



## Venus Figurines

### Anchor Point between Primatology and Archaeology

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**Abstract.** – In this article the socio-sexual behaviour of the most recent common ancestor of non-human primates and *Homo sapiens* is seen as the source of an apotropaic – invocatory, calming, and/or threatening – meaning of Upper Palaeolithic Venus figurines. This thesis is based on characteristic behaviours of these primates and draws on insights from human ethology. The meanings of socio-sexual behaviour are phylogenetic or transmitted culturally and were transferred to Venus figurines during the Upper Palaeolithic era. Transferring a meaning to an object became possible as a result of an increasing ability to think in terms of symbols. It is primarily the genitalia, breasts, and buttocks, which are the bearers of meaning in these small sculptures. [*Venus figurines, primatology, archaeology, apotropaic meaning, genitalia*]

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### Introduction

In 1864, the Marquis de Vibraye dug up a small female figurine near Laugerie-Basse in the French Dordogne. It was an armless and headless sculpture of approximately 8 cm in length with a strongly incised vulva. The Marquis named her “Vénus

impudique,” or the indecent Venus.<sup>1</sup> She was the first in a long line which since have been recovered in an area stretching from southwest France to the Ukraine.<sup>2</sup> The figurines were produced during the Upper Palaeolithic era from approximately 40,000 to approximately 11,500 B.P., a time span of nearly 30,000 years. These Venus figurines are usually described in a fairly generalist way as an image of fat, naked women with voluminous breasts, large buttocks, and a prominent pubic area. Further mentions are made of missing or rudimentary faces and that little attention has been paid to shaping the limbs. Although these generalisations are not totally wrong, there is still a considerable variation in shape amongst the figurines. It was only from 1990 onwards that the differences received more attention (Gaudzinski-Windheuser and Jöris 2015; White 1997: 107). There is some lack of clarity about the number of Venuses excavated. The French archaeologist Delporte speaks of more than 400 “figurations humaines” (1979: 15). This amount, however, also includes engravings and rock drawings. The German researchers Röder, Hummel, and Kunz speak of an amount of about 200 (Röder et al. 1996: 197). The American archaeologist Olga Soffer speaks of “well over 200 examples for the Gravettian period alone” (Soffer et al. 2000: 514).

1 For the history about naming the Venus figurines see White (2006).

2 The figurines from the Russian Mal'ta and Buret were traditionally assigned to the group of *naked* Venus figurines. In 2016, however, it became apparent that these figurines are clothed (Gerteyk 2016).

In Appendix 1, I have listed the interpretations which have been formulated up to now. These vary from fertility or religious rituals to pornography. The figurines are said to be the archetypal “Great Mother” or prove the existence of a matriarchy. Venuses are said to have been important in (mating) networks, have served as instruction materials for pregnant women or played a role in initiation rites. Former scientists also saw the representation of the various races in the figurines. The figurines were also seen as carriers of “time-factored” symbols and some scientists claim that the meaning and function of the Venuses never can be established with complete certainty. The most recent, original interpretation of the Venus figurines was published in 1996 by the American art historian LeRoy McDermott. In his opinion, the Venus figurines were created by women as a form of self-representation.

It is generally assumed that the figurines have a symbolic meaning. A symbol, however, can only refer to something that is known at that time or earlier. Ten out of the twelve interpretations mentioned in Appendix 1 are anachronistic, because they refer to ideas which only evolved and were put into words later.<sup>3</sup> None of these interpretations is therefore valid. See the Appendix for an explanation of the remaining two interpretations.

My assertion is that Upper Palaeolithic Venus figurines had a threatening and repelling, warding off and calming, or apotropaic<sup>4</sup> meaning and function. This stems from our biological heritage, which can be traced back to the last common ancestor which we share with nonhuman primates. This heritage has been the feeding ground from whence symbols have been able to develop. The Venus figurines fulfilled the purpose warding-off the existential angst of Palaeolithic people, which primarily can be seen in the presentation of genitals, buttocks, and breasts.

