

Mind, “the Power of the Human Spirit”

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Abstract

This paper correlates Bahá'í concepts of the mind with insights from philosophy. It presents arguments from both sources for a non-reductive understanding of the human mind and argues that, although science can help us advance our understanding of the mind, it is not sufficient in this pursuit, as it cannot capture fully how the human mind experiences reality. The paper reviews the mind's conceptual way of knowing, explores the implications of language for philosophy of mind, and considers how the pursuit of science and the phenomenon of religion both shed light on the capacities and nature of the mind. After suggesting that the process of learning in which the global Bahá'í community has embarked may serve as a model for engaging the human mind in a collective enterprise for the betterment of the world, it turns back to philosophy to submit that, while many contemporary philosophers persuasively argue that the human mind is not reducible to physical causality, the philosophical resistance to a spiritual dimension of the human mind is excessively limiting. The minds of human beings demonstrate capacities that lie beyond nature, and a conception of the mind as “the power of the human spirit” or “rational soul” can not only be a fruitful way of understanding the mind, but lead to an orientation by human beings in the world, demonstrated through the learning

process discussed earlier in the paper, that holds promise for the future of humanity.

Résumé

Le présent article met en corrélation les concepts bahá'ís de la raison avec les perspectives de la philosophie. Il expose des arguments provenant des deux sources en vue d'une compréhension non réductrice de la raison humaine. Il fait valoir que même si la science peut nous aider à mieux comprendre la raison, elle n'est pas suffisante dans cette quête car elle ne peut pas saisir pleinement comment la raison humaine fait l'expérience de la réalité. L'auteur passe en revue le mode de connaissance conceptuelle de la raison, explore les implications du langage pour la philosophie de la raison et examine comment l'activité scientifique et le phénomène religieux permettent tous deux de nous éclairer sur les capacités et la nature de la raison. L'auteur avance que le processus d'apprentissage dans lequel est engagée la communauté mondiale bahá'ie peut servir de modèle pour faire intervenir la raison humaine dans une entreprise collective visant l'amélioration du monde. Il fait ensuite un retour à la philosophie et affirme que si plusieurs philosophes contemporains soutiennent de manière convaincante que la raison humaine ne se réduit pas à la causalité physique, la résistance des philosophes à l'idée d'une dimension spirituelle de la raison humaine est extrêmement limitative. La faculté de raisonnement des êtres humains démontre des capacités qui transcendent la nature, et une conception de la raison en tant que « pouvoir de l'esprit humain » ou « âme rationnelle » peut non seulement se révéler fructueuse pour comprendre la raison, mais elle peut aussi permettre aux êtres humains d'orienter le monde, comme l'a démontré le processus d'apprentissage discuté plus

haut dans l'article, et ainsi, se révéler prometteur pour l'avenir de l'humanité.

Resumen

Este artículo relaciona los conceptos Bahá'ís de la mente con pensamientos filosóficos. Presenta argumentos de ambas fuentes para un entendimiento no reduccionista de la mente humana y argumenta que, a pesar que la ciencia puede ayudarnos avanzar nuestra comprensión de la mente, no es suficiente en esta búsqueda, ya que no puede captar completamente como la mente humana experimenta la realidad. El artículo revisa la manera conceptual de la mente para conocer, explora las implicaciones del lenguaje para la filosofía de la mente, y considera como tanto la búsqueda de la ciencia como el fenómeno de la religión irradian luz sobre las capacidades y la naturaleza de la mente. Después de sugerir que el proceso de aprendizaje en el cual la comunidad mundial Bahá'í se ha embarcado podría servir como un modelo para involucrarse en un emprendimiento colectivo para el mejoramiento del mundo, vuelve a la filosofía para aceptar que, mientras muchos filósofos contemporáneos en forma persuasiva argumentan que la mente humana no se puede reducir a la causalidad física, la resistencia filosófica a una dimensión espiritual de la mente humana es excesivamente limitada. Las mentes de los seres humanos demuestran capacidades que yacen más allá de la naturaleza, y una concepción de la mente como "el poder del espíritu humano" o "el alma racional" puede no solo ser una manera fructífera para entender la mente, sino conduce a una orientación para los seres humanos en el mundo, demostrado por el proceso de aprendizaje discutido anteriormente en el artículo, lo cual es prometedor para el futuro de la humanidad.

INTRODUCTION

This paper is about the human mind, identified by 'Abdu'l-Bahá as "the power of the human spirit" (*Some Answered Questions* 55:6).¹ I compare Bahá'í concepts with some insights from contemporary philosophy of mind that are similar to Bahá'í views. As with any philosophical question, there is a broad range of positions on the mind in philosophy, but my focus on points of similarity is deliberate. On the one hand, some of the more naturalistic or computational philosophical approaches to the mind, which resonate less with a Bahá'í understanding, are well represented by approaches to human consciousness that take animal consciousness or artificial intelligence as their models; these are explored in due course. On the other hand, and more fundamentally, the focus on similarity supports the goal of the paper, which is to assist readers to see how insights from philosophy and from the Bahá'í writings can complement each other, and contribute to discourse in this area.

The paper is structured around three interweaving strands of argument. In the first, to gain some idea of the nature of the mind, I explore helpful insights

1 The ideas in this paper grew out of a presentation to a colloquium on human nature organized by the Institute for Studies in Global Prosperity (ISGP) in December 2020. I am grateful to the ISGP and to Lydia LeMay, Ilya Shodjaee, Todd Smith, and Levin Zendeh for their helpful comments on the presentation which have been extended in this paper.

from philosophy that help to illuminate the insufficiency of reductive explanations of the mind that rely solely on physical or natural explanations, thereby implying (or stating explicitly) that the mind is a purely physical and natural phenomenon. I canvass philosophy that provides logical support for the Bahá'í view of the mind as a unique power that lies beyond physical explanations that aim to level the human mind to animal rationality, describe it as arising entirely out of the operations of the physical brain, or propose that artificial intelligence (AI) will reproduce the power of the human mind. These reductionist accounts stand at odds with our intuitive understanding of the mind, of course. After all, we don't say that neurons or physical dynamics in the brain read and write music, just as we don't say that feathers and wings fly. Birds fly, using these parts of their anatomy, and people compose music in their own minds by way of their conscious appreciations.² But philosophy can help us move beyond an intuitive sense that there must be something more to the human mind than these reductionist models suggest, and provide reasoned arguments for why, for example, despite the success of neuroscientific efforts in correlating brain activity with some features of consciousness, they fall short of demonstrating

causality. More fundamentally, the reductionist accounts fail to provide an adequate qualitative description of consciousness itself; and while science may aspire to progressively "fill in the gaps" to create a complete picture of consciousness rooted in physical causality, philosophers have persuasively argued that an accurate description of consciousness requires a kind of knowledge that science simply cannot access.

The second strand of argument elaborates on what, then, an adequate philosophical approach to the mind entails, one that takes account of those features of mind that cannot be reduced to animal or computational models. Such an approach must provide a more complete account of the human mind and consciousness than either neuroscience, animal rationality, or AI. I therefore explore philosophical accounts of the mind that, like a Bahá'í view, emphasize a range of capacities of the mind: knowledge and rationality certainly, but also feelings (attitudes and emotions) and purposefulness (the intentionality of the mind). I argue that a philosophy that appreciates these features of the mind and grapples with their implications for human agency, normativity, and free will ultimately provides a more sufficient account of the mind than can a materialist neuroscience that seeks to flatten these capacities into purely physical terms, and thereby loses sight of the fullness of what they are.

The third strand focuses on where and how a Bahá'í contribution to our

2 This observation comes from Colin McGinn's rebuttal of Patricia Churchland's reduction of mind to the physical across several issues of the *New York Review of Books*. See, for example, McGinn's "Storm Over the Brain."

understanding of the mind may help expand current philosophical positions. Even in philosophy that resonates in important ways with a Bahá'í understanding of the mind, there are, of course, differences. Most contemporary philosophers, for instance, even when they reject the reduction of mind to narrowly physical computational processes, still insist on placing the mind within the natural world rather than accepting the possibility that the mind is embedded in a reality that goes beyond the natural. This, however, requires highly abstract arguments, such as McDowell's position that our capacities of mind are "second nature," or references to "normativity" that remain apart from a natural scientific explanation. These positions have shortcomings, in my view, that an acceptance of a wider, "extended reality"³ above and beyond the physical or the natural would avoid. Such a reality can better account for the qualitative "feel" of consciousness and its immateriality. The idea of an extended world is, of course, built into a Bahá'í approach to the question of mind, which centers on the "power of the human spirit" or "the rational soul."⁴ Conversely, the philos-

ophy I engage with typically understands the mind's essential features to be "human agency" and "normativity," concepts relating to the freedom and spontaneity of the mind. Through normativity, we take responsibility for our judgments and perceptions: we (potentially) choose how to evaluate the world around us, rather than passively receiving value judgments pre-formed in the world, the way we receive sense impressions. Through human agency, we choose our actions.⁵ Though "human agency" is not too distant from the meaning of "the power of the human spirit," which on its face could be understood as describing a supra-physical capacity *emerging* from an essentially physical being, contemporary philosophy resists the idea of the "rational soul" which, for 'Abdu'l-Bahá, is

Some Answered Questions 55:5). Further research on the use of these terms in the original language texts may provide insight into the logic behind specific uses of each. It may be that in some cases 'Abdu'l-Bahá's choice of one or the other term is based on His audience's framework for thinking about the nature of this human essence; perhaps in other cases the choice is meant to highlight a particular facet of this essence which, by its nature, cannot be encompassed by language. There may of course be other considerations.

3 I take this term from Thomas Nagel.

4 "Spirit" and "soul" (sometimes "rational soul") refer to the same general concept in authoritative Bahá'í writings. "The human spirit, which distinguishes man from the animal, is the rational soul, and these two terms—the human spirit and the rational soul – designate one and the same thing" ('Abdu'l-Bahá,

5 "Both Heidegger and Korsgaard, following Kant, conceive of human agency in terms of ... normativity" (Rousse 417); "If there is room for a substantial conception of the will in contemporary theorizing about human agency, it is most likely to be found in the vicinity of the phenomenon of normativity" (Wallace 195).

equivalent to “the power of the human spirit,” and which is an essence that is *ontologically* supra-physical. Still, it may be that “normativity” and “human agency” are merely useful labels that cover insurmountable problems in philosophy’s efforts to gain a genuine understanding of the mind and of human action. I suggest an alternative approach that relies on the power of the human spirit in the final sections of this paper.

The paper is structured around these three strands as follows. In Part One, I explore how different the human mind is from animal rationality, focusing on the uniquely conceptual nature of the human mind. In Part Two, I explore implications of the conceptual nature of the mind relating to learning and objectivity, and suggest that in its reliance on self-conscious awareness as the foundation of thought, as well as in its capacities for feeling and purposefulness, and its essential holism, the human mind is categorically distinguishable from AI. I add comments in Part Three about language as a central instrument of the mind. These sections together demonstrate that explanations confined to natural science are unable to account for the mind’s faculties of knowing, feeling, and purposefulness, features of mind that not only shape consciousness on an individual level, but have allowed humans collectively to generate progressive civilization, a phenomenon with no parallel in the natural world. In Part Four, I argue that scientific practice is an exemplary expression of the mind’s capacity for

investigating reality and generating knowledge, but that, like any form of human knowledge, it is an outgrowth of human agency, or in ‘Abdu’l-Bahá’s terms, the power of the rational soul. It is a capacity that operates at a level of consciousness that cannot be reduced to causal interactions at the physical level in the brain. Having thus examined how science can both shed light on the mind, and have its own nature illumined by careful consideration of the nature of the mind’s capacity to conduct scientific investigation, in Part Five I explore the same questions with respect to religion. Religion, like science, cannot simply be understood as a creation of the human brain; it is instead a powerful way of knowing for human beings, precisely because of the human mind’s unique capacities to know. I comment on the language of Revelation, and the power of that language to reach not only the cognitive capacity of the mind, but also the feelings and purposefulness of human reality. The phenomenon of religion, therefore, helps give us a fuller appreciation of the nature of the human mind: engagement with Revelation can engender feelings, thoughts and purposefulness that strengthen the mind’s relationship to an extended reality beyond space and time, to a world that is expansive beyond the merely sensible environment of the animal. Finally, in Part Six, I consider whether understanding the mind as an essentially spiritual phenomenon—as “the power of the human spirit” or “rational soul”—can help lend coherence to a

philosophy of mind that rejects a narrow physicalist understanding of mind, and if so, how such a paradigm can be presented in philosophical terms.

