THE EMERGENCE OF SPIRIT IN AN EVOLUTIONARY COSMOS: MOVING BEYOND THE PERCEIVED DICHOTOMIES

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In the beginning, when all was formless and void, the Spirit of the Living God brooded over the face of the deep, structuring the emergence of created reality and explosively bringing forth swarming myriads of life. In the scriptures of the Christian tradition the source of new life is always the Spirit of God. From creation to conception to co-creation and resurrection, the Holy Spirit is the life-giving principle, power, and person who originates all things and makes all things new. Today, while an increasing number of people are said to be "spiritual," as opposed to being merely materialistic, this sense and use of the word "spirit" has little or nothing to do with the Spirit who is attested to in Scripture. Indeed, in the popular imagination—and even in that of many Christians—matter is often dichotomously juxtaposed to spirit to arrive at a position closer to the intellections of the ancient Gnostics than that of Jesus' Apostles. This common contemporary misunderstanding of "the material" versus "the spiritual" is particularly prevalent in pop-cultural perceptions of the so-called science versus religion "debate." In a culture that capitalizes on catch phrases like "evolution versus creation," "soul versus body," "mind verses brain," and so on, dichotomies abound on all sides and one is often left wondering whether science and religion have anything constructive or edifying to say to one another. Indeed, many have urged that one must choose a side in this ideological battle and others have attempted to broker an uneasy truce, setting up a demilitarized zone between the realm of faith and the realm of fact. (Hence the popular "Nonoverlapping magisteria of Authority" or NOMA view of science and religion—a view which Yong, rightly in my assessment, rejects [27].) Into this current confusion regarding the relationship of science to spirit enters pentecostal scholar Amos Yong.

In two recent works, Yong skillfully challenges the perceived opposition between that which is seen, and that which is unseen, and arrives at a vision of an emergent cosmos that is embraced and enlivened by not only the mysterious third person of the Triune God, but also by other spirits of all sorts. In this response I will briefly touch on a few central themes of Yong's book *The Spirit of Creation*. In particular I will explore Yong's treatment of how Pentecostal theology and the natural sciences interact over the problem of theological anthropology and the evolutionary emergence of human beings. Raising a few questions and concerns along the way I will then suggest some pathways for further inquiry.

In his book, *The Spirit of Creation*, Yong develops "two basic arguments: a methodological one regarding the need for many scientific disciplines to investigate the many kinds of emergent realities that make up this world, and a theological one regarding how the person and work of the Holy Spirit can illuminate the theology and science dialogue" (133). To this end he works out an eschatological and teleological framework for a theo-

logical and philosophical interpretation of the scientific concept of emergence that he hopes will "make a difference" for understanding the origins and cosmic history of the world. His argument proceeds from science to philosophy to exegesis to theology and he provides an exposition of philosophical understandings of emergence, "motivated by the conviction that it provides a helpful bridge between the evolutionary sciences and eschatological theology" (134). Yong's thesis is "to suggest, very tentatively, an emergentist cosmology that provides nonreductionisite accounts for pneumatic or spiritual realities while, at the same time, challenging dualistic construals about the relationship between the spiritual and material world" (31). Yong chooses emergence theory to assist him in this venture because the concept of emergence helps us see "how the higher and more complex levels of reality appear unpredictably from, and are constituted and self-organized by, lowerlevel parts yet activate novel properties and even behaviors that are not explicable in terms of the sum of their parts" (58-59).

In his discussion of the human person Yong develops what he calls an *emergentist anthropology* (58). He makes both a theological-exegetical and a scientific case for why he does so. On the theological side Yong—correctly in my opinion—rejects the trichotomist and dichotmist views of the human person that are prevalent in much current Charismatic and Evangelical Christian thinking, and he opts instead for an understanding of the human being as a psychosomatic unity. In arguing for the metaphysical unity of the human person Yong's position follows the best of current biblical exegesis. As Yong explains, "ha'adam is said explicitly to be formed

out of and thereby emergent from the dust of the ground" (159-160). In this way, says Yong, citing Old Testament scholar Claus Westermann, "the person as a living being is to be understood as a whole and any idea that one is made up of body *and* soul is ruled out." In other words, clarifies Yong, the consensus of Old Testament exegesis "effectively undercuts the dominant dualistic reading of the [pentecostal] tradition that defines human nature in terms of material bodies plus eternal souls" (160).

On the scientific side of his case for an emergentist anthropology, Yong cites the empirical work of neuropsychologists Malcolm Jeeves and Warren Brown which demonstrates how the mind is constituted by and dependent upon, but irreducible to, the ever-changing neural states of the brain. Yong points out that Jeeves and Brown's theory of the emergent mind supports the existing experimental data, and coherently demonstrates "how the whole of the mind is both greater than the sum of the (biological) parts and simultaneously constituted by nothing more or less than those parts" (59). Yong then philosophically follows Nancey Murphy and especially Phillip Clayton who advocate a "nonreductive physicalist or supervenience theory of human nature and the mind-brain relationship." Yong concurs with Clayton's conclusions that:

1. Non-reductive physicalism rejects dualism in favor of a monistic view of the human person as essentially and ontologically a corporeal or physical being; hence, there is no "vital force" or other metaphysical entity that is needed to explain

- higher-level or emergent phenomena such as consciousness.
- 2. Non-reductive physicalists acknowledge that once having emerged, mind or consciousness also exerts top-down or downward causal influence on the physical world and in that sense is dependent upon but causally irreducible to the brain. (60)

Given these conclusions, what results is a concept of the mind as "an emergent property with a level of complexity and capacity to act that is constituted by, but ontologically irreducible to, the brain and the body" (63). Once the mind is emergent, certain personal and social properties are likewise activated and these properties in principle "cannot be explained as merely the sum of the constitutive parts" (64). Moreover, the combination of these properties symbolizes for Clayton what he calls "the emergence of spirit, both of human persons as individuals and of social or communal groups as collectives." Finally, Clayton suggests that we should conceive of mind (or spirit) "not merely as an emergent quality of the natural world, but also as a source of agency in its own right" (150).