Warding-off evil is the engine behind all cultural expressions including religion, rituals, and art, according to the German cultural theorist Abraham Warburg (Wunn 2009: 296). The Austrian human ethnologist Irenäus Eibl-Eibesfeldt and the Swiss art historian Christa Sütterlin devoted a monograph to angst and apotropaic symbolism in 1992. This work shows many examples of figurines (mainly from the Neolithic period) with an apotropaic meaning.<sup>5</sup> In his “Biologie des menschlichen Verhaltens”

(1995) Eibl-Eibesfeldt refers explicitly to our ancestor shared with non-human primates when understanding human behaviour. This is true, for example, regarding the calming effect of (showing) the female breast. Eibl-Eibesfeldt, however, does not refer to comparative behaviours in nonhuman primates when it comes to anal and genital warding-off or threatening. According to him, anal threatening has developed in various cultures independently from one another, because people find faeces dirty. He assumes an older phylogenetic source for female genital threatening. However, he does not mention which behaviour is connected to this phylogenetic source (Eibl-Eibesfeldt 1995: 233, 307, 671). Hereafter, I will argue that both of these forms of threatening draw on socio-sexual behaviour which can be traced back to the last common ancestor we share with nonhuman primates.

The central question of this research therefore is: To what extent can insights from primatology serve as an explanation for the function and meaning of the Upper Palaeolithic Venus figurines?



**Fig. 1:** The Czech Venus of Dolni Vestonice (photo: Tosca Snijdelaar).

## Literature Study

This article is based on a literature study. The most important works which have been consulted come from the fields of archaeology from the Palaeolithic

3 Nowell and Chang (2014: 571); Tringham and Conkey (1998: 40); Dobres (1992b: 2); Nelson (1990: 17).

4 For the history of this term, see Darby (2014: 6).

5 Sütterlin (1993, 2013, 2016) also gives examples of apotropaic female genital display/presentation from the Roman era, the European Middle Ages, and from South American, Oceanic, and Asian art.

age, paleo-anthropology, biology/primateology and human ethology, as well as (art) history, religious history, (neuro-) psychology and sexology. I have also included older titles in my study, in particular concerning the interpretations of the Venus figurines (see Appendix 1) in order to provide as broad a picture as possible of the reception of these artefacts. The literature about primates has not been extensively consulted.

### Human and Nonhuman Primates: Culture and Genes

For some time, many scientists have pointed to similarities between humans and nonhuman primates which can be traced back to their last shared ancestor, whether physiologically, psychologically, socially, or emotionally.<sup>6</sup> These similarities have been passed on phylogenetically or culturally (Luncz et al. 2015; Whiten et al. 2005). We share almost 99% of our DNA with chimpanzees and bonobos and 98% with gorillas (Wong 2014). The likely mechanism of cultural inheritance for nonhuman primates is conformist transmission: adopting (problem-solving) behaviour from dominant members of their species (Whiten et al. 2005: 737) and for humans and humanoids mimetic skills, “the production of conscious, self-initiated, representational acts that are intentional but not linguistic”, developing into mimetic culture with the use of symbols and language (Donald 1991: 168).<sup>7</sup>

Recent research has shown that the Neanderthaler DNA present in *Homo sapiens* reduced from 3–6% to 2% between 45,000 and 7,000 B.P. (Qiaomei Fu et al. 2016). A similar process may have taken place more often during history, where the genetic proof can no longer be traced, but where the behavioural repertoire of the ancestor has been taken on and retained. The American anthropologists Sally McBrearty and Alison Brooks write in their often-cited article “The Revolution That Wasn’t. A New Interpretation of the Origin of Modern Human Behaviour” (2000: 486): “Attempts to identify the earliest

signs of language, whether from study of the brain, the speech apparatus, stone tools or primate communication, contribute to a sense of continuity, rather than discontinuity, between human and non-human primate cognitive and communicative abilities.”