This paper is inspired by a talk given by 'Abdu'l-Bahá on 20 September 1912, in which He says that philosophy should make efforts to seek understanding of both physical and spiritual aspects of reality. In that talk, He specifically credits the enduring importance of Socrates, Plato, and Aristotle to the way they combined physical and spiritual dimensions in their philosophy (*Promulgation* ch. 105). The philosophers I cite in this paper have devoted years of study to those great figures of the western philosophical tradition, and in their own ways, they show the fruitfulness of a philosophy that, if not explicitly embracing the spiritual, is not hidebound by an insistence on materialist reductionism.

PART ONE:
ANIMAL RATIONALITY
AND HUMAN MIND:
SENSING AN ENVIRONMENT VERSUS
CONCEPTUALIZING A WORLD

Since antiquity, philosophers have compared human beings with animals, both in order to distinguish these two realities and to connect them. The work of John McDowell, one of the foremost philosophers of mind working today, provides useful insight into the limitations of an animal model for understanding human consciousness.

McDowell's arguments resonate

with Abdu'l-Bahá's statements on this matter. For McDowell, a primary difference between the animal and human is that the human mind has a conceptual way of knowing and engaging the world, while the animal responds to an immediate environment. "World" and "environment" are distinguished by the fact that where an environment is defined by its materiality and sensibility, a world is a conceptual construct that includes both features immediately sensed, but also (and usually far more) features that reside as concepts in the human mind. Thus, an animal's environment, in this use of the term, consists of everything to which it has direct sensory access in a given moment. This sensing may trigger memories that prompt action; but the human mind situates itself in a wider world, within which it can invoke memories, concepts, imaginations, etc., including ones not triggered by immediate sensory input. In a similar way, 'Abdu'l-Bahá explains that "the animal perceives sensible things but cannot perceive conceptual realities" (*Some Answered Questions* 48:6). "Of this power of discovery which belongeth to the human mind, this power which can grasp abstract and universal ideas, the animal remaineth totally ignorant" (*Selections* 163:2).⁶ McDowell, like

6 I take the meaning of "conceptual" for both McDowell and 'Abdu'l-Bahá to be in line with Markus Gabriel's definition of a concept: "a concept is something by means of which we can distinguish something or some things from other things. The concept of a dog distinguishes dogs from

'Abdu'l-Bahá, understands the human mind as reliant on an enormous number of concepts that shape a world the mind then has in view. Concepts are the means by which the mind perceives and engages with that world. Some concepts represent the material features of the world: by concepts we know red from green, for example, and also know that red is in the concept class of color, which is distinct from the concept class of texture. These materially grounded concepts exist alongside others that supply us with the meanings we need in order to navigate the human world of institutions, norms, values, principles, and language. Thus, such crucial parts of our daily experience as feelings and purposes are also conceptual, yet immaterial. Through concepts, we distinguish indignation from anger, generosity from kindness. We learn from infancy thousands and thousands of concepts that shape the world we have in view. Many concept classes are nested within other concept classes; "dog" is a concept nested within the broader concept "animal," yet itself encompasses the concepts of "German shepherd," "poodle," and other breeds of dog. This is only one of many ways in which concepts are profoundly interdependent. Concepts

cats, but also from lions and earlobes" (Gabriel, *Meaning* 192). Importantly, a concept in this sense does not require direct sensory comparison in order to distinguish two things. Thus, while an animal can distinguish different things by sight or smell, the human can distinguish them in the abstract using concepts.

also imply other concepts in chains of implication or assumptions: some concepts are assumed implicitly in order to understand other concepts. Humans do not draw on concepts in isolation; our capacity to know depends on the interrelationships between many concepts. As philosopher Markus Gabriel puts it:

Whatever is real is integrated in a network of concepts. Every concept refers to another. If you know a concept, you thereby know a bunch of others too. This thesis is known as semantic holism and says that you're able to deploy a concept only if you're able to deploy a whole battery of further concepts that stand in various logical relations to it. (*Meaning* 194)

This emphasis on the role of concepts in human thought is not to deny the importance of sense perception and direct experience. We take in our experience by way of our senses, but in a manner that must always be mediated by the conceptual for us to have any experience at all. To paraphrase Kant, whom McDowell draws on to develop his own idea of the conceptual, sensations without concepts are blind, and concepts without human experience and sensations are empty (*Mind and World*). Concepts allow us to understand what we perceive, and "sensory consciousness" is always shaped by our understanding: "objects come into view for us [by sensations] in actualizations of capacities that are fully conceptual" (McDowell, *World in View* 34–35).

In other words, to be receptive to the world we rely on a conceptual idea of a world that is already “there” in the mind, so that as we perceive and recognize features of the world (whether material objects or abstract realities), they are then available for placement within the world we have in view—or close enough to allow relative adjustments to a world that shapeshifts as we gain further knowledge of it. Successive experiences of life bring to us a manifold of sensations that we are able to grasp by the elimination and reduction of the available information—the millions of sensory bits available to our senses—bringing to our experience an understandable world that we then have in mind.⁷ “Our subjective beliefs on the physical world have a decisive role on how we perceive reality . . . All that we perceive might be deeply contaminated

by our subjective beliefs on the physical world” (Tabas, qtd. in “We Hear”). We interpret the sensations we experience in the world by way of the concepts we have learned, and through these concepts we then make judgments about the world and take actions—for reasons that are themselves conceptual—as we advance matters at hand, or bring about a better world we have in view. There is thus an inseparable cooperation of sensibility and conceptuality that cannot be disentangled.

This interplay between sense and concept does not seem to operate in the same way in animal cognition. In McDowell’s assessment, which resonates with ‘Abdu’l-Bahá’s explanations on the topic, animals may appear to reason in a manner that seems comparable to human reasoning, but their reasoning is always a response to an environment and to particulars, not to a world. The animal “reasons” by way of differential response repertoires that rely on acute senses, and their excellent memory of environments and the particulars within such environments. In short, the animal distinguishes particulars not conceptually, but by acute sensibility and memory—which, as ‘Abdu’l-Bahá points out, are often better than human sensibility and memory, which have different functions than strict fidelity to the physical and the natural (*Some Answered Questions* 48:2).

The animal’s ability to distinguish between particular objects, and even human gestures, may appear similar to our human discrimination, but has to do with particulars in the physical

7 Psychologist Timothy Wilson estimates that the brain is inundated with “11 million discrete bits of information per second, of which no more than 40 can be consciously processed” (qtd. in Heath, *Enlightenment 2.0* 73). An animal, of course, may receive as much sensory data as a human being—or more, for animals with keener senses than ours—but to the extent that they react to and engage with an environment without needing to understand it, the simplifying function of concepts is not necessary for them. For recent discussions by neuroscientists on how our consciousness maps patterns of synaptic firings in the brain onto conceptual patterns, see Antonio Damasio’s *Feeling and Knowing: Making Minds Conscious* and Anil Seth’s *Being You: A New Science of Consciousness*.

environment rather than conceptual meanings. However aware and conscious animals may be, theirs is not a world that is conceptual and thus beyond the physicality of nature. The human mind understands and navigates both the world of physical objects and human realities that are perceived and brought to mind by our conceptual way of thinking, feeling, and engaging with purposefulness (or intentionality). The animals' engagement, at whatever level of consciousness it may be, is by way of biological needs, while human beings engage with a world, not a mere environment, with purposes and projects that reach beyond the biological.

An example can help illustrate the distinction. A horse, seeing an apple, moves to eat it: sensory information prompts a reaction. A human seeing the same apple may have a similar reactionary response, but can also engage in conceptual thinking. Thus, the sight of the apple reminds her of a trip to an orchard as a child, or of the threat of drought, or, by way of the story of Sir Isaac Newton, of the law of gravity. It leads to a decision to act in the world, by taking her children to an orchard, or limiting water waste in her household, or revisiting her university physics textbook.

The centrality of concepts to human thought also permits a self-awareness about our thinking that does not seem to be shared by the animal. As Hegel argued, human thought is about "cognizing the distinction of things" while "knowing and holding in mind what is being distinguished" (qtd. in Pippin,

Hegel 104). This is the nature of judgment, the action by which thinking is conscious; for "to judge is to be aware not only of what one is judging, but that one is judging, asserting, claiming something," to others or to oneself (105). The human being can thus think about their own thoughts (and actions), holding them in mind and cognitively examining them in the same way as one can examine an external object.

Human beings also rely on more capacities of mind than sense perception and a memory of sensory information. 'Abdu'l-Bahá affirms that the human capacities of imagination, thought, comprehension, and memory—along with "a common faculty . . . which mediates" between these capacities and the outer senses of perception—are spiritual powers, which seems to imply that they are different in kind from animal rationality (*Some Answered Questions* ch. 56). An element of this difference appears to be their holism. Thus, Bahá'u'lláh likewise confirms that

[s]pirit, mind, soul, and the powers of sight and hearing are but one single reality which hath manifold expressions owing to the diversity of its instruments. As thou dost observe, man's power to comprehend, move, speak, hear, and see all derive from this sign of his Lord within him. (*Summons*, "Suriy-i-Ra'is" ¶35)

McDowell seems to be driving at a similar concept when he stresses the

inseparable cooperation of perception and conceptual thought, as noted earlier. He further points out that the conceptual nature of our thinking is only made possible by a “rationally organized network of capacities for active adjustment of one’s thinking to the deliverances of experience” (*Mind and World* 29).

Andrea Kern follows McDowell’s thinking about the conceptual nature of our rational capacity. In her important book, *Sources of Knowledge: On the Concept of a Rational Capacity for Knowledge*, she provides one way of understanding the above statement of Bahá’u’lláh on the “single reality” of “spirit, mind, soul, and the powers of sight and hearing.” She, too, understands the rational capacity for knowledge as a single reality of mind and perception. While not referring to spirit or soul, she thus agrees with Bahá’u’lláh’s idea that our rational capacity seamlessly brings together the conceptual mind and perceptions. This seamless integration of capacities enables us to further distinguish the human capacity for *judgment*. Kern elaborates on what it means to make a judgment. Judgment—deeming something true or untrue, correct or incorrect, according to some standard of truth or correctness—is always self-conscious, in that our knowing something is also being conscious of knowing something (or sincerely believing that we do).⁸

In making a judgment, we rely on our perceptions and on concepts: our beliefs, our standards for truth (or our standards of the right, the good, or the beautiful), any necessary background assumptions, and logic and syntax. This reliance is seamless; while a person can analytically distinguish between the sight of a work of art, the aesthetic standard against which she appraises it, and the process by which the perception is measured against the standard, in actual experience there is no such distinguishing, supporting the contention that it is a “single reality” at work. Indeed, in making judgments we often rely on concepts, including the standard of truth by which we judge, without consciously bringing them to mind (Kern 182). This is a unique capacity for knowledge that combines at once perception, judgment, and action, along with an enormous amount of human learning.

This capacity for judgment has contributed to a further unique feature, or product, of the human mind. Human beings have created a world through the visual arts, architecture, music, and crafts, as well as engineering and infrastructure that strives to make the world more beautiful. Our capacity for judgment enables this creation, by allowing us to judge proportion, scale, and symmetry, to identify appropriate metaphorical expressions, and to decide on and assess art against aesthetic ideals. Thus, it is important to comment on the arts as a feature of culture that likewise goes beyond the animal’s often more practical and sensible

8 Or as Pippin puts it, “[j]udgment is the consciousness of judgment . . . There is not two acts, but one” (*Hegel* 105).

reshaping of its own environment in ways that fall relatively short of the human being’s efforts.

