

# **EVOLUTION, ARTEFACTS, MEANING AND DESIGN:**

The extent to which evolutionary theory can explain how and why humans attribute significance and meaning to the material world and the consequences of this for understanding design

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Doctor of Philosophy

by

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For my parents

Frank Batchelor and Vera Batchelor

for a lifetime of unswerving love and support

## Abstract

The manner in which our ancestors and ancestor species negotiated their physical and social environments has had consequences for how we engage with artefacts today. Like language, the ability to attribute significance and meaning to artefacts is evolved and consists of a suite of interconnected adaptations. A model is articulated which, it is claimed, accommodates all the possible ways in which humans attribute significance and meaning to artefacts. It consists of two halves. Each element is considered in turn and accounts of their evolutionary origins are constructed. This sequence moves from the oldest to the most recently evolved: thus the first half - the sensory-kinetic-affective mode - includes ancient, reflexive, sensory (including the physical and kinetic) and perceptual responses originating in our ancestor species' negotiation of their organic and inorganic environment; and the affective responses such as technical and aesthetic pleasures arising from such responses. The second half - the symbolic-narrative mode - embraces the attribution of symbolic or narrative meanings to artefacts which, I propose, prefigured, or co-evolved with the emergence of language and, like language, is an expression of symbolic thought. I argue that where symbolic meaning is intentionally ascribed to an artefact, some account will be taken of the data delivered by the sensory-kinetic-affective mode, such that those intending the meaning will often seek *consonance* between that data and the meaning intended, in order to strengthen the power of the artefact to act as an agent of *social mediation*. A central role is ascribed to a sensibility towards *style*, as the mechanism by which the two halves are united. This sensibility is highly attuned to physical characteristics, with the objective of intuiting something of the character, make-up and therefore, likely future behaviour of the maker, owner, or other with whom the artefact is associated. I call this resultant data *tacit social intelligence*. It is argued that practices which evolved during the 100,000 years or so in which *Homo sapiens* created artefacts by hand, using simple tools, despite the changed circumstances of manufacture, economics, technology and social and political organisation, have persisted into historical times and remain active today. In particular, artefacts continue physically to represent *accumulations of behaviour*. Thus, in creating or choosing to be associated with an artefact, we are conscious that others will interrogate it for signs of the behavioural values we are seen to esteem.