

Mark Graves, *Mind, Brain and the Elusive Soul, Human Systems of Cognitive Science and Religion*, Ashgate Science and Religion Series 2008, 244p.

Graves argues that the human person in its material relationships may be understood by science, but the person as a whole cannot be fully understood without reference to religion in general and the soul in particular. Just like hemoglobin itself does not contain iron for binding oxygen, its constellation of four proteins only making up an empty space for that iron (so hemoglobin would be *iron-less* when described with a reductionalist account); likewise the measurable, scientific aspects of the human person open up an empty space which has to be filled with the transcendent goal of human personhood, implied by the concept of the soul. By so using this religious concept of the soul, Graves sets out to integrate and unify findings from six(!) disciplines in cognitive science, i. e., psychology, computer science, neuroscience, philosophy, linguistics and the social sciences. Introducing the notion of *dynamic form*, he reframes what he sees as the traditional doctrine of the soul as the form of the body, drawing on the founder of pragmatic philosophy, Charles. S. Pierce.

What must be clear by now, is that Graves, having a MA theology and having spent ten years working in the fields of bioinformatics, genomics and systems biology, is acquainted with a truly remarkable quantity of theories. For someone not familiar with all of them – someone like me –, reading some of his passages gives the uneasy feeling of not being able to grasp everything at appropriate depth. This review is from the angle of someone trained in medieval philosophy (or should we say theology?) and contemporary *philosophy of mind*.

Emergence

Fundamental is his elaborate concept of *emergence*. There are several levels in reality: Graves distinguishes the subatomic, the physical, the biological, the psychological and the cultural. These realms are not to be reduced to the most basic one as reductionist are trying to do; instead they relate to each other by *emergence*. Drawing on the concepts of self-organization, the function of constraints and of attractors, Graves builds up a highly specific web of (in part science-based) notions for pinpointing the concept of emergence (using the work of, e.g., Claus Emmeche and Stuart Kaufmann). The overall thrust against reductionism and the hierarchical levels of reality culminating in the highest level of transcendence reminds strongly of the *theory of modalities* in Reformational Thought (Herman Dooyeweerd).

Metaphysics

One of the important insights of this book is that a theory of human personhood needs metaphysics; Graves rightly argues that the current *philosophy of mind* is deeply debilitated by its (usually) implicit nominalism. He tries to fill in this gap with the metaphysics of American Pragmatism (especially Peirce's Semiotic Metaphysics). I will comment briefly on some metaphysical concepts Graves is arguing for. First of all, he develops his own concept of *form* mainly in opposition to the Aristotelian concept of form. Vis-à-vis this necessary concept of form, Graves is certainly right in arguing that the proper concept of form must be able to account for change (not only in concrete entities, for which the Aristotelian concept was of course designed, but in the form itself too, as modern evolutionary findings demand). The proposed alternative, the concept of *dynamic form*, better suits an ever changing world, so he accurately contends. Here, however, Graves could have incorporated medieval theories of *forma substantialis* as well. Most of these concepts were contingent, as opposed to the Aristotelian one, so they too account for the modifications in species in evolutionary

history. Yet I see some advantages of more thoroughly incorporating medieval ontological instruments. First of all, Graves sticks to an Aristotelian (and Thomistic) scheme of form and matter as far as *monism* is concerned: no form without matter and vice versa. So this seems to lead to ontologically motivated, apriori (non-reductionist of course) monism. I do not think this is wise. Next, I contend that Graves related (Aristotelian or Thomistic?) theory of individuality is flawed. He states that the ‘something’ that makes e.g. Michelangelo’s statue of David irreproducible is the *form*. But the form is a *general* property, pertaining to each entity which it informs. So while deeply appreciating his effort to expand his argument to the realm of ontology, I think this monograph would have benefitted if medieval theory was scrutinized more carefully for that goal.

True self

In the end, Graves beautifully introduces Thomas Merton’s perspective on the soul. He discusses self-surrender, willfulness as opposed to willingness and individual sin. Our true self is the self that ‘is hidden in (or towards) the mystery and is not knowable in a similar way to how God is unknowable.’ (212). Beautiful and strong insights, although I think that we should not polarize between the use of apophatic, neo-platonic language and analysis of properties (joined to, in the very kernel, univoce semantics). I am of the opinion that conceptual analysis of properties both divine and human leads to a protracted and enhanced awareness of Gods overwhelming mysteriousness. We *need* univoce concepts to point out how different He is, otherwise we cannot express and know anything of Him at all, only His total elusiveness .

Some doubt

Although there are vast fields of knowledge covered with this book – and sometimes a beauty in poetic imagination as in the comparison with the hemoglobin – , I doubt whether the astonishing plurality and quantity of theories, authors and systems Graves employs, did not on the other hand somewhat impair the author in coming to a more in depth analysis of a number of key problems concerning the analysis of human personhood. I think of the concept of form in relation to (or as opposed to?) individuality; of the problem of free will and determinateness (can we really account for free will within the boundaries of non-reductionist monism and the related language of emergence?). Here, – obviously with a topic like this – some questions remain in my view.

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