A final point on which McDowell differentiates the animal and human mind is that we characterize all human beings as moral or immoral, but hardly ever conceive of animals in these terms. This position finds support in ‘Abdu’l-Bahá’s reminder that while the scorpion may seem evil in relation to the human being, it is, in its own self, good (*Some Answered Questions* 74:5). This is not, on its face, an attribution of good (or bad) moral behavior to the scorpion, but an assertion of its ontological goodness as a creation of God. This is the sense of good and evil within which nature and animals can be assessed, and all in this sense are good in themselves, even if from our perspective they can cause bad outcomes for us. Only in the human realm is it meaningful to attribute good and evil to intentions and actions.

In *A Natural History of Human Thinking*, linguist and developmental psychologist Michael Tomasello summarizes much of the research regarding differences between the human mind and animal rationality. This research largely bears out the conceptual differences between animal and human minds outlined in the philosophy above. Tomasello focuses in particular on the thinking of the great apes, widely considered to represent the apex of non-human mental ability. These animals, of course, do have prodigious capacities. In recent experiments, often involving the use of tools, they have

demonstrated a capacity to re-imagine situations on some level; similar capacities can be seen elsewhere in the animal kingdom, as in certain birds. While there is thus some evidence for the great apes’ representation of the object world in simple abstract and causal, even intentional inferences in the mind, they are unable to adopt alternative perspectives. Tomasello summarizes how, unlike animals, human beings have:

- (1) the ability to cognitively represent experiences to oneself ‘off-line’;
- (2) the ability to simulate or make inferences transforming those representations causally, intentionally, and/or logically;
- (3) the ability to self-monitor and evaluate how these simulated experiences might lead to specific behavioral outcomes . . . [or to undertake]
- (4) thoughtful behavioral decisions. (4)

These capacities at an individual level have an exponential impact when deployed at the level of the group, and give rise to human ways of being together that the more basic cognitive capacities of the great apes do not permit. In addition to the “shared world” constructed by human language, as discussed below, the human ability to decenter our individual perspective, to take neutral-agency perspectives, appreciate the perspective of others, and coordinate action accordingly, does not find a strong correlate in the great apes.

Any discussion of how conceptual

thinking distinguishes humans from animals, particularly in its implications for coordination, necessarily requires consideration of language. However, before considering language in full, which will have implications for how the pursuit of scientific and religious knowledge shed light on the nature of mind, it will be helpful to explore some further implications of the conceptual mind.

PART TWO:

HOW THE CONCEPTUAL MIND LEARNS

LEARNING AT THE INTERSECTION OF SELF-CONSCIOUS AWARENESS AND SOCIAL COOPERATION

Having introduced key features of the human mind through contrast with animals, I want to specifically explore how the mind learns new ways of viewing the world. Such learning involves the multiple realities of cognition, feeling and purpose that the mind engages. Though the platform for such learning is always our own self-conscious awareness, it is important to emphasize our inherently social nature as minded creatures. Both the self-referentiality and social embeddedness of learning highlight that the human mind, as discussed in the previous section, operates in a world, not merely in an environment. This world is in fact constructed of many worlds, including our inner world and shared social worlds. All are built out of an architecture of concepts. The features explored here

will support the argument, made later in the paper, that a philosophy of mind that acknowledges the more-than-animal capacities of the human mind, and rejects a reductionist physicalist neuroscientific explanation of these capacities, need not reject out of hand the concept of the mind as an essentially “supernatural” phenomenon. This argument will be further developed by considering the knowledge systems of science and religion in light of human language.

We can begin with Tomasello’s insight that the capacity of human groups to progressively build on advances in culture (broadly speaking, including technology) is due to a fundamental feature of human conceptual thinking. Where animals can share a sensory environment, and use this sharing as the basis of cooperation, humans can achieve a different degree of cooperation thanks to our capacity to share a world of concepts:

human beings construct an intersubjective world with others—shared but with differing perspectives . . . [this is] fundamental to human cooperative communication. (46)

Tomasello’s insight into the cooperative structure of human teaching and learning by no means applies only to formal learning in the classroom. It is inherent in human learning from the very beginning, as demonstrated by human infants who master “joint attention” with mothers before speech

develops, allowing for the coordination of complex actions, and, as we mature, a "collective intentionality" with others. Joint attention, crucially, is more than two minds paying attention to the same thing; it is paying attention with awareness that this attention is shared, something that human infants are capable of in some form from a young age. While great apes demonstrate certain characteristics of joint attention, these do not continue to develop into the rich forms of collective intentionality that unfold as the human child matures. "The idea that the human mind in its infant stages, as it were, looks at the physical world and tries to make sense of it, is completely mythical . . . [O]ur first encounter with reality is an encounter with people" (Gabriel, *Not a Brain* 37). Other people and their minds have far greater impact on a baby's growing awareness and consciousness than the baby's encounters with a world of objects. Babies meet mother, father, and significant others, and experience their own consciousness by way of immediate relationships, mediated by powerful gestures and enactments. Babies begin learning through different social practices that are mindful, including with respect to the physical world. The physical world takes shape within a baby's consciousness mediated by concepts, standards and norms gleaned from other minds. The baby, in effect, learns of the world (in the expansive, more-than-environment sense) in its mental features as much as in its physical features, and does so by way of a triangulation between the

infant mind, other minds, and the reality of an object world. Thus, even as the child learns about the object world by relying on others' first-person reactions towards, and expressiveness regarding, that world, they simultaneously learn the importance of emotions, meanings, and intentionality.

No creature is as helpless, for as long, as the human infant. Those inclined to see a design in the features of our existence might point out that it is arguably our complete dependency on other people and their reactions to us that enables us—indeed, requires us—to learn so early the foundation of human sociability: that others have minds and consciousness as we do. Obviously in the infant this is not yet self-consciousness, but the first glimmerings of a world we wake up to over the years of our infancy as we learn a complex of feelings, purposes and thoughts that is extraordinarily vast. The human capacity to entertain multiple perspectives, for instance, which seems to elude the great apes, begins to develop as early as between the ages of two and three.

The dependence of the human mind on social learning is exemplified by how we learn language. From his first word at twelve to eighteen months old, the child acquires well over 10,000 words by the age of six, while simultaneously learning rules of syntax and semantic usage that build to an enormous complexity (Pinker)—and all this, as philosopher of mind and language Donald Davidson emphasizes, is done on very thin evidence and limited experience. And it is not that one word

is uttered, then another, in an additive process of learning; this is a process of gestures, actions, enactments between mother and father and baby, that builds a world of sense, a holistic picture, that is grasped by the baby (Taylor, *The Language Animal*). “Mama” may be the “first word” uttered, but it is already embedded in a baby’s understanding of a whole world of previous interactive gesture and response that has been growing in the mind of the baby. This allows the baby to begin utterances in speech intimately tied to a world that is blossoming in the mind of the infant, a world where the sun comes up gradually, as it were, as the infant develops and learns. As Wittgenstein writes, “Light dawns gradually over the whole” (qtd. in McDowell, *World* 168). Wittgenstein brings into the picture the imaginative powers of the multiple language-games in which human beings become quickly adept across the many social practices of human reality.⁹ And, as philosophy now emphasizes, it is the sentence, not words themselves, that comprise meanings, facts and truths (the good, the right, and the beautiful).

Philosopher Charles Taylor, too, refers to the capacity of human infants to quickly acquire a capacity for “joint attention” with mothers and significant others, and notes the emergence of “the cultural conventions, norms and institutions, including language”

⁹ See Hans J. Schneider’s discussion of imagination and calculation in *Wittgenstein’s Later Theory of Meaning*.

(*Language* 141) that allow human beings to develop ideas of objectivity by way of a detachment from first-person consciousness to agent-neutral perspectives. At a very early age, this enables the coordination of action by a “we-intentionality” among groups of human beings.¹⁰

In line with the highly cooperative nature of the human mind, Charles Sanders Peirce, the seminal pragmatist philosopher, argues, as does Hegel, that it is a mistake to think of “belief as *individual* belief. Of course the beliefs of individuals are flawed; no individual mind is capable of an accurate and objective knowledge of reality” (qtd. in Menand 228). It is in the shared views of many minds that we come to know the world. This agrees with Davidson’s view that all members of the human race share far, far more conceptually than the small proportion of views on which we disagree.

It is always, of course, our own consciousness or mind, in the first-person, that serves as the only platform we have by which we engage the world.¹¹ This first-person awareness comes first in any order of an explanation of reality. It is important to note that our

¹⁰ See “How Language Grows” in Taylor’s *The Language Animal*.

¹¹ This discussion of the centrality of self-consciousness is largely inspired by the complementary views of Merlin Donald in *A Mind so Rare*, and Sebastian Rödl in *Self-Consciousness and Objectivity*. Merlin writes from the perspective of psychology and cognitive neuroscience; Rödl from the perspective of Hegelian philosophy.

self-conscious judgments are not simply subjective, although they can be. Our judgments about reality can approach objective reality to the extent that we have developed them in sound, cooperative social practices with other minds—discovering how others judge objective reality, learning how to think from others' perspectives as well as our own, bringing these multiple perspectives together according to standards or principles of truth that we have learned with respect to the object world, or by standards of the good, the right, or the beautiful, that we have learned by way of our ability to share others' perspectives in multiple social practices since infancy. We may have judgments we aren't sure of, or that are wrong, and those may be called subjective, but when we judge by standards or norms of truth using our rational capacity for knowledge, we judge objectively in the best way we know how. Objective knowledge, we then conclude, is a neutral, third-person judgment that comes *after* our first-person judgments. It is *derivative* of our first-person consciousness and rational faculty as we come to understand each other in our many first-person to first-person exchanges through life.

When we think of objective knowledge, we tend to privilege more formal, physical descriptions of phenomena. Such descriptions are, of course, powerful: being able to capture the operation of air currents in mathematical terms allows the human mind to design and refine flying machines. And yet such descriptions are utterly inadequate to

capture the *experience* of phenomena, which can only be known from the perspective of first-person consciousness. A man who is entirely blind from birth will not understand and appreciate color by finding out about brain processes in the visual cortex, or by listening to testimony from others. He has to *experience* color first-hand, a phenomenon in the mind that is simply not made existent by any "objective" description of the electro-magnetic spectrum. Someone who is deaf cannot appreciate the impact in a hearing person's mind, whether by way of the mind's capacity for feeling, imagination, or cognition, of hearing Puccini's "Nessun Dorma," no matter how refined an understanding the deaf person has of sound waves and the relationship of the ear to the auditory regions of the brain. This is the nature of mind and consciousness, a feeling and mindedness that refutes any and all physical explanations of the brain as a way to account for our conscious minds. Yet there are available to the blind or the deaf, conceptual translations—not qualitatively comparable in the sense of conscious appreciations—that do allow, nonetheless, sufficient shared conceptions to permit coordinated actions.

Thus, if our self-consciousness is *the* platform or space by which we make judgments and take actions, this has implications for the extent to which those judgments and actions can be studied, quantified, and explained from the outside. Our understandings are always internal understandings, and while they can be explained

derivatively by an external explanation, such an explanation is already less than the awareness of reality that we know by knowing our own minds. Indeed, an individual can arguably gain a better understanding of another's mind by the exercise of the simple, yet profound, human capacity to take multiple perspectives, than the researcher could obtain by even the most detailed description of the workings of that person's brain. Just as we know ourselves from within, we can to some extent come to know another person's conscious sense of themselves, not through scientific measurement, but through intentional perspective-taking, aided by our interpretation of the other's expressive language and actions. We can, however roughly, know what the other feels and thinks because we can to some extent take their position, and feel and think it ourselves. And this, again, is a capacity only made possible by our own foundational self-consciousness.