### Primates and the Social Use of Genitals, Breasts and Buttocks

In addition to their reproductive function, nonhuman primates can use their genitals, breasts, and buttocks in a nonsexual way, namely socio-sexually. In Appendix 2, detailed behavioural descriptions of different types of nonhuman primates have been included, divided by gender, including references to the literature in which the behaviour is described.<sup>8</sup>

#### Breast

It can generally be stated that young primates experience safety by running to their mothers. Eibl-Eibesfeldt says on this matter: “Für viele Jungtiere hat die Mutter als Ort der Zuflucht geradezu Heimcharakter” (1995: 233). This is the case, for example, with macaques and baboons. The young of these primates put their mother’s nipple in their mouths if they need reassurance. Adult chimpanzees manipulate their own nipples to reassure or soothe themselves. The American psychologist Sue Savage-Rumbaugh carried out linguistic research with the female bonobo named Panbanisha. She learned to express herself using lexigrams and a lot of English was spoken to her at the same time. According to Savage-Rumbaugh, Panbanisha had a fairly broad understanding of the English language and also used metaphors. Panbanisha always pressed the lexigram for milk, for example, if she wanted to show her good intentions. Milk refers in this way to breast milk, a mother’s breasts: milk = being good.

#### Vulva/Clitoris

Both bonobos as well as chimpanzees touch each other’s vulva or clitoris with their hands or with their own genitals. Female chimpanzees sometimes stick their finger into the vulva of another female

6 For instance: Richard Alexander, Sarah Blaffer-Hrdy, Christopher Boehm, Christophe Boesch, Walter Burkert, Irenäus Eibl-Eibesfeldt, Paul Ekman, David Erdal, Peter Gärdenfors, Jane Goodall, Stanley Greenspan, Itani Junichiro, Barbara King, Imanishi Kinji, Konrad Lorenz, Dario Maestripieri, Tetsurō Matsuzawa, Karl Meuli, Desmond Morris, Tomas Persson, Sue Savage-Rumbaugh, Carel van Schaik, Stuart Shanker, Christa Sütterlin, Michael Tomasello, Frans de Waal, Nicholas Wade, Andrew Whiten, Wolfgang Wickler, Edward Wilson, Ina Wunn, and Jordan Zlatev.

7 See also Zlatev et al. (2005) for a refinement of Donald’s original idea of mimesis.

8 I chose to mainly look for information about the behaviour of bonobos and chimpanzees because of their genetic similarity to humans. I did not explicitly search for information about any other kinds of nonhuman primates, I encountered this during my research and have included it as comparative material.

who has a lower rank. Sometimes females present their genitals frontally. Primatologist Frans de Waal (1988: 233) reports: "... ventral presentation occasionally seemed to serve an appeasement signal. For example, one time the adult female, Louise, made such a wild run across the enclosure, ending with a jump into her newly built nest, that her infant, who was sitting in the nest, uttered a frightened 'scream'. At the same instant the infant turned around to make a ventral present to her mother." Males and females inspect each other's genitals and females mount each other as if they were mating. (Mounting also takes place by males and intergenerationally.) Depending on the situation, these behaviours demonstrate a meaning by confirming the dominance relationships. It can also be a way of regulating tension, reassuring, reconciliation, or maintaining peace.

South American species of nonhuman primates also show a behaviour concentrated on the genitals. The black howler, for example, presents her clitoris or her vulva in order to maintain the peace. In the case of marmosets, genital presentation is an aggressive behaviour and the female squirrel monkey shows a clitoral erection. This has an aggressive meaning.

### Buttocks

Macaques present their buttocks as a reaction to aggression. It is a reconciliatory gesture. Hold-bottom is a gesture used by macaques, capuchin monkeys, tamarins, and dusky leaf monkeys, amongst others, in order to come close to each other again, where the buttocks of the other individual are grasped. The captive gorilla Koko understands sign language and is able to insult others, including people, by calling them a "toilet." As well as Panbanisha's behaviour, this is idiosyncratic up to now. Chimpanzees involuntarily defecate in situations of alarm. South American monkeys living in captivity, such as the night monkeys, howlers, and capuchin monkeys, defecate and urinate in hostile situations. These actions are aggressive and aimed at the intruder or the source of danger. Other types of South American monkeys do this in the wild as well. It is also noted that chimpanzees groom the anus area of a former opponent, otherwise known as brown-nosing. This is a reconciliatory gesture.

