

Anthropomorphism, Anthropogenesis, Cognition



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Edited by

Dragoş Gheorghiu and Vincent C. Paladino

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Cover: Caryatids from the Erechtheion temple in Athens and a pareidolia figure from a rock pillar from the Externsteine rocks in Germany

Photo collage by Mihaela Moțaiianu (Photos by Mihaela Moțaiianu and Paul Devereux)

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Introduction

Anthropomorphism, Anthropogenesis, Cognition

Dragoş Gheorghiu

Anthropomorphism is a debated topic in contemporary philosophy and psychology (see Guthrie 1993; Boyer 1996; Gell 1998; Heberlein and Adolphs 2004; Epley et al. 2007; Airenti 2018), which is only addressed in archaeology in the form of case studies (for ceramics see Nanoglu 2008; Naumov 2008; 2010; Gheorghiu and Cyphers 2010; more examples in Schwarzberg and Becker 2017).

This book contains some of the papers from the session “Anthropomorphism in nature and material culture and technology: Approaching a fundamental of human cognition”, presented at the 2018 EAA Meeting in Barcelona. Anthropomorphism is perhaps one of the most common manifestations of the human nature, being the human form perceived in the manifestations of the surrounding world. In this book we try to give the term a broader meaning than that offered by the current definitions, namely, as part of the process of anthropogenesis, and as a significant stage in the cognitive process.

As a fundamental of human cognition, anthropomorphism is present in the imaginary, mythologies, religions, and material culture of all ages, and is therefore an important subject of archaeology.

The present book approaches anthropomorphism from the moment of anthropogenesis, tracing its presence in Nature and material culture in prehistory and Antiquity.

The cover of the book is a metaphor, joining together two perceptions of anthropomorphism, a rational one, that of the female - columns at the Erechtheion temple in Athens, and a case of pareidolia, namely a figure with outstretched arms on a rock pillar at the Externsteine rocks in Germany.

Anthropogenesis

The present volume begins with a brief description of the phenomenon of anthropogenesis, starting with the sensory-cognitive development of the mental image of the body, created

through sensations and emotions, and the emergence of symbolic thought (see Dambricourt Malassé, this volume).

Anthropogenesis could be seen as a result of brain development, involving a Gestalt-type visual efficient organization of perception, in which the human body as an efficient mental template plays an imperative role. From the perspective of culture, anthropogenesis is also an anthropo-formation realised with the instrumentality of fire (Gheorghiu 2007; Dods, this volume), with the use of technology (Aydin 2013 [2015]; Dods, this volume), and with the help of oral tradition and mythologies (see Dods, this volume).

One mechanism of the human mind is that of analogy, which is the foundation of symbolic thinking, and which, in countless instances applies the anthropomorphic template as a means to extract meaning from unfamiliar patterns.

Analogical thinking generates metaphors (see Dods; Keene; Gheorghiu; Jelínek and Horáková; Paladino, this volume) and an animistic perception of the world (see Lindstrøm; Keene, this volume).

A case of analogical thinking is pareidolia (see Lindstrøm; Devereux, Marangou; Chroustovský, this volume) (Figure 1a, b), which is an immediate mental response in which “first impressions’ are matched with information stored in the brain” (see Bednarik 2016: 168; 2017), and anthropomorphism was the most effective analogical pattern generated by anthropogenesis.



Figure 1: a. Pareidolia at Balchik, Photo Mihaela Moțăianu; b. Pareidolia at Saint George Castle, Lisbon, Photo Mihaela Moțăianu.

In the contemporary world, as some experiments demonstrate (see Chroustovský, this volume), the mental imaginary is still dominated by anthropomorphic patterns, but it is also influenced by present-day visual culture.

Thus, from the perspective of anthropogenesis, a definition of anthropomorphism would include all the cognitive elements that define human corporeality, i.e. those that would symbolize body shapes (verticality, symmetry, proportions, centre), analogical/metaphorical/symbolic thinking, which blurs the differences between anthropomorphism and animism (see Lindstrøm, this volume).

Last but not least, besides imaginative and emotional development, anthropogenesis also means an emotional behaviour, which is specific to shamanism (see Winkelman 2015; Dambricourt Malassé, this volume), but also to pareidolia (as a phenomenon of discovery), or to the use of symbols in artistic creation (see Lindstrøm, this volume).

Such a perspective presents anthropomorphism as the consequence of the process of anthropogenesis, both biological and cultural, offering the reader an extension of the meaning of this concept.

