The Bilaterian Body Plan and the Evolution of Intrinsic Intentionality

Abstract: Attempts to naturalize intentionality—to explain the presence and emergence within the natural world of intentional relations, or “aboutness”—have taken various evolutionary turns. Ruth Millikan’s argument (1984, 2001) that intentionality can evolve as a biological proper function has garnered support among philosophers of mind and language, but it is grounded in suspect evolutionary theory. In consequence, it can be charged both with Panglossianism, and with epiphenomenalism. Dennett (1996) avoids these charges by denying that organisms have intrinsic intentional properties. More recently, Fitch (2008) has defended the biological reality of intrinsic intentionality by recourse to the inherent goal-directedness of eukaryotic cells.

I follow Fitch in arguing for the biological reality of intrinsic intentionality. But whereas Fitch extends his account of cellular intentionality to metazoa by considering nervous systems as structures of eukaryotic cells, I focus instead on the metazoan body plans within which such nervous systems arise. Almost all metazoa with nervous systems have two features in common: they exhibit Weismannian segregation; and they are motile. Both characteristics imply some degree of intrinsic goal-directedness or intentionality. But there is a further, fundamental difference between, say, cnidaria, with their blind-guts, and bilaterians. Drawing on Merleau-Ponty’s (2012) account of the embodied character of intentionality, I argue that bilaterians, with their through-guts and localized sensory organs, exhibit *intrinsic direction*. Bilaterians don’t just move; they are *going somewhere*. All higher-order intrinsic intentionality presupposes intrinsic direction.

References:

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