### Discussion

The above confirms that breasts, nipples, and/or milk have a calming, reassuring effect. Panbanisha's



**Fig. 2:** Two male chimpanzees from Arnhem Zoo, Luit and Nikkie, struggled for power for a long time. Between their fights they could hardly wait to reconcile and groom each other's anuses. In the picture, they are literally brown-nosing (photo: Frans B. M. de Waal, 1982).

behaviour is a "living" example. The subject of the female genitals is a little more complicated. With bonobos and chimpanzees it is important who carries out the action: Touch signals reassurance to a subordinate from a dominant and appeasement to a dominant from a subordinate (Goodall 1990: 210). The vulva – vagina and/or clitoris – functions as an intrinsic centre of power and strength. Depending on the event, conflict, or conflict avoidance, this part of the body is the place for reassurance gestures, or gestures to reduce tension. With marmosets and squirrel monkeys – South American primates which are phylogenetically further away from *Homo sapiens* than bonobos and chimpanzees – it is even possible to see an actual aggressive effect of the vulva/clitoris. The greater genetic distance, however, does not have to entail that this aspect could not have been recorded in the Venus figurines. According to de Waal (1999: 257), "[t]hese so-called phylogenetic scales have nothing to do with actual phylogeny, however, which is manifestly nonlinear."

The apotropaic function of the buttocks-display cannot be clearly distilled from primate behaviour. Koko is the only gorilla which can insult people in this way (this is a form of aggression), making use of a metaphor. In addition, presenting the buttocks is a manner of greeting which confirms the dominance relationships. Eibl-Eibesfeldt explains the presentation of the buttocks, demonstrated by both males and females, as a generalised invitation to mate, so it has a calming effect (Eibl-Eibesfeldt und Sütterlin 1992: 176).

Involuntary defecation has been noted in alarm situations in a number of kinds of South American primates and chimpanzees. To this end, classicist Walter Burkert says: “The monkeys’ sign of submission, the presentation of the posterior, has been inverted by humans to become a sign of contempt against the weak” (1998: 213). This comment is based on Eibl-Eibesfeldt’s research who filmed girls who were ridiculing him during his work with the San. They clenched sand between their buttocks which they then released in front of his eyes while bent over in front of him. This was an obvious allusion to defecation and had only an aggressive meaning in the sense of ridiculing and provocation (Eibl-Eibesfeldt 1995: 671). Burkert also states that over the years the biological reaction to panic has developed into apotropaic magic. What was at first an instinctive reaction later became intentional. “The practice remains notable for the interplay of a biological program [...]” (Burkert 1998: 46). Luit and Nikkie, the two chimpanzees on the photo above are doing two things at the same time (de Waal 1982: 128). They are ending their conflict by being submissive and actually brownnosing their opponent.<sup>9</sup> It is hardly possible to be more submissive than that. In this way, they are pacifying the aggressive effect of the buttocks. The opponent can no longer say: “Kiss my arse.” Therefore, it depends on the situation if the buttocks have an aggression-reducing, calming, or aggressive meaning.

In summary, primate behaviour concentrated on breasts, genitals, and buttocks is aimed at reassurance, appeasement, reconciliation, tension regulation, and aggression. This behaviour assumes its meaning predominantly in relation to other individuals. These behaviours belonged to the repertoire of the last common ancestor which *Homo sapiens* shares with nonhuman primates. In the Upper Palaeolithic Age, the meanings of the behaviours mentioned were transferred to the Venus figurines. The fact, that meaning could be transferred to an object, can be ascribed to the increasing ability of *Homo sapiens* in regards to symbolic thinking.<sup>10</sup> This ability was well developed from approximately 40,000 B.P.

<sup>9</sup> Hall and Valde (1995: 400f.). In humans brownnosing is connected to attempts to climb the social ladder, not by demonstrating qualities or hard work but by creeping. The term “Kiss my arse” is undoubtedly connected to this behaviour.

<sup>10</sup> It is known that in ancient times figurines and statues were said to be able to move and intercede. I have given an example of this in Appendix 1, number 2, about voodoo rituals. Steiner (1995: 180) gives examples of writers from the 1st millennium B.C. For example, a figurine in Euripides’ work would look away in irritation and Strabo wrote the same about a statue in Athens.

onwards.<sup>11</sup> As is stated in the introduction, the Venus figurines could then communicate threatening and repelling, warding-off and calming, otherwise known as apotropaic messages. The central question, as to which extent insights from primatology can serve as an explanation for the function and meaning of the Palaeolithic Venus figurines, as such seems to have been answered positively.