Anthropomorphism

Anthropomorphism is therefore the result of a complex psychological-cognitive process, organically linked together in numerous combinations.

Analogical thinking, which involves the use of symbol and metaphor, identifies anthropomorphic characters in the aniconic representations that contain vertical or symmetrical elements, or present proportions analogous to those of the human body. A special case of anthropomorphism that combines bodily verticality with the analogy of symbolic thinking is that of the perception of the shaman-as-vertical-animal, as it appears in the Palaeolithic iconography or in the rock art with therianthropes from South Africa (see Keene, this volume).

The perception of the form of the human body can also be fragmentary, in which case rhetorical tropes can evoke the body in its entirety, or the body absent through its indexical presence. Anthropomorphic perception can be considered to be a form of brain efficiency, of Gestalt formation type (see Lindstrøm, this volume), which will use synecdoche, metonymy and indexicality to realize the cognition process. Therefore, the anthropomorphic perception is rhetorical, the whole can be represented by fragments (see Gheorghiu, this volume). The head can symbolize the whole body, as well as the eye, limbs, or genitals. Equally, the anthropomorphic form can be indexical (as handprints, footprints, or masks). Furthermore, aniconic anthropomorphism can be suggested by objects evoking the presence of the human form (empty thrones and *polos* headwear of invisible deities; see Marangou, this volume).

Iconic anthropomorphic images can be gendered, like the Gravettian and Magdalenian female statues, “metaphors of creation” (Otte 2008: 138 ff), or Nut the Egyptian Sky Goddess, or the Atlantes and Caryatids (see Gheorghiu, this volume), or the female therianthropes (see Keene, this volume). At the same time the aniconic images are gendered, such as the innumerable

mimetoliths (Dietrich 1989) grouped under the name of ‘Mother Goddesses’ (see Meaden 2012), “goddesses stone” (see Devereux, this volume), or phytomorphic female images (see Jelínek and Horáková, this volume).

Anthropomorphism is related to spirituality, from the animistic shamanic experiences of anthro-zoomorphic transformation, in which future elements of religion are foreseen (Guthrie 2002; Winkelman 2022; see also Gheorghiu, this volume), to the emergence of the first deities (Cauvin 1997) and then of the pantheons in historical periods (see Dods; Lindstrøm; Devereux; Marangou; Jelinek, this volume).

Anthropomorphism in Nature

Anthropomorphic images projected onto the earth construct spiritual landscapes (McNiven 2008: 149; see also Higginbottom, this volume), starting from iconic geomorphic forms (Figure 2) and aniconic forms (see Devereux; Marangou; Higginbottom, this volume), to landscapes (see Gheorghiu, this volume), to all hydrological forms, such as flowing water (springs, rivers, streams, waterfalls), still water, or the sea, or combinations of them (see Marangou, this volume). Other spiritual landscapes are produced by relating the landscape with standing stones (as images of the dead) with the celestial vault (see Higginbottom, this volume).



Figure 2: Coralline limestone geomorph at the entrance of Għar Dalam cave, Malta, Photo Dragoş Gheorghiu.



Figure 3: Ottoman funerary stela, Mangalia,
Photo Dragoş Gheorghiu.

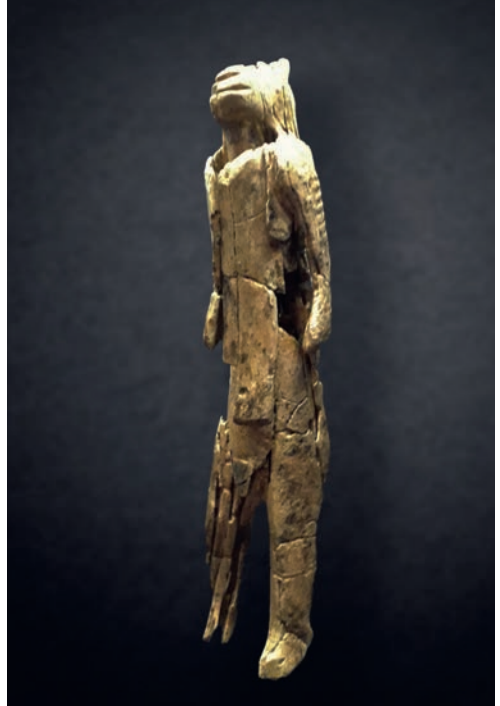


Figure 4: Lion-man, Aurignacian, Höhlenstein-Stadel,
Photo Dragoş Gheorghiu.