Both of the facets of thinking and learning just discussed—the social and the self-conscious—have implications for how we make judgments about what is true or correct, how our thinking can go wrong, and how we can become aware of this and respond.

A genuine capacity for knowledge requires the ability to recognize that we can at times be wrong. Humans, of course, have this ability; yet, as Hegel pointed out, we often overlook the grip on our minds of concepts that are wrong and prevent sound thinking and reasoning. While Descartes had questioned the ways the mind grasps

a concept, Hegel asked: How is it that *concepts grasp our minds* so firmly that they then limit our thought and reasoning.

Hegel's question provides a way of understanding an important passage of Bahá'u'lláh:

To whatever heights the mind of the most exalted of men may soar, however great the depths which the detached and understanding heart can penetrate, such mind and heart can never transcend that which is the creature of their own conceptions and the product of their own thoughts. (*Gleanings* 148:1)

As we saw from McDowell, we take in the world by placing what we experience within the world of concepts we have construed over years of learning. Yet such learning may be seriously misinformed. Becoming aware of inconsistencies in the vast array of concepts that make up our world can prompt adjustments, as can learning new concepts or new relationships among existing concepts. However, while individuals can in this way correct some measure of error their thinking, our concepts and view of the world can also be changed gradually by sound social practices that involve shared perspectives and cooperation.

At the same time, Bahá'u'lláh points out limitations to which man's finite mind is strictly subjected. Where some concepts can be changed over time by appropriate learning, there is another

kind of limitation which we can never overcome and which pertains to the actual workings of our own minds and the way in which the "rational faculty" (or soul) mediates the operation of the mind. Referring to the "rational faculty," Bahá'u'lláh says,

Wert thou to ponder in thine heart, from now until the end that hath no end, and with all the concentrated intelligence and understanding which the greatest minds have attained in the past or will attain in the future, this divinely ordained and subtle Reality... thou wilt fail to comprehend its mystery or to appraise its virtue. (*Gleanings* 83:4)

Markus Gabriel may be identifying one aspect of this limitation on ever understanding the rational soul when he points to a limit in thought's ability to apprehend itself:

Because thinking is something real, the conditions of its emergence are not known to us in their entirety . . . how exactly a concrete thought process unfolds, is something it takes a further thought to grasp. No thought can catch itself in the act. (*Meaning* 217)

This limitation, of course, in no way absolves us from the responsibility to seek to increase our understanding within the limits imposed on it, and to identify and improve on errors in our understanding. The Bahá'í writings

unequivocally call upon us to always advance in our learning and our investigation of reality, which sometimes does require modifying firmly held, yet erroneous, concepts.

THE "SPACE OF REASONS": FEELINGS, COGNITION, AND THE HOLISTIC MIND

By what means, then, can the mind fulfill this mandate, given that our thoughts are vulnerable to error and bound by the limitations just described? McDowell's discussion of "reasons" is helpful on this question:

[W]e make sense of rational relations between experience and judgment only in the context of an equation between the space of concepts and the space of reasons. Thought can bear on empirical reality only because to be a thinker at all is to be at home in the space of reasons. (*Mind and World* 125)

The idea of a "space of reasons," as McDowell puts it, refers to the capacities of mind by which we reason through the elements of that multiplicity of human realities: feelings, beliefs, attitudes, norms, memories, imagined counterfactuals or future possibilities, motivations, purposes, projects, and values. And if guided rightly, and with enough experience in sound social practices, we take on reasons that adjust the concepts we hold. We generate reasons for the intentions and purposes of actions we take; and when reflection

is required, we rely on higher values and meanings that override passing desires and idle preferences. The reasons supporting our intentions usually go well beyond our immediate experience. We rely on a conceptual shaping of our experience in order to perceive the world, and rely on our imagination informed by new concepts to consider possibilities that don't yet exist, but may with the right sort of actions.

And in our consideration of the multiple realities that make up our view of the world it is important to recall passages from Bahá'u'lláh's Writings where He refers to our "understanding heart,"¹² alerting us to an understanding of the mind and heart as one. Our conceptual nature includes feelings, emotions, attitudes and other sensibilities. That we are self-conscious about our feelings, often come to understand them, and give them expression in language and gesture, provides evidence that they can have just as much of a conceptual hold on us as more cognitive concepts do. For the mind is not simply cognitive or intellectual. The mind thinks and judges with feelings as well as beliefs, and with attitudes that are themselves conceptual, for we know the object world as much as we know the world of principles, purposes, norms and standards, and the human situations that enter into the judgments and actions by which we engage the world.

There is little distance between the heart and the head, as attested by

Bahá'u'lláh's request to us: "ponder in your hearts."¹³ The cognitive, the affective (or emotional), and the purposeful are all present in mind as a feature of our human agency, consciousness, freedom, and spontaneity within the constraints of the world we have in view and which underlies and prompts our perceptions, judgments, affirmations and actions.

Feelings are, in their own way, just as much evaluations of situations as cognitive thoughts are. Ronald de Sousa argues that we respond to the situations of life with emotions learned during childhood or from literature and the arts. Such evaluations are judgments about the world that rely on the mind. Robert Pippin writes that "a rational capacity to take up the view of the other is based on a deeper and more original affective capacity" (*Interanimations* 133), while Rainer Forst writes, "Feelings are expressions of our beliefs and evaluations, not their opposite: someone who did not have any moral feelings would not really be a participant in social, evaluating practices" (22).

Here we see that the human mind is no more reducible to an analogue of artificial intelligence than it is to the animal mind. Unlike artificial intelligence that operates according to rules, terms and algorithms on only one logical level, our understanding of the world is by way of concepts that operate on different levels, including attitudes and feelings, purposes and projects.

12 See, amongst many, *Gleanings* 95:4 and 100:8.

13 See, for example, *Gleanings* 5:6, 65:4, and 108:11.

Gottlob Frege, who developed the first “concept script” that today serves as the basis of the digital revolution, is also credited with realizing that our human propositional judgements and utterances are always attached to attitude, normativity, and human agency. Markus Gabriel refers to Frege’s “colouring and shading” of thought, and the way in which feeling accompanies thought. “When we reflect on thinking itself, we also express attitudes” (*Meaning* 75).

While analytical philosophy has tended to reduce thoughts to mere propositions or assertoric sentences, Taylor, McDowell, Gabriel and Pippin, among others, emphasize how language is also constitutive, as new meanings and concepts are developed that make sense of ourselves and human life. Language not only depicts an object world, but creates and constitutes higher values and meanings that define human reality. A complete understanding of thought recognizes human agency, and accounts for the attitude and feeling involved in the commitments and responsibility we attach to thoughts and judgments. It recognizes that thoughts involve different modalities—remembering, imagining, hoping, or asserting—and that we undertake thoughts with different levels of enthusiasm or detachment.

Irad Kimhi notes that “capacities for judgment, for language, for the deployment of logical words (such as “not” and “and”) and for self-consciousness (and hence for the use of the word “I”) . . . are all one and the same

capacity. To appreciate the uniqueness of thinking . . . even the concept of a capacity threatens to block one way to a full appreciation of the uniqueness of thinking” (16).

Bahá’u’lláh’s description of our “rational faculty” is important to these considerations. He describes the role of the rational faculty as fundamental to the agency of mind, whose instrumentalities can be understood to a degree even though its actual nature cannot be:

Consider the rational faculty with which God hath endowed the essence of man. Examine thine own self, and behold how thy motion and stillness, thy will and purpose, thy sight and hearing, thy sense of smell and power of speech, and whatever else is related to, or transcendeth, thy physical senses or spiritual perceptions, all proceed from, and owe their existence to, this same faculty. (*Gleanings* 83:1)

In sum, while we inevitably must dissect the mind into distinct capacities in our efforts to understand it, and while there is also value in investigating correlations between features of the mind and particular brain areas or processes, this kind of analysis should not be allowed to obscure a fundamental truth about the mind, attested to by Bahá’u’lláh and recognized by the philosophers cited above: the human mind is not truly a composite of many parts, but a whole. While humanity will no

doubt continue to develop ever more sophisticated artificial systems that incorporate more features that we associate with the mind—some of them operating at levels beyond what is seen in humans—it seems unavoidable that these must always fall short of the holism that fundamentally characterizes a true human mind.

PART THREE:

LANGUAGE AND SHARED WORLDS

Having laid some groundwork by exploring correlations between philosophical understandings of the mind and its workings, and the picture of the human mind that emerges from the Bahá'í writings, I now return to the role of language in the human mind; this in turn will set the stage for a discussion of how science and religion shed light on, and can be better understood through, an adequate concept of mind.

Much of our conceptual capacity depends, of course, on language, which is comprised not only of words, but also of the gestures and enactments that accompany speech.¹⁴ The relationship between the mind's perception and thought, and human action and engagement with the world, is inextricable, and it is mediated by language. The mind draws on language to reason through the desires, feelings, beliefs,

thoughts, values, and purposes that have current salience for the person reasoning, and then also uses language to form intentions for actions. Donald Davidson writes that “language is not an ordinary learned skill; it is or has become a mode of perception . . . essential to the other senses if they are to yield propositional knowledge. Language is the organ of propositional perception” (*Truth* 135). An animal, or a human newborn, in other words, can sense raindrops on its body and react to them; a more mature human who feels the same raindrops can generate the knowledge, through language, that “it is raining.”

Charles Taylor writes, too, of how language widens our perceptual capacities, and increases our range of thinking and feeling. Insofar as an object, an emotion, a value or purpose, stands out in our minds, it does so in the context of a whole situation, a world that we have in view and that we have constituted by way of a language we have learned. This world is built of concepts put together using the subject-predicate structure of language. Some features of the world are constructed from direct, nonfigurative language—“the sky is blue”—and some from figurative language. Language then influences the way we perceive and take in the world (*Language* 93–94). Language gives us new feelings, new desires, new goals, new relationships, and introduces a dimension of strong values in our lives (33).

Language multiplies a thousandfold and more the combinations of concepts

14 “Speech acts involve more than emitting the appropriate words. They also involve bodily action, stance, gesture, tone of voice, and the like” (Taylor, *The Language Animal* 98).

available to the human mind. It allows us to theorize, to generate analogies and metaphors that connect concepts, and so influences how we perceive and understand a world beyond what is possible for the environmentally constrained animal. Its subject and predicate structure gives us a powerful way of combining properties and objects, abstractions and particulars, adding to capacities for logic we have developed since infancy. Language enables us to continually make judgments, relying on logical operators that we are not usually conscious of using—the logic of identity, non-contradiction, exclusions and inferences of the if-x-then-y sort.

The human being operates with vocabularies of tens of thousands of words, and intricate rules of syntax that we deploy without pause or thought. Even when we get words wrong, or mangle syntax, our common sense way of thinking allows us to understand each others' utterances. Indeed, the capacity of language to enable communication between minds is remarkable for its flexibility. As Davidson has argued, we rely on an enormous set of interrelated concepts that are shared universally by all human beings, the majority of which were developed in infancy, childhood and adolescence. This has always, through history, allowed human beings to meet and converse across widely different languages and cultures, employing Davidson's "principle of charity" by which we assume that other humans are rational beings navigating the same world as

us. We are able to translate each other's languages, and even when differences in culture and linguistic usage create gaps in understanding, we can articulate those differences and gaps.¹⁵

The role of language in enabling, or constraining, our capacity to understand each other across linguistic and cultural barriers is contentious. The Sapir-Whorf hypothesis, for example, holds that our subjective views of the world are predominantly influenced by the languages we speak. As noted, Davidson argues that translation between languages goes far to mitigating the inherent irreducibility of these subjective views. At the same time, of course, different languages do create different ways of taking in and seeing the world. Yet the point made by Davidson, as well as Taylor, is that there is far more overlap between human beings' worlds than there is difference; or, in other words, that our shared world is greater than those worlds that are unique to each culture, linguistic group, or (ultimately) individual. Translation relies on this extensive shared world of human beings, and conceptual differences between particular languages represent only a portion of the enormity of conceptual reality that all human beings share.¹⁶ Of course, something is always

15 See Davidson's *Subjective, Intersubjective, Objective* and also his *Truth, Language and History*.

16 See Taylor's critique of the Sapir-Whorf hypothesis in chapter 9 of *The Language Animal*. Tomasello, as noted above, makes a similar point in arguing

lost in translation: the idea of a shared world should not lead us to conclude that there are no functional differences between languages, or to imagine that a language can be learned mechanically without reference to its cultural context and distinctive characteristics. But the point remains that the phenomenon of language, as a whole, is enabling of a collective life for the human race that other species do not have access to. Thus, where similar animals in the same place at a given time can share a sensory environment, humans can, through language, share a world across time, space, culture, etc. And, largely through language, humans can collectively expand and refine the conceptual landscape of that world, leading to developments in culture.