### Conclusion: Do All Palaeolithic Venuses Have an Apotropaic Meaning?

The Venus of Willendorf possesses all of the characteristics discussed. Her vulva lies anatomically further forwards than is realistically possible and according to the British archaeologist Timothy Taylor she even has a clitoris. In addition, she also has striking buttocks and emphasises her breasts with

<sup>11</sup> D’Errico and Nowell (2000). There is a “discontinuist” and a “gradualist” approach to the symbolic abilities in the Palaeolithic era. According to d’Errico, symbolic thinking first emerged in Europe from around 50,000 B.P. and according to Nowell, symbolic thinking is older and has continued to develop over time. However, both are in agreement that by around 40,000 B.P. it had become a matured capability.



Fig. 3: Venus von Willendorf (© The Natural History Museum, Vienna).

her arms (Taylor 2008). Many figurines show these characteristics to a greater or lesser extent and, therefore, also fit the apotropaic thesis.

It is, however, conceivable that it is possible to discover a more extensive “system” of apotropaic elements amongst the heterogeneity of the figurines in which both our biological as well as our cultural heritage from various periods could play a role. Historical, archaeological, and primatological literature would need to be researched again from an apotropaic perspective in order to provide an answer to this question.

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## Postscript

It has been made clear in the preceding text that breasts and buttocks attributed with a calming and threatening and, therefore, apotropaic function. The question which remains is: Why do genitals have this meaning? Why do genitals represent an aggressive, threatening power? I do not have a ready answer to this question. However, I do think that we have to concern ourselves more with the primal reproductive force. Cell division and multiplication are at the beginning of every level of life. It is the primary force, from which all living beings derive and further develop. This force, embodied in the genitals, does not just consist of actual fertility and procreation, but also stands for primordial energy.<sup>12</sup>

That this primordial energy is (still) regarded by some people as real is proven by stories which are told around the world about female genitalia. The West African Bambara think that the clitoris can kill a man during sexual intercourse (Lightfoot-Klein 1993: 55), and in Egypt girls are still growing up with the idea that the clitoris is socially threatening (Kölling 2008: 14). The famous American psychiatrist Karen Horney noted: “... this dread of the vagina itself appears ... in the dream of every male analysand” (1932: 351). And, last but not least, the almost universal dispersion of the myth of the vagina dentata is clear enough (Otero 1996: 269).

In this article about the Upper Palaeolithic figurines I wanted to point out that the apotropaic meaning of these artefacts has a long history, which can be traced back to the ancestor we share with nonhuman primates. Venus figurines, therefore, can rightly be considered an anchor point between primatology and archaeology.

## Appendix 1

### Existing Interpretations of Venus Figurines

In the following I have summed up the interpretations known to me, whereby some authors are convinced that it is not possible to give one single explanation.<sup>13</sup> In addition to each interpretation follows a brief explanation why I consider them incorrect.

#### 1. Force or Beg for Fertility (Giedion 1962: 434; Bosinski 1982: 24; Conard 2009: 251)

Female fertility was not an important theme during the Palaeolithic era. Breastfeeding delays fertility for three to five years. This seems indispensable for today's hunter-gatherers, because only one small child can be carried whilst walking, which during the Palaeolithic era probably would not be different.<sup>14</sup>

#### 2. Pornography, Trophies, and Sexual Culture (Absolon 1946; Collins and Onians 1978; Eaton 1978, quoted in Dobres 1992a; Taylor 1997: 141; Guthrie 2005; Mellars 2009: 176)

Under the influence of the Stoic Philosophy, which was influential from approximately 300 B.C., sex was seen as only a means of procreation. Theologians, inter alia, the influential Christian theologian and philosopher Augustine (354–430), assimilated this vision for the Christian church (Francoeur

12 Mukherji (1926). Other authors have defined it as libido (not in the Freudian, sexual sense of the word), will-to-power, and *élan vital*. See also Sütterlin (2016: 44).