Figure 5: Siren from Kerameikos cemetery, 370 BC,
Museum of Antiquity, Athens, Photo Dragoş Gheorghiu.

Vegetation plays an important role in Western Indo-European mythologies (see Jelínek and Horáková, this volume), the tree evoking the human body in cases where it is not present (see Kligman 1989), or the so-called World Tree, or the Cosmic Tree (Eliade 1964) in shamanic traditions, functioning as anthropomorphic metaphors. The metaphorical perspective of evoking humans as trees is found in many cultures (Figure 3), and the breast-feeding tree-goddesses (Jelínek and Horáková, this volume) are an example of phyto-anthropomorphism, as is Galiki the woman-taro, a transformer (see Dods, this volume).

The iconography of the Palaeolithic (Figure 4), and of historical periods (Figure 5) shows that animal imagery played an important role in combining with the shape of the human body, producing an anthro-zoomorphism (see Keene; Gheorghiu, this volume), in

the form of metaphorical images such as those found in fables, or images of deities, to cite only Basset, the Egyptian cat-goddess, or the Satyrs. This mix formed between humans and animals has been given different names, such as therianthropes (see Keene, this volume), or shamans (Clottes and Lewis-Williams 2001), and characteristic of these images is their vertical structure, verticality being specific to human nature (see Dambricourt Malassé, this volume).

Anthropomorphism in Material Culture

In material culture anthropomorphism is present both implicitly and explicitly. Carvings, paintings, figurines and statues have visualised the image of the human body throughout time, presented independently or embedded in objects (Figure 6). In an explicit iconic manner, anthropomorphism is to be found from traditional containers (Durand 1969; David *et al.* 1988) and tools (Figure 7), to robots and androids (see Paladino, this volume).



Figure 6: Anthropomorphic amphora, Archaeological Museum Varna, Photo Dragoș Gheorghiu.



Figure 7: Door knocker, Maçao, Portugal, Photo Mihaela Moșăianu.

Measures and numbers inspired by the dimensions of the human body hidden in the architectural structures have shaped architectural objects (Wittkower [1949] 1998; Gheorghiu, this volume), and have become abstract images of the human body. Another example of objects with implicit anthropomorphism are the indexical objects of an anthropomorphic presence, such as thrones or *polos* headwear (see Marangou, this volume). Both forms of representation demonstrate a rational, conscious approach to anthropomorphism (see Paladino; Lindstrøm, this volume), but with roots in the mythical thought.

A rational (and mythical at the same time) approach is found in the prehistoric architecture, from the alignments of menhirs or stone circles, to the hypogeum-like funerary structures (Guilaine 1998; Guilaine 2015), or the funerary standing stones in relation to the celestial bodies (see Higginbottom, this volume).

Since the beginnings of monumental stone architecture in the Pre Pottery Neolithic, fragments of the human body have been used to evoke wholeness: sanctuary pillars featuring human limbs (Schmidt 2012: 112; Gheorghiu, this volume) or human heads (see Gheorghiu, this volume) evoked the whole body of anthropomorphic entities.

The dwelling has always had a strong anthropomorphic symbolism (Preston Blier 1987). Pillars or columns of the sanctuaries or of the secular buildings, begin to be implicitly or explicitly anthropomorphic images, showing human features or proportions of the human body (Vitruvius 1914, Book 2). Facades, and entrances in pre-modern times, explicitly exhibited human features, especially the symmetry and proportion of the human face, the eyes, the nose and the mouth being correctly positioned (Figure 8).



Figure 8: Entrance, Igreja Matriz da Golega, XVI century, Portugal, Photo Mihaela Moțăianu.

Facades can also exhibit abstract concepts such as metaphors of the force and power (see Gheorghiu, this volume), which would visualise the weight of the walls and roofs and the effort to support them using the image of the human body in the form of Atlantes or Caryatids (Figure 9).

In the contemporary world anthropomorphism has multiple uses, the most important being to humanize technology, to ‘align it with human norms’ and ‘create tools to induce anthropomorphic thinking’ (see Paladino, this volume; Vidal 2007).

A conclusion of this book is the importance and ubiquity of anthropomorphism, which emerges with the genesis of the human mind and persists in contemporary thinking and creation, moving towards an anthropo-techno-genesis. The archaeological research of the past will be able to come closer to understanding human nature with this evidence in mind.



*Figure 9: Caryatids, Erechtheion Temple, 5th century BC, Acropolis, Athens,
Photo Mihaela Moțăianu.*

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