As with the human mind's way of learning, its reliance on language has implications not only for the world we share with others, but for our inner world. Human use of language differs in important respects from the computer's use of language, not least in that a human's use of language is intimately bound up with the human agent's own self-understanding, and cannot be properly considered without reference to this. Humans are language generators; we are constantly combining words, and the concepts they pertain to, in new and original ways.¹⁷ And

that advances in human civilizations depend upon humans' shared grasp of a conceptual reality, including across linguistic divides.

17 Consider Noam Chomsky's observation that once a threshold of twenty

this language generation is not, as it is for the AI, a sophisticated recombination of words and phrases according to rules generated inductively through the analysis of thousands or millions of texts. For the human, language use and generation is bound up with meaning. Figurative language and new and novel expressiveness in turn influence the birth of new aspirations, projects and purposes. They give us ways of perception beyond the surface of things. Our discursive activity, our conversations with others, set up new relationships, redefining previous understandings.

This capacity of language to shape and direct our inner world is particularly powerful when we use language to grapple with things beyond the concrete. Davidson writes persuasively that we have two languages, one relative to the physical realm, and one that is about the mental realm. Taylor, in turn, refers to the former language as "designative," while the latter is only sometimes designative, and more often "constitutive." Where designative language assigns relationships between objects or concepts that require little or no interpretation—"the ball is round"—constitutive language

to twenty-five words is passed, "almost every sentence uttered by an adult native speaker is a novel sentence. It is new . . . in the sense that no one in the history of the world has ever heard exactly that string of words before . . . This is an observation that has been empirically verified over and over again by examining large corpora, transcribing actual conversations, and so on" (Brandom, *A Spirit of Trust* 520).

requires interpretation and a less determinate grasp on such matters as feelings and attitudes, values and norms. We use these two languages—neither of which, Davidson argues, can be translated into the other—without pause or deep reflection, in conversation and in how we go about our lives.

'Abdu'l-Bahá seems to agree with both Taylor and Davidson when He explains that "human knowledge is of two kinds":

One is the knowledge acquired through the senses. That which the eye, the ear, or the senses of smell, taste, or touch can perceive is called "sensible". . . . These are called sensible realities.

The other kind of human knowledge is that of intelligible things; that is, it consists of intelligible realities which have no outward form or place and which are not sensible. For example, the power of the mind is not sensible, nor are any of the human attributes: These are intelligible realities. Love, likewise, is an intelligible and not a sensible reality. For the ear does not hear these realities, the eye does not see them

But when you undertake to express these intelligible realities, you have no recourse but to cast them in the mold of the sensible, for outwardly there is nothing beyond the sensible. Thus, when you wish to express the reality of the spirit and its conditions and degrees, you are obliged to describe

them in terms of sensible things . . . For example, [for] grief and happiness . . . you say, "My heart became heavy", or "My heart was uplifted", although one's heart is not literally made heavy or lifted up. (*Some Answered Questions* 16:1-4)

The existence of this second language pertaining to the mental realm, and the inextricable influence of language on our inner condition, point to a hard limit on the extent to which any human mind can be fully described from the external, objectivizing stance of neuroscience. However precisely neuroscience might map out the synaptic correlates to a person's realization that "my heart is heavy," this description will never capture the essence of the feeling thus described. Gabriel summarizes the issue well:

Our self-conception . . . reflects our value system and our personal experience . . . It has developed in complex ways, in the tension between our understanding of nature, literature, legal systems, values of justice, our arts, religions, socio-historical and personal experience. There just is no way to describe these developments in the language of neuroscience that would be superior or even equal to the vocabulary [that we have] already at hand. (*Not a Brain* 15)

In the closing sections of this paper, I look first at how language and

the mind operate in natural science, a language Davidson characterizes as of the physical realm, Taylor as the designative. I will then look at the language of Revelation, which addresses both the physical realm and the mental realm—the designative and the constitutive—and how both languages relate to the material and the spiritual aspects of reality.

PART FOUR: SCIENCE

We think of science as proceeding by way of designation, description, and explanation of physical and natural causality, and there is validity to this: at a certain point in the process by which human minds investigate natural phenomena using the tools of science, discoveries are framed in this kind of language. In some scientific domains, as in physics, this designative language can even be crystallized into mathematics. However, if we focus only on these outcomes of scientific activity, framed in this particular kind of language, we end up missing the full richness of the mental processes by which human minds engage in science.

It is noteworthy, for instance, that the human ability to “cast” intelligible realities into the “mold of the sensible” highlighted by ‘Abdu’l-Bahá is vital to the pursuit of science as well. Whatever is undiscovered in a given process of natural causality is, in a certain sense, insensible: it has not yet been made accessible to us to be

measured. Scientists will often advance the ways we perceive the world by relying first on metaphor and analogy with reference to the concrete and sensible in order to hypothesize about possible undiscovered causal mechanisms. Once the hypothesis is tested, and phenomena are observed through elaborate instrumentation, analogy can remain useful in understanding what has been observed; only later are such analogies articulated into more formal theory. Consider, for example, how non-intuitive findings of physics in the twentieth century at both the relativistic and quantum scales almost demand to be understood through metaphor and analogy before the student can undertake to comprehend them more formally.

The process by which science advances through metaphors and analogies has been labelled “abduction” by Charles S. Peirce.¹⁸ Abduction involves a way of thinking that relies on highly focused observation, but also on imagination and a general intelligence. This is a capacity of the human mind beyond inductive and deductive reasoning whereby scientists eliminate fanciful theories and mere superstition by deepening their experience with, and intuitive understanding of, the phenomena at hand.¹⁹ This exploration in

18 For an informative summary, see Igor Douven’s “Peirce on Abduction.”

19 Peter Godfrey-Smith explains abduction as “inference to the best explanation” in *Theory and Reality*, and as a way of eliminating other possible explanations. Imre Lakatos writes about scientific

depth, beyond the surface observation of the everyday world, is necessary, as Francis Bacon wrote at the dawn of modern science, since:

the greatest hindrance and aberration of the human understanding proceeds from the dullness, incompetency and deceptions of the senses; in that things which strike the senses outweigh things which do not immediately strike it, though they may be more important. Hence it is that speculation commonly ceases where sight ceases; insomuch that of things invisible there is little or no observation. (58)

Insights that come from intense investigation provide clues that lead to theories that advance science. Such insights emerge through the mind’s capacity to associate disparate things and find connections and resonance, to make imaginative leaps. Thus, however much knowledge is ultimately *captured* in science by designation and explanation, the mind has capacities for *generating* knowledge that do not operate by simple induction (in the way an artificial intelligence generates “knowledge” inductively from large data sets, for instance).

Scientific investigation thus involves looking into phenomena in order to discover entities and forces

research programs that showed promise or decline as a way of then formulating theory that was plausible, in *For and against Method*.

below the surface of the ordinary perceptual world. This is stressed by ‘Abdu’l-Bahá in His discussion of the role and power of the soul in scientific discovery:

Through the power of the rational soul, man can discover the realities of things, comprehend their properties, and penetrate the mysteries of existence. All the sciences, branches of learning, arts, inventions, institutions, undertakings, and discoveries have resulted from the comprehension of the rational soul. (*Some Answered Questions* 58:3)

So powerful and consequential is this capacity of the soul to discover realities beneath what is immediately sensible that, as ‘Abdu’l-Bahá stresses, it must be understood as an essentially supernatural capacity:

The virtues of humanity are many, but science is the most noble of them all. The distinction which man enjoys above and beyond the station of the animal is due to this paramount virtue. It is a bestowal of God; it is not material; it is divine. All the powers and attributes of man are human and hereditary in origin—outcomes of nature’s processes—except the intellect, which is supernatural . . . The power of intellectual investigation and scientific acquisition is a higher virtue specialized to man alone. (*Promulgation* 20:2)

The implications of this characterization of the mind and scientific inquiry for philosophy will be considered later. For the present, we can consider how the human mind's capacity for scientific investigation sheds light on the distinctiveness of the phenomenon of mind itself (whether or not one sees in this distinctiveness evidence of a spiritual or "supernatural" essence to the mind). Indeed, it seems plausible that the way the mind undertakes science may not be reproducible in, for instance, artificial intelligence systems.

As noted earlier, scientific advances rely on not only inductive and deductive reasoning, but also on abductive reasoning or "general intelligence." The role of general intelligence in particular demonstrates the futility of efforts to model scientific practice on a series of technical steps, or to reduce it to an algorithm. As Hilary Putnam writes, "there is no such thing as *the* scientific method" (72). This is not only due to the diversity of methods within science, which range from classification and taxonomies, to mathematical methods and computer simulations, and from laboratory experiments involving ever more elaborate instrumentation and measurement approaches to speculative cosmological theory.²⁰ More fundamentally, the idea of "the" scientific method is misleading because the crucial role of general intelligence is simply not reducible to a formulaic

approach. Until recently, histories of scientific advance neglected the role of haphazard inventions, innovations, and advances that were initially disconnected from theory.²¹ As Thomas Kuhn notes, scientists develop ways of *seeing* particular domains of reality by way of a kind of sixth sense or an intuitive grasp arising from their absorption in scientific practice. There are few better explanations of this than the book on scientist Barbara McClintock, *A Feeling for the Organism*. Author Evelyn Fox Keller describes the (often overlooked) contributions McClintock made to ecological and genetic science thanks to how she came to "see" phenomena, a kind of vision arising out of her absorption and dedication to sound scientific practices. Einstein felt that, "only intuition, resting on sympathetic understanding, can lead [to discovery of new laws], . . . daily effort comes from no deliberate intention or program, but straight from the heart" (qtd. in Keller 201).

The crucial role of intuitive understanding in science does not seem to be one that artificial intelligence, as it is currently being developed, can take on. While AI may serve as a tool of immense power for researchers, there seem to be core aspects of the activity of science that the human mind alone can undertake. An increasing number of articles and books now note how efforts in artificial intelligence have failed to model "general intelligence."

²⁰ See Ian Hacking's work paper, "Finding Out: Prolegomena to a Theory of Truthfulness and Reasoning in the Sciences."

²¹ See Stephen Gaukroger, *Civilization and the Culture of Science*.

In *The Myth of Artificial Intelligence: Why Computers Can't Think Like We Do*, Erik J. Larson points out that the enormous funds given to AI research, which continues to rely on the inductive processing of large data sets, displace funding for more effective scientific research that includes deductive as well as abductive reasoning. Artificial intelligence's reliance on inductive modelling alone allows it to discover correlations, but provides few insights into causality; AI's lack of understanding of underlying causes makes it error prone with respect to specific cases (even before considering the often biased and subjective rules and algorithms that AI programmers write into their programs). Our efforts to develop this kind of “intelligence” have not yet discovered the path to enabling AI to develop a genuine scientific understanding of deeper forces, and causal connections at work.