13 Sandars (1968: 70); Nübling (1999: 130); Braun (2009: 177).

14 Hassan and Sengel (1973); Rice (1981: 407); Russell (1998: 267).



Fig. 4: Venus of Kostenki (© Hermitage Museum, Saint Petersburg).

1994: 514). Despite, or perhaps as a result of this sexual repression, sexual obscenities in the form of songs and texts, aimed at shocking the ecclesiastical or worldly authorities, flourished from the Middle Ages until about 1800. In the 19th century this led to the development of pornography as an independent genre (Hunt 1993). The descriptions of the Venus of Hohle Fels by the British archaeologist Paul Mellars (2009) as "... bordering on the pornographic" and "[a] 35,000-year-old sex object" are therefore historically inaccurate. The Venus figurines are also not erotic objects for (young) men without lovers. If one looks at the last hunter-gatherers, for example, in Canada, North America, and Siberia, one can see an unbiased approach to sex, as children often marry at the first sign of physical adulthood and, as well, then always remain living in a group. Promiscuity – also by women – although it is not viewed positively everywhere, however, is not rejected either and some Eskimo peoples once had the tradition of offering their wives to male guests.<sup>15</sup>

15 Examples of sexual freedom from older literature where the people live, more than is now the case, according to old tra-

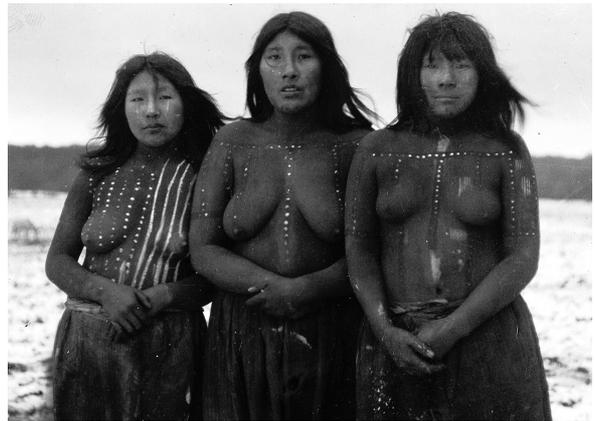


Fig. 5: Selk'nam girls from Tierra del Fuego, photo taken by Martin Gusinde between 1918 and 1924 (© Anthropos Institut, Sankt Augustin).

The Venus, as a trophy for every conquered woman, according to Eaton (1978), is very reminiscent of Fred Flintstone.

The British archaeologist Timothy Taylor (1997) explains the straps around the necks and breasts of (for example) the Venus of Kostenki as signs of S/M bondage. In more recent sources (1st millennium B.C.), there are mentions of "binding enemies." Small figurines which represent persons who need to be injured are bound and sometimes pricked with needles, burned, and/or buried. This is comparable to voodoo rituals. The binding is part of a curse which aims to protect the curser from evil. According to the Bulgarian historical linguist, Velizar Sadovski, these are very archaic rites (2012: 331, 335). The binding of figurines is also well known in Egypt (since ca. 2300 B.C.) and the Near East (Farone 1992: 78). This view nears the apotropaic thesis formulated in this article. Another way of thinking about the straps of the Venus of Kostenki or the engravings of the Venus of Hohle Fels may be delivered by the body paintings of the Selk'nam girls from Tierra del Fuego (see Fig. 5). They are painted

ditions: Point Barrow Indians, northern America: "promiscuous sexual intercourse between married or unmarried people or even among children appears to be looked upon simply as matter for amusement." Ammassalik, Greenland: "Complete sex freedom exists before and after marriage." Sallumiut, Greenland: "Eskimo life was very open and children learned all about sex from babyhood." Marriages often took place from the first menstruation and sometimes even before. For the Tungus in Siberia and the Utku Inuit in Canada, children's genitals are objects of public admiration and affection. Free sexual norms are also maintained by native peoples in warmer parts of the world. This is the case for the Andaman Islanders and the Muria Gonds of Bastar in India. These examples are drawn from Janssen (2006).

with red ochre and white motifs which symbolise their ancestry (Barthe and Barral 2015: 91).

