whole self, including our biology, philosophy, and morality, arises. "Our past, our present. and our future are part of our reflection. That reflection consists of the physical body, the philosophical *esse*, and the theological *imago Dei*" (Hewlett 2010, 163). This forms the core of the self. Even though our identities constantly change, this core enables us to understand ourselves interacting with others as the same person over time (Messer 2001, 109).

Today I am a mother, while 30 years ago, I was not. However, I still see myself as "me." I look into that mirror and "see" everything that has brought me to this now, including possible epigenetic changes due to trauma, my nonlinear significant life events, and my moral compass grounded in the *imago Dei*. I live in relationality with my physical, social, and historical environment. I am not one definition of self but a complex lived reality of self.

Conclusion

To do justice to answering the question, "how do we see ourselves?" we need a comprehensive examination that considers multiple aspects of identity and relating to each other. This analysis of identity demonstrates the importance of a layered approach to understanding the self. In particular, it shows that a relationality between body, mind, event, memory, and morality forms a holistic picture of self and self in relation to the other. Biology, namely epigenetics; philosophy, namely event phenomenology; and religion, namely morality, help us comprehend ourselves. We are an amalgamation of our epigenetic changes, nonlinear events, and essence. One facet without the others renders an incomplete picture of identity.

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Notes

1. Epigenetics—changes in an organism caused by modification of gene expression through DNA methylation and histone modification rather than an alteration of the genetic code itself (Lerner and Overton 2017, 114).

2. Tyrka, Wier, et al. (2008).

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