Comments by Rebecca Golden of the Genetic Literacy Project are enough to show the potentially insurmountable problems jointly faced by AI researchers hoping to reproduce the functioning of the human brain, and neuroscientists who hope to model the human brain, or ever understand the mind completely:

The human brain is estimated to have approximately 86 billion neurons, each neuron with possibly tens of thousands of synaptic connections; these little conversation sites are where neurons exchange information. In total, there are likely to be more than a hundred

trillion neuronal synapses—so a computer recording a simple binary piece of information . . . would require 100 terabytes. The amount of storage needed to store even this very simple information every second over the course of one day for one person would be more than 100,000 terabytes, or 100 petabytes. Supercomputers these days hold about 10 petabytes. And this quick calculation doesn't account for the changes in connectivity and positioning of these synapses occurring over time. Counting how these connections change just after a good night's sleep or a class in mathematics amounts to . . . many more bytes than the estimated atoms in the universe. The wiring problem seems intractable in its magnitude. (qtd. in Larson 250)

It would seem that just as animal cognition is an inadequate model for understanding the human mind, artificial intelligence is not a convincing model for our own capacity for thought; and perhaps our efforts to make AI in the image of our own minds are destined for failure. Just as a thought, in Gabriel's words, cannot “catch itself in the act,” the mind cannot fathom itself. This is attested to in the Bahá'í writings, and is coherent with an understanding whereby the mind is an essentially spiritual phenomenon. We will explore this further later, but it helpfully leads us to the broader point that science cannot fully describe the world.

It is a principle of science that evidence always underdetermines theory. Evidence, in other words, can always support different theories, as Kuhn emphasizes. That is why science is so intent on gaining ever more evidence in order to endlessly adjust theory. We never have complete evidence as there is always more to learn and know, and theory is likewise always open to adjustments, if not outright paradigm shifts.

Our scientific theories, then, can never be total descriptions of reality.²² Mathematician and philosopher John Myhill summarizes this well: “There is no nonpoetical description of the whole of reality” (qtd. in W. Hatcher 11).²³ This view is consonant with the

22 Quantum mechanics has also been used to demonstrate science inability to arrive at a total description of nature, since it understands the physical world at the subatomic level as a matter of probabilities only, not strict causality. For a recent discussion, see Vahid Ranjbar’s “The Quantum State Function, Platonic Forms, and the Ethereal Substance.”

23 This conclusion is based on Heisenberg’s uncertainty principle, confirmed by the Hilbert Space model of quantum mechanics, and reinforced by the mathematician Gödel’s incompleteness theory which proves that no axiomatic system, even basic arithmetic, can ensure both completeness and consistency. If a model of basic arithmetic can only be complete if it is inconsistent, or consistent if it is incomplete, we can be sure there will never be a total understanding of the physical realm. See physicist Roger Penrose’s *Shadows of the Mind*, especially with respect to his

Bahá’í writings. ‘Abdu’l-Bahá states that the concept of “nature itself” is “not a sensible reality,” but an ideal, an abstraction (*Some Answered Question* 16:3). Bahá’u’lláh likewise confirms that we will never have a total explanation of the natural world:

Say: Nature in its essence is the embodiment of My Name, the Maker, the Creator. Its manifestations are diversified by varying causes, and in this diversity there are signs for men of discernment. . . . It is endowed with a power whose reality men of learning fail to grasp. Indeed a man of insight can perceive naught therein save the effulgent splendor of Our Name, the Creator. (*Tablets, Lawḥ-i-Ḥikmat* ¶14)

This perspective returns a measure of enchantment to nature and confirms Myhill’s suggestion that poetry—and, we might add, perhaps most especially the divine poetry of Revelation—provides the only total view of reality.

PART FIVE:

THE LANGUAGE OF REVELATION

Having briefly considered how the mind generates scientific knowledge, as well as the limits of the mind’s scientific pursuit in understanding the totality of reality, I now turn to the question

use of Gödel’s theory in demonstrating the difference between mind and brain, and William Hatcher’s *Minimalism* (11) for references to these same ideas.

of what religion, and Revelation, can tell us about the mind. Where science aims at a determinate knowledge of entities and forces across well-defined domains of phenomena in its multiple sub-fields, the language of Revelation encompasses determinate and indeterminate knowledge, and experience of realities both physical and natural as well as spiritual and beyond nature.²⁴

Before considering what the phenomenon of Revelation might tell us about the mind, it may be helpful to say a few preliminary words about the phenomenon of art, and its relation to religion. The reason for this is that some of the capacities of the human mind to know and experience reality transcend intellectual or cognitive apprehension. The mind, as noted above, has capacities for feeling, for moral and purposeful action, and also for aesthetic perception and expression. Art, as an element of human civilization, has long justified a more capacious

view of the mind, as it highlights the mind's capacity for astonishment and awe, perplexity and puzzlement in our encounter with aesthetically stirring phenomena. This capacity is equally—or perhaps even more powerfully—engaged as the mind tries to understand the contingencies and mysteries of ordinary human life, and to contemplate being and reality.

Common to art and Revelation is a concern with meaning, and a reliance on metaphor as a means of expressing the inexpressible. Like philosophy—and unlike science considered in isolation—religion and much of art intentionally explore meaning and the purpose of life. The pursuit of meaning can, of course, be a legitimate source of understanding and wisdom, and therefore a particular kind of knowledge, distinct from the knowledge generated by science. In her book *The Life of the Mind*, Hannah Arendt explores how western philosophy emerged in the Greek world largely as a matter of wonder, in the pursuit of understanding at the level of meaning. In this pursuit, Greek philosophers, including Socrates, Plato and Aristotle, encountered the problem of the ineffable—or that which cannot be put into language. Arendt notes that Plato was often reluctant to put his views in writing, and that Aristotle wrote of "truth that refused to be expressed in discourse" (114). For these philosophers, as well as later thinkers such as Nietzsche, Heidegger, and Wittgenstein, who ran up against the limits of language, metaphor assumed a central role in their attempts

24 See Hatcher's *Minimalism* for a discussion of the distinct purpose and nature of scientific language and the language of Revelation. I had the good fortune to know Hatcher, and learned a great deal from our many conversations. Importantly, he points out that the ways of knowing fostered by each are complementary—one does not supersede the other: "intuition and mysticism may give rise to transrational modes of knowing reality . . . [but neither] divine revelation or mysticism can contradict the conclusions of reason *in the face of the same information base* . . . there is a fundamental difference between . . . the transrational and the irrational" (114).

to convey knowledge about questions of meaning. Art and Revelation have, of course, similarly relied on metaphor to express the ineffable. The examples of this phenomenon in the Writings of Bahá'u'lláh are too numerous to count; we might consider one example from *The Seven Valleys* in which He simultaneously explicitly speaks of the ineffability of spiritual meanings that language is powerless to convey, employs metaphor to provide a glimpse of what lies beyond the veil of the ineffable, and uses art—specifically the poetry of ‘Atṭár and Ibn-i-Fárid—to help the reader understand what cannot be grasped cognitively:

The tongue faileth in describing these three valleys, and speech falleth short. The pen steppeth not into this arena, the ink leaveth only a blot. In these stations, the nightingale of the heart hath other songs and secrets, which make the heart to leap and the soul to cry out, but this mystery of inner meaning may be whispered only from heart to heart, and confided only from breast to breast.

The bliss of mystic knowers can be only told from heart to heart,

A bliss no messenger can bear and no missive dare impart.

How many are the matters I have out of weakness left unsaid;

For my words would fail to reckon them and mine every effort would fall short.

O friend, till thou enter the

garden of these inner meanings, thou shalt never taste of the imperishable wine of this valley. And shouldst thou taste of it, thou wilt turn away from all else and drink of the cup of contentment. . . .
(*Call* ¶¶ 63–64)

In this short paper, I am forced to set aside an exploration of the world of art and its different modalities of language and expression, modalities that engage the capacities of the mind to know and experience reality in an aesthetic and sensible way that is less determinate than the knowing produced by science. Art brings a measure of indetermination and wonder to our perception and knowledge of the world. Through the arts we expand the powers by which we are able to bring alternative perspectives into view, and we develop our sense of a world that transcends the mere physical by way of evaluations and reactions that are emotional as well as cognitive. This growth in perspectives is not limited to our interaction with art itself; as de Sousa emphasizes, we often then shift those emotional evaluations into the situations of human life. The arts thus help us to see the world in new ways.

If this is true of the arts, how much more is it true of the language of divine Revelation, a form of language that looks beyond the causal and habitual perceptions and realities of human conceptuality, and aims to advance the mind's grasp of realities that include, but also transcend, the physical and

natural world.²⁵ I turn to Revelation and its language now, drawing on arguments from within philosophy itself to support the view that religious language—especially that of the most recent Revelation—allows unique access to certain ways of knowing.²⁶

If human agency, or the power of the human spirit, is beyond physical determinations and descriptions of brain physicality, as many philosophers claim, then it may be worth asking if we might find a better resolution to the challenge of understanding the mind by relying on the concept of the rational soul and the power of the human spirit. As a path to bringing those ideas back into philosophical discourse, we might first investigate the capacity of the mind to know and engage with the language of divine Revelation. Such investigation can lead us to value this language

25 Indeed, the Báb explains that some of the power of art may come from its ability to tap into the same source that gives Revelation its force: "It is the immediate influence of the Holy Spirit that causes words . . . from the tongue of poets, the significance of which they themselves are oftentimes unable to apprehend" (qtd. in *Nábil-i-A'zam* 259)

26 Of course, as a believer in the Revelation of Bahá'u'lláh, I consider His Writings, and those of the Báb, 'Abdu'l-Bahá, Shoghi Effendi and the Universal House of Justice as truths and guidance that transcend the arguments and positions of philosophers. At the same time, I recognize the need to advance the discourse in philosophy around the existence of an "extended reality" beyond the merely material.

of Revelation as a way by which human beings can navigate the contingencies of human affairs, and develop their capacity for cooperation, collective intentions and coordinated action—features that are unique to the human mind as philosophy itself has argued.

Before considering how Revelation might shed light on the mind itself, let us consider in more depth how it contributes uniquely to our ways of knowing in general. On the matter of religion, no less a secular philosopher than Jürgen Habermas has written,

[R]eligion, which has largely been deprived of its worldview functions, is still indispensable in ordinary life for normalizing intercourse with the extraordinary. For this reason, even postmetaphysical thinking continues to coexist with religious practice . . . [and] throws light on a curious dependence of philosophy that has forfeited its contact with the extraordinary. Philosophy, even in its postmetaphysical form, will be able neither to replace nor repress religion as long as religious language is the bearer of a semantic content that is inspiring and even indispensable, for this content eludes . . . the explanatory force of philosophical language and continues to resist translation into reasoning discourses. (*Postmetaphysical Thinking* 51)

. . . philosophy has itself fostered a kind of cognitivist reduction and

has pinned reason down to only one of its dimensions, . . . the truth of assertoric sentences . . . pursuing truth is the only thing that still counts as rational. Questions of justice and questions of taste, as well as questions regarding the truthful presentation of self, are all excluded from the sphere of the rational. (49–50)

The questions Habermas refers to are reflected in the content of much religious language, just as religious language also addresses the capacities of feeling and purposefulness which many philosophers emphasize as central to an understanding of the mind. Habermas explains, too, that ordinary life is by no means “immune to the shattering and subversive intrusion of extraordinary events” (*Postmetaphysical Thinking* 51). Revelation speaks directly to the tragedies and crises facing humanity, providing a context for the mind to grapple with death itself, and with the appalling levels of personal suffering that exist in the world; yet even in confronting these areas of human experience that have so troubled human thought across history, religious language can inspire a sense of astonishment, awe and beauty, and bring about epiphanies, heightened excitement, love, and joy.