### 3. Part of a (Sort of) Religion (Klíma 1989; Gvozdover 1989)

A great many authors who think that the Venus figurines belong to the domain of religion do not define what they mean by religion and fail to take the fact into account that fully formed deities did not form a part of the religious repertoire of the Palaeolithic people.<sup>16</sup>

### 4. Matriarchy (Bachofen 1980 [1861]; Eisler 1989; Göttner-Abendroth 1995)

The Venus as an image of a great Goddess or Great Mother in a matriarchal community relies on the work of Bachofen in the 19th century, but has become a popular interpretation during the second feminist wave from 1970 onwards. Archaeology has been unable to prove this interpretation and it also does not fit with the egalitarian lifestyle which has been demonstrated by Christopher Boehm, amongst others, for ten “late Pleistocene appropriate” hunter-gatherer peoples which are still in existence.<sup>17</sup>

### 5. The Great Mother Archetype (Neumann 1963)

The ideas about a Great Mother archetype, based on the work of Carl Jung and expanded upon by Erich Neumann, are metaphysical in nature and do not rely on “hard” evidence. The way in which the American psychiatrist Anthony Stevens (2005) has made the concept of archetypes generally usable for Evolutionary Psychology, while making use of information from Ethology and Socio-Biology, means that the concept of the “archetype by itself” best fits the thesis of this article and, at least, it is not anachronistic.

### 6. Bearer of “Time-Factored”<sup>18</sup> Symbols (Gaudzinski-Windheuser and Jöris 2015)

This explanation, which emphasises that the figurines are bearers of symbols or ideas which had a

contemporary meaning in the lives of Palaeolithic people, is not anachronistic and not incorrect, but does not, as a result of its extremely general phrasing, contribute to a better understanding of the figurines.

### 7. Part of a (Mating) Network of Alliances (Gamble 1982)

The Venus figurines are assumed to have had a meaning in networks in which marriage partners were sought. The originator of this interpretation, however, fails to answer the questions, as to what this meaning actually is (Dobres 1992a: 248).

### 8. Instruction Material for Pregnant Women, Amulet for a Successful Birth (Morriss-Kay 2010: 166; White 1997: 116)

See below No. 11.

### 9. Role in Initiation Rites (Haaland and Haaland 1996: 298; Nelson 1990: 17)

See below No. 11.

### 10. Representation of “Womanhood” and/or Pregnant Women (Burkitt 1934: 121; Rice 1981: 412; Duhard 1993)

See below No. 11.

### 11. Self-Representation and/or Self-Representation after the Birth of a Child (McDermott 1996; Morriss-Kay 2010)

Instruction aids for pregnant women, a role in initiation rites, representation of womanhood, and self-representation are explanations which were also born during the second feminist wave, whereby the role of women in society needed to be made visible. Current questions stemming from current problems were at the heart of this, but are not the best guideline for answering questions about the past.

### 12. Representation of Different Races (Sommer 2005: 332, 345; White 2006)

At the end of the 19th and beginning of the 20th century, various scientists thought that since the middle of the Palaeolithic era higher developed races had driven other races to the peripheral areas. The Bushmen (now called San), for example, were seen as such a banished, less worthy race. Certain Venus figurines, such as the negroid head of Grimaldi, were seen as products of these people and proof of their theory by these scientists. This theory was created in a period during which Europe was under the spell of racist thinking and where a justification was sought for European imperialism (Gay 1993: 68).

16 “Die Weltbilder und Religionen von Wildbeutern zählen zum Typus der *primitiven Religion* sensu Bellah. Primitive Religionen kennen zwar übermächtige Gestalten und Wesenheiten, aber keine eigentlichen Götter und deren kultische Verehrung. Es kann sich daher bei den Frauenfigurinen nicht um Idole einer oder mehrerer Gottheiten oder aber um Motivfigurinen handeln” (Wunn 2005: 141). “Ancestor spirits or high gods who are active in human affairs were absent in early humans, suggesting a deep history for the egalitarian nature of hunter-gatherer societies” (Peoples et al. 2016: 261).