Having explored the conceptual terrain of philosophical and scientific emergence, in chapter 6 Yong explains that he will go "out on a limb to propose a pneumatological or spirit-filled cosmology in dialogue with the philosophy and science of emergence" (173). LeRon Shults' paper in this session will speak in more detail to the other topics of this chapter, but here I want to briefly touch on the themes in chapter 6 which critically re-

late to Yong's development of an *emergentist anthropology*.

As part of his development of a pneumatological or spirit-filled cosmology Yong makes a sustained case for taking the theories and findings of the parapsychological sciences seriously. Yong says, "I think the scientific bias against parapsychology is derived from an underlying commitment toward a non-scientifically determinable materialist philosophy or metaphysics rather than the result of an honest examination of carefully conducted case studies and the experimental evidence" (185). Among the findings of parapsychology are what are called disembodied psychic phenomena—such as near death experiences (NDE), and out of body experiences (OBE). These phenomena have given rise to what the "parapsychological sciences have called the survival hypothesis, the idea that disembodied consciousnesses may survive bodily death" (190). Beyond the existence of disembodied human consciousness are phenomena such as mediumships and poltergeists, which according to Yong also comprise evidence of disembodied non-human conscious entities. Having surveyed the data of parapsychology Yong proposes to build "toward an emergentist interpretation of psychic phenomena." Using the anthropology entailed by David Ray Griffin's Process cosmology, which holds "that the person (the mind or the soul, with or without some kind of nonphysical body) can exist apart from the physical body," Yong goes on to provide a "metaphysical account not just for the existence of the disincarnate human spirits of the dead" but also for a disembodied non-human "spirit-filled world" (203). Yong explains that there are two aspects to this proposal:

On the one hand, if human minds are considered as emergent properties or capacities constituted by but irreducible to the brain and the body, then psychic interactions can be similarly considered as emergent realties constituted by but irreducible to the complex interrelations of two or more mental sequences, whether conceived individually (as referring to specific persons) or corporately (in this case involving group activities and histories). On the other hand, if human spirits are emergent realities that are capable of surviving and indeed survive after bodily death, then I suggest that, as pentecostal and charismatic spirituality assumes, angels (as servants of God and human beings) and demons (as agents of destruction in human lives and societies) are similarly emergent spirits that can and indeed do "survive" the disintegration of their originary material or sentient "parts" (204, emphasis mine).

Yong's key move here is an analogy from the emergence of the human mind from the human brain to the emergence of disembodied spirits from embodied minds. I would argue, however, that unfortunately this analogy falls short. The main reason why the analogy breaks down is because midway through the above paragraph the meaning of the term *emergent* fundamentally changes. The basic scientific and philosophical idea behind emergence is that the *parts* of a given entity are essential for the continued existence of both the whole and the whole's emergent properties. In other words, while

the whole is indeed not reducible to the sum of the parts, the parts are still absolutely necessary. To maintain that "the whole can not be reduced to the sum of its parts" in no way implies that "the whole can be separated from the sum of its parts." In this way Yong's proposal of disembodied human spirits existing in a spirit filled cosmology goes well beyond Murphy, Clayton and other contemporary emergence thinkers. The view that the human spirit can continue to live on when divorced from its material substrate, is not *emergentist* as such. There can be no emergent entity called water—with all its entailed emergent properties such as surface tension and wetness—without the continued presence of constituent atoms of Hydrogen and Oxygen, and no emergent snowflakes can persist apart from the constituent crystals of ice. To press the meaning of emergence beyond this to include postulated non-material entities that completely survive the dissolution and destruction of their material components is to altogether leave behind the meaning of emergence as it is currently understood within the context of the natural sciences.

In conclusion, I must commend Amos Yong for his courage in embarking down the often-perilous pathway of faith seeking scientific understanding. In particular I applaud him for his endeavor to bridge concepts of the human person and spirit arising from the world of the lived Pentecostal faith with those that emerge from the realm of the natural sciences. In my own estimation, emergence theory—as it is currently understood within the philosophy of the natural sciences—may not be the most stable bridge upon which to build theoretical connections between the disembodied human and angelic spirits of Pentecostal experience and

the fully embodied concepts of mind and personhood attested in the neurosciences and in biblical exegesis. However, this lack of a suitable scientific conversation partner certainly need not herald the end the dialogue between Pentecostal theological anthropology and the natural sciences. Indeed, even now the natural sciences do observe and investigate at least one phenomenon one which Yong, in fact touches on briefly—which has the ability to exist and persevere beyond the dissolution of the original component parts—namely information. While all persons or agents are information (which includes one's genetic makeup, phenotypic appearance, personal thoughts, memories, etc.), information can also exist independently of agents. Moreover, according to our current scientific knowledge, during the evolution of our cosmos there has been a movement from simple information towards more complex information. In other words, information itself emergently evolves. If I had to make a wager, then, I would bet that a deeper exploration of the phenomenon of information—an entity, which exists irrespective of its underlying substrate, and one that can even defy the destructive forces of thermodynamic entropy—will turn out to be the key to unveiling the mysterious core of anthropological identity and continuity. A more adequate conception of information might even be the key to solving some of the more persistent puzzles surrounding emergence theory. Given the current empirical and philosophical situation, then, I would be greatly interested to see Yong explore the theological and scientific interface between emergence theory, information theory, and the spirit in his future works.