The language of divine Revelation provides a source of inspiration and guidance that widens the ways by which the mind can know and experience the world. It is a language that is more expansive, and often less determinate,

than that of science. It brings to mind astonishment and solace, peace and insight. It prompts in the self-consciousness of mind an awareness of a larger sense of being and purposefulness than arises in the mere attending to the practical matters of physical survival. The language of Revelation conveys a sense of grace and contentment, but also inspires determination and perseverance; it opens for those who take such language seriously a form of knowledge that helps meet the practical imperatives of everyday life even as it provides a worldview beyond the particulars of ordinary life. This is a language that encompasses both the descriptive and the figurative or constitutive. Thus, the language of divine Revelation expresses determinate guidance, in specific laws, and well-defined principles and values; yet it also involves a way of knowing and experiencing life and the mystery of being itself. It conveys more general and sometimes indeterminate expressions of aspirations and noble goals that lead to different interpretations, and does so in a language that speaks to young and old, the humble or sophisticated, with an expression that can be understood by all. These two qualities of language together capture realities of truth, goodness and beauty, enabling the mind to gain an awareness and, to some extent, understanding of both its immediate reality and an extended, infinite reality that lies just beyond the horizon of our finite and humble lives.

Genuine religious language thus takes advantage of the mind's

composite of capacities and ways of knowing and experiencing the world, through thoughts, beliefs, feelings, and purposes. The mind relies on these capacities seamlessly, adjusting flexibly to different contexts, but it is always able to be inspired and guided by noble values and principles that, over successive Revelations from God, human beings have gradually come to understand. Exposed to such language, whether in the form of the Sermon on the Mount, the verses of the Qur'án, or the speeches attributed to the Buddha, human beings gain insights that have allowed them to overcome and transcend the contingencies of life and providence—contingencies that, as Bahá'u'lláh points out, are often "too mysterious for the mind of man to comprehend" on a cognitive level (Kitáb-i-Íqán 167).²⁷

While this developmental effect of Revelation on the mind can be attested to by the individual, its effects can also be seen from a historical perspective. Scholars such as Robert Bellah, building on Karl Jaspers' concept of the Axial Age—a period of cultural ferment measured variously from around

the time of the Buddha, the emergence of Greek thought, and the Revelation of the Old Testament, through to the Revelations of Christ and up to that of Muḥammad—have begun to document the ways religion stimulated the advance of human capacities of thought, feeling, and purpose. Bellah details impacts of religion on the evolution of the mind before and during the Axial Age, arguing that religion was the impulse behind significant shifts in the cognitive independence of the human mind.²⁸ Jaspers, for his part, wrote that the Axial Age formed "the spiritual foundations of humanity . . . foundations on which humanity still subsists today" (qtd. in Nirenberg and Nirenberg 98). This scholarship demonstrates a powerful relationship between religion, the human mind and the advance of human civilization. It does so by understanding religion as a general institution throughout history, rather than focusing on specific faith communities or religious labels that are often weighed down by dogma and clerical interpretations that cloud the originality of genuine Revelation language. Viewed in this perspective, history testifies to the impact of religion on human civilization with respect to culture, rationality, morality and language itself.

We can reflect, in light of this view of religion, on the importance of

27 Bahá'u'lláh's own language of Revelation consists of an enormous body of Writings of equally enormous range. He provides a practical vision of human purpose and relationship, inviting all the members of the human race to live in "the utmost love and harmony, with friendliness and fellowship," and assures us that unity, cooperation and love among the peoples of the world that "can illuminate the whole earth" (*Gleanings* 132:3).

28 In addition to Bellah's works *Religion in Human Evolution* and *The Axial Age and Its Consequences*, see also Ben Schewel's *Seven Ways of Looking at Religion*.

Revelation to the process of learning that Tomasello refers to as “the ratchet effect” by which “cumulative cultural evolution” occurs in the “social learning” of humanity. Tomasello views the human mind’s cooperative nature (discussed earlier in this paper) as arguably its essential quality. Habermas’ prodigious philosophical work reflects the same idea: human beings advance by a process of social reasoning in which minds are engaged cooperatively and communicatively in unending conversations that touch contexts of affectivity, cognition, and purposefulness, in an ongoing assessment of the consequences of our actions with a view to establishing better reasons for subsequent and better coordinated action.

Yet, even if the Axial Age provides abundant evidence of the historical role of the language of Revelation in fostering this fundamental human capacity for cumulative cultural development through cooperation, can it fulfill the same function today? Humanity faces enormous challenges: environmental harm, gross inequities across and within countries, racism, prejudices and injustices that cause appalling suffering to many, to name a few. These challenges represent an evident failure of human solidarity. Despite an understanding of the human mind as uniquely designed for cooperation and for collective intentionality, we seem to be falling short of the minimal level of cooperation demanded by the exigencies of our times. With a renewed confidence in the power of the human mind and its capacity for cooperation,

knowledge and learning, we could broaden and deepen a shared view of the world in both its physical and spiritual dimensions. This would mean expanding and deepening our perception of social reality, refining our powers of judgement, and elevating the meaning and purpose of our lives.

Here I would like to suggest how, given what we have reviewed about the nature of learning in a social context, the role of language in the mind, and the particular attributes of the language of Revelation, a certain kind of “religious” practice might be considered as a powerful tool for humanity to resolve the challenges it faces. The example provided—the social practices prompted by Bahá’u’lláh’s Revelation and elucidated by the Universal House of Justice—may not look like most people’s idea of a religious practice. But it is, I would argue, a practice that both relies on the capacity of Revelation language to engage the human mind in a unique way, and takes advantage of the nature of social learning. It is a kind of practice, in short, that can give the observer a reason to have confidence in the human mind’s ability to generate the collective intentionality and action needed to resolve the crises it faces. It provides evidence of the power and enormous influence that Revelation can have on the processes of mind in its learning to build better, more peaceful and prosperous communities.

Over the past twenty-five years, the Bahá’í community has been engaged in a collective, worldwide learning process, relying on an evolving conceptual

framework detailed in a series of letters of the Universal House of Justice. The process of learning has centered on a systematic educational program involving study circles for adults, junior youth empowerment programs, and children's classes. This program of education involves study of the language of Revelation and authorized interpretations, embedded in extensive conversation and discussion, as well as social practices undertaken by participants. This process encourages efforts to generate a collective intentionality that then allows for coordinated action characterized by creativity and imagination. Participants learn to apply the guidance studied, and then reflect and converse together about such actions and their consequences. This serves to stimulate advances in both individual and collective learning among the participants, whether Bahá'í adherents, their friends, families or neighbors.²⁹

This process emphasizes both cognitive learning and the development of spiritual qualities, including attitudes, feelings, aspirations, and noble goals and purposes. It relies on appropriate kinds of social practices that involve action accompanied by others. This is learning by doing, as described by Aristotle in his *Nicomachean Ethics*: "For the things we have to learn before we can do, we learn by doing" (qtd. in Kern 259). We take actions and we learn, replacing mistaken concepts

with newer, better ways of viewing the world. With continued study of the language of Revelation, and with efforts to apply its guidance through action, our perceptions widen, deepen, and are enriched.

This systematic process promotes in its participants a deeper appreciation of the language of the Revelation of Bahá'u'lláh, whether one believes that He is a Manifestation of God or thinks of Him merely as one more among many educators and teachers of humanity whose language and ways of expression make sense, are coherent, and are also stimulating and encouraging. As all divine Revelations have done, Bahá'u'lláh's both elucidates the spiritual aspects of life and outlines a more appropriate relationship to the material aspects of reality. In language that is at once figurative and informative, explicit and explanatory, the Revelation addresses and activates those human realities of purposeful action, thought and feeling.

The impacts of the language of Revelation through the learning process described above are thus not measured in external outcomes alone. In this shared and cooperative enterprise of learning, there is an emphasis on standards of the right and the good. There is an assumption of the nobility of those who participate in the learning process, which stimulates aspirations to attain to higher levels of service, sacrifice, nobility, and positive action. The mind's self-understanding and its inextricable sociality mutually reinforce each other, as the personal drive

29 For a philosophical analysis of this educational process, see Sona Farid-Arbab's *Moral Empowerment: In Quest of a Pedagogy*.

to surpass one's previous self-understanding is simultaneously a drive to contribute to greater social cohesion and unity among all who participate. This may be understood as a process of self-transcendence as described by philosopher William Desmond:

Religious community binds together the human and the divine, and out of this it transforms the bonds holding humans together. The sources of social power undergo a transformation that carries human power to the edge of humanness. We understand power as given all along, a gift from motiveless generosity, motiveless goodness beyond the goodness of the gift, rousing in community the vision of humans living together an ethics of generosity in the finite image of the ultimate generosity. (486)

This process of learning, by way of a mind that develops feelings, attitudes, cognition, perception, and purposefulness relies on personal and collective efforts to translate the Revelation language into advances in skills, qualities of mind, and action. The participation of a few million people around the world has contributed to an evolving framework for action that relies on cycles of study, action, reflection, and deliberation and conversation among groups of friends who begin to see themselves, their local communities and neighborhoods, as well as their local and regional Bahá'í institutions

as protagonists in the development of new ways of life.

Central to this kind of development is growth in the mind's capacity to understand reality. Beyond a more informed reading of the reality of both the material and spiritual nature of villages, towns, and city neighborhoods, participants learn to perceive and penetrate social reality at a deeper level. This process involves a re-evaluation of the standards we rely on in our judgments of others, of the truth, the good, the right, and the beautiful. There is as much to learn from false starts and mistakes as there is from positive experiences. For it is not only the concepts that come most quickly to mind that hold us in their grasp, and from which we try to shake free, but deeper, more ingrained standards that we may not initially think to question when perceiving, judging and acting. These are uncovered and explored by way of the kinds of intense discussion and conversations that occur in the study circles.

In describing this process, Paul Lample draws attention to an image, developed by Otto Neurath, that McDowell also uses to explain human learning. We are, as it were, at sea on a ship that we have to rebuild, one piece at a time, while still staying afloat. We replace by bits and pieces one timber of the ship—one concept, or group of concepts—after another, making gradual adjustments as we come to learn new ways of thinking about the world (174). “[T]hinking,” as McDowell puts it, “is under a standing obligation to reflect about and criticize the standards

by which at any time, it takes itself to be governed" (*Mind and World* 81).

This work of rebuilding our "ship of concepts" is facilitated by the religious language at the center of the learning process being described here. By surfacing the spiritual nature of the world we have in view, and of the relationships between the realities within it, this language helps the mind advance in its understanding of the meaning of things, and thereby build sound concepts, new ways of perceiving the world (including other human beings). It develops our capacity to reason through the feelings, attitudes, beliefs, norms, values, and purposes that justify our actions. Our interactions with others can take on a sense and a feeling that is spiritual, not because we turn away from the material dimension, but because we come to see greater coherence between the material and the spiritual dimensions of reality. We develop finer discriminations in how we see and hear the world in both its material and spiritual aspects, relying on our rational faculties and capacities for knowledge as well as our capacities for feeling and purposefulness.

Genuine religious language is about unity, love and understanding, moral qualities, and the living of a life that moves a person closer to God. It is a language that deals with features of the world that can guide our perceptual attention, allowing us to see the world in the light of those spiritual qualities of love, mutual understanding, care, kindness, and justice. Throughout our involvement in this learning process,

as our inherited conceptual frameworks come under scrutiny in the light cast by the language of Revelation, we learn to see with our "own eyes and not through the eyes of others," calibrating our capacity to exercise judgment, in recognition that "justice is [God's] gift to thee and the sign of [His] loving-kindness. Set it then before thine eyes" (Bahá'u'lláh, Arabic Hidden Words no. 4).³⁰

'Abdu'l-Bahá writes,

let them open wide their eyes and uncover the inner realities of all things,... Our spiritual perception, our inward sight must be opened, so that we can see the signs and traces of God's spirit in everything. Everything can reflect to us the light of the Spirit. (qtd. in Ruhi Institute 9)

From what has been described, it should be clear that in our involvement in this learning process, we need to adopt the scientific approach elaborated on earlier. Where scientists learn to look beyond the mere surface observations of the object world in order to determine the underlying forces and entities operating in nature, participants in this process learn to look beyond the surface of culture and external reality, and the limitations of that way of perception, opening their minds to a realm

30 For a discussion of the nature of this judgment, see John S. Hatcher's article in this issue, "The *Mizán* of Affect in Material versus Metaphysical Models of Human Consciousness."

of spirituality beyond nature. “It is common nowadays to think of science and religion as opposed. To the contrary, faith and reason are twins born of sameness and difference,” write David and Ricardo Nirenberg (97). Science, in its determinate ways of knowing, represents an unquestionable advance for humanity, but religion in the form of the divine language of Revelation provides another avenue of knowledge and experience that complements, overlaps and extends the ways that science engages the world. Our understanding, whether in science, the arts, religion, or in the practical course of ordinary life, is always a capacity of human agency (or, we might say, the human soul)—an expression of a mind that finds itself in both an object world of spatially extended entities, energies and forces, but also in a space of non-physical abstraction and ideals. The advancement of human civilization depends on a deepening of our understanding, based on all capacities of mind: the instrumental and designative, but also the expressive, the cooperative, and the communicative, along with the mind’s sense of value and purpose.

I have suggested here that interaction with the language of Revelation, particularly in a process of social learning with others, draws on and strengthens the capacities of the human mind in a way that can help us address our collective problems, and advance civilization. We may agree with this proposition, of course, without also believing that Revelation, or the specific claims it makes about reality, are

true. I will conclude this paper, then, by considering whether a view of the mind that emerges from the Bahá’í writings is, if not demonstrably true in a scientific sense, capable of grounding the philosophical view of the mind presented thus far.

PART SIX:

THE MIND AND THE SOUL

A further question, then: Is it not time to recover a view that brings together an understanding of our range of mindful capacities for thought, feeling, expressiveness and purposefulness with a ready acceptance, too, of the limitations of mind before the infinite reality beyond the horizon of our finite and determinate knowledge?

The mind and, therefore, human action have a degree of freedom that lies outside the laws of causality that the natural and physical sciences generally take as given. While many contemporary philosophers persuasively argue that natural science is not enough to fully understand the human mind, the Bahá’í idea of mind goes a step further in holding that the mind has a relationship to the soul.

The mind may be dependent on the health of the brain and body, but it is not entirely of that world, for it reaches into a higher level of reality, however uncanny or other-worldly this may sound to philosophers. If we understand the supernatural correctly as a quality of spirituality and the true nature of the human spirit, we can attain to an understanding that both

recognizes the constraints imposed by nature, and the resulting importance of science and material means, and yet transcends those constraints in certain ways that rely on our learning from the language of divine Revelation.

Neuroscience and studies of animal cognition are, thus, certainly necessary and essential to human advancement. A scientific understanding of the brain serves to inform a better understanding of the mind.³¹ Physical happenings affect the brain, causing changes in our minds. Lack of sleep, poor nutrition, and physical injuries provide all the evidence we need in this respect. It is also true that our conscious and unconscious choices—about what to think, how to judge, and what simple or complex actions we undertake (from drinking coffee to learning to ski downhill)—also cause changes in the physical state of the brain.³² There are influences going both ways—brain to mind and mind to brain—but not all correlations amount to causal explanations. Davidson argues—effectively, in my view—that there are no psycho-physical laws: though some brain occurrences that then lead to mindful actions, and some mindful actions (the decision to drink coffee, for instance) impact the brain, there always remains a measure of free will. The brain is plastic and adaptable, and

changes in the brain are often generated through deliberate practices—habits of will that lead to actions. Arendt similarly argues effectively that will is real, and is different from mere thinking. Human beings do manage to develop character and right conduct, and we all are witness to how these can often manifest themselves against terrible odds in the exigencies of human life.

We also recognize limitations that we cannot overcome in principle. Bahá'u'lláh comments on the limitations of any total understanding of the mind given its relationship with the soul, and ‘Abdu’l-Bahá notes that “the uttermost limit of [the power of comprehension’s] flight is to comprehend [only] the realities, signs, and properties of contingent things” (*Some Answered Questions* 58:3).

Writing to Dr. Auguste Forel, an early co-founder of the first neuron theory of the brain, ‘Abdu’l-Bahá states that “for the mind to manifest itself, the human body must be whole; and a sound mind cannot be but in a sound body.” But He also made it clear that the mind, while “circumscribed”, is also beyond the brain and body by the power of the soul:

It is through the power of the soul that the mind comprehendeth, imagineth and exerteth its influence, whilst the soul is a power that is free. . . . The mind is circumscribed, the soul limitless.

. . . all other beings, whether of the mineral, the vegetable or the animal world, cannot deviate from

31 Indeed, Shoghi Effendi writes that one of the important future pursuits of humanity will be “the sharpening and refinement of the human brain” (204).

32 See Sanjay Gupta’s excellent summary of keeping the brain healthy in the aptly titled *Keep Sharp*.

the laws of nature, nay, all are the slaves thereof. Man, however, though in body the captive of nature is yet free in his mind and soul, and hath the mastery over nature.

‘Abdu’l-Bahá thus asserts that there is physical causality, or determinism, in the material realm, yet freedom, spontaneity and autonomy for the mind, however circumscribed or limited. This opposition between freedom and determinism has long been a conundrum in philosophy—how can they exist in the same world?

Yet nowhere do we find ‘Abdu’l-Bahá bothered by this problem. He views our minds as straddling the physical and spiritual dimensions of a more extended reality encompassing both. In contemporary philosophy, too, there is greater acceptance of the compatibility of necessity and determinism in nature and the freedom of human mind and human action. This acceptance may stem in part from the realization of the impossibility, in principle, of ever arriving at an explanation of the totality of the physical and natural universe.³³ Nagel’s idea of an “extended reality,” some of which may be open to scientific discovery, but some remaining forever beyond science, or McGinn’s “mysterium” in physical reality, forever beyond science, are useful ways of considering the impossibility of ever knowing everything about physical or natural reality.

Our human agency operates in a self-conscious way at a level above and beyond what natural or physical science can account for by mere description and explanation of causal mechanism. In considering how the mind develops a view of the world by way of its relationships with other minds through language and concepts, Pippin summarizes well the views of many other philosophers when he states that, “there is something about some human capacities that . . . will *never* be explicable scientifically, no matter our eventual knowledge of ‘feedback loops’ and brain reorganization” (*Interanimations* 65).

‘Abdu’l-Bahá makes a similar point, yet draws a bolder conclusion:

Man possesses conscious intelligence and reflection; nature does not. This is an established fundamental among philosophers . . . The ideal faculties of man, including the capacity for scientific acquisition, are beyond nature’s ken. These are powers whereby man is differentiated and distinguished from all other forms of life . . . Notwithstanding the gift of this supernatural power, it is most amazing that materialists still consider themselves within the bonds and captivity of nature. (*Promulgation* 20:5)

An “intelligence” and “ideal faculties . . . beyond nature’s ken” puts the mind, including its “capacity for scientific acquisition,” beyond an explanation by

33 See footnote no. 23.

natural science. Many contemporary philosophers would agree with this assessment; but 'Abdu'l-Bahá's reference to the "supernatural" is a term philosophers resist. McDowell mentions the "supernatural" as an option for understanding the mind, but quickly dismisses it. He writes that we need not be bothered by "the fear of supernaturalism," and argues for an explanation of the human mind's uniqueness, however inexplicable by natural science, as a "second nature" (*Mind and World* 84).³⁴ Nagel considers "divine intervention" as one way to explain the evolution of the human mind but also sets it aside, opting instead for an understanding of mind that will have to wait for a currently unavailable, but he hopes eventual, scientific understanding of teleology that might explain the evolution of consciousness and mind (*Mind and Cosmos* 66–67). McDowell and Nagel both dismiss the "supernatural" and "divine intervention" based on a conventional understanding of the "supernatural." Yet 'Abdu'l-Bahá understands the "supernatural" as simply that which is beyond nature. Thus, a mind can be embedded in nature and the physical but also in a larger reality

that also involves the spiritual. The material and spiritual are understood as dimensions of one single reality. This model is not any more "other-worldly" than any other that recognizes the immateriality of our consciousness, thought, feeling and purposefulness. It is a way of understanding realities of human life that are abstract and ideal, simultaneously beyond the natural world and yet immediately at hand in the commonplace experience of our mindedness or consciousness.

As Gabriel writes, "[a]s minded beings . . . we humans are in contact with infinitely many immaterial realities" (*Meaning* 9). These realities of mind can be called "spiritual" if "supernatural" is too far a reach, though "spiritual" may also raise objections in a culture that arguably lacks a strong sense of the sacred or the holy, and where material aspects of life eclipse the spiritual. Yet such realities of mind are "outside of nature," beyond the biological and natural, and though they may be immaterial in mind, once translated into human action they have effects on the world that always carry both material and human, or "spiritual," consequences.

To support the contention that the mind is in essence a spiritual or supernatural phenomenon, we can consider the insufficiency of considering the mind, or the human being, as a purely natural entity. As Pippin argues, human beings have "no naturally determined niche in the world" (*Interanimations* 24). We find our place in the harmonization of our interaction with the

34 McDowell relies on Wittgenstein's statement that, "Commanding, questioning, recounting, chatting, are as much part of our natural history as walking, eating, drinking" in order to justify his use of the term "second nature" but his point, like Pippin's, is that "commanding, questioning, recounting" are beyond the natural world by the uniqueness of our human mind.

physical world in which we are embodied, and of our purposes and intentions, meanings, norms and language that are thoroughly conceptual, abstract, and immaterial in both our individual and collective consciousness. The human creature is never a “natural man,” as Hobbes and Rousseau both imagined for their differing arguments about human nature. The human cannot be natural, because, as argued at the outset of the paper, she does not live primarily in an environment, but in a world. The human being is able to conceive and inhabit alternative worlds and orders of reality, from the political to the moral and from the aesthetic to the spiritual, escaping the here and now of a natural life, living in worlds either shaped by inspiration or demeaned by a degraded imagination. What might be, what can be, and what is valuable and desirable in human life, always lies beyond our biological and bodily needs—yet such a human life must also serve those needs and be in harmony with the natural environment if we are to survive as a human race.

“Before all else, God created the mind.” ‘Abdu’l-Bahá cites this Holy Tradition on the first page of *The Secret of Divine Civilization*, and explains that “[t]his supreme emblem of God stands first in the order of creation and first in rank.” He refers to “the intellect and wisdom” as “luminous lights”, and states that “grace and splendour” derive “from wisdom and the power of thought.” The mind is “the power of the human spirit . . . the light that shines from it” (*Some Answered Questions*

55:6). “The mind itself, reason itself, is an ideal reality and not tangible” (*Promulgation* 111:13). It is the human mind that generates “the sciences, arts, inventions, crafts and discoveries” (*Some Answered Questions* 48:4), “for it is only physically that man resembles the lower creation, with regard to his intellect he is totally unlike it” (*Paris Talks* 23:3).

The soul is spiritual and outside of nature, and so too is the human mind in its inseparable relationship to the soul. Unless we realize who we are as human creatures, different in kind and quality from animals, and from nature and the physical world, we will struggle to understand and embrace the responsibility that devolves upon us, as spiritual creatures, to look after the natural world as we should, preserving its integrity and health, while advancing our own health, spiritually and materially, personally and collectively.

Walk thou high above the world of being . . . Those who have rejected God and firmly cling to Nature as it is in itself are, verily, bereft of knowledge and wisdom. (Bahá'u'lláh, *Tablets*, Lawḥ-i-Hikmat ¶¶17–21)

In this rapid overview of the mind and the “power of the human spirit,” much has been left unexplored. Of late, there has been an outpouring of thoughtful publications about consciousness, mindedness, sentience and sapience, wisdom and meaning, knowledge and sound reasoning. This

paper represents a modest effort at engaging in the philosophical discourse in this field. Philosophy itself remains a discipline within which many thinkers, though by no means all, maintain a level of respect for religion in spite of the advance of secularism. With that in mind, I hope that this paper may inspire Bahá’ís and like-minded individuals to read philosophy, including the works of philosophers who do not share their own views, trusting that continued earnest efforts from seekers of truth will advance our collective understanding of the relationship between human agency and the mind, casting light on the mind’s relationship to the “human spirit” and “the rational soul.”

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