17 Röder et al (1996); Boehm (2012: 78); Peoples et al. (2016: 261).

18 Marshack (1972: 79) has coined the term “time-factored.” “The cognitive ability to think sequentially in terms of process within time and space.”

## Appendix 2

### Socio-Sexual Behaviour of Non-Human Primates

In the following, the behaviour of various nonhuman primates are listed, with a focus on breasts, genitals, and buttocks and a division by gender. In addition, the behaviour is interpreted.

#### Female

##### Bonobo (*Pan paniscus*)

- Touching the clitoris or vulva with the hand – reassurance, consolation, reconciliation.<sup>19</sup>
- Genito-genital rubbing, pressing vulvas/clitorises against one another – reconciliation, tension regulation, conflict resolution (de Waal 1990: 380; Dixon 2012: 200).
- Same and opposite sex: pressing the genital areas against one another from behind – tension regulation (de Waal 1990: 381).
- Ventral presentation of the vulva – appeasement (de Waal 1988: 233).
- Vento-ventral and ventro-dorsal mounting between same and opposite sexes and intergenerationally – tension regulation, appeasement (de Waal 1990: 381).
- Milk = being good: The captive Panbanisha always pressed the lexigram for milk on a lexiboard if she wanted to show her good intentions. Milk refers in that case to “breast milk,” a mother’s breast.<sup>20</sup>

19 Mariska Kret, personal communication, viewed in the Apenheul, Netherlands, November 2015.

20 The basis for this metaphor are reminiscences about the psychological reward (production of the endorphine-like hormone oxytocine) during drinking. The American psychologist Sue Savage-Rumbaugh who carried out linguistic research with Panbanisha, does not deny the role of the human interlocutor. “This is not to say that no one ever mentioned the words ‘milk’ and ‘good’ together in a sentence, in all of the millions and millions things she heard. It is to say that the experimental methodology was designed, by intent, to prevent the rote learning” (pers. comm.). No programme was followed in which this combination was offered to her consciously. According to Savage-Rumbaugh, Panbanisha’s utterances could be complex and metaphorical. See Savage-Rumbaugh and Segerdahl (n. d.) and Savage-Rumbaugh et al. (2000); for literature about oxytocine see Dunbar (2010) and de Dreu and Kret (2015).

Furthermore, on YouTube there is a film titled “Kanzi. An Ape of Genius. Part 2,” with a scene where Panbanisha misbehaves by jumping on the back of a dog, thereby hurting the dog. After she is blamed, she asks for milk by pressing on the lexigram for milk on the lexiboard. The milk is meant to reassure herself, or to gain the courage to make up, or to indicate that she will behave herself again (NHK 1993).

##### Chimpanzee (*Pan troglodytes*)

- Mutual genital touching, simultaneously touching each other’s vulva from behind (can also be a one-sided action) – greeting, tension regulation (Nakamura and Nishida 2006: 37; Nishie 2016: 2).
- Sticking a finger into or touching the vulva of a subordinate – tension regulation, appeasement (Hohmann and Fruth 2000: 118; Wrangham 1992; Wittig, pers. comm., quoted in Hohmann and Fruth 2000: 118).
- Genito-genital rubbing – tension regulation, reconciliation (Zamma and Fujita 2004: 5).
- Presenting and inspecting the genitalia – greeting, affiliation, confirming dominance relationships (de Waal 1982).
- Nipple fumbling – comforting, self-reassurance (Warniment and Brent n.d.; Nakamura et al. 2015: 513).

##### Gorilla (*Gorilla gorilla*)

- Anthropologist Christopher Boehm visited the captive gorilla Koko and made her angry. She insulted him in sign language (taught to her by her keepers) by calling him a “toilet.”<sup>21</sup>

##### Baboon (*Papio*)

- Captive and wild infants sit with mother’s nipple in mouth – not for milk but for reassurance (Bertrand 1969: 202).

21 Boehm argues that Koko learned this combination from humans (2012: 128). Patterson says: “... using a test of metaphoric matches devised by Howard Gardner, I have been able to collect some hard evidence suggesting that Koko can understand metaphor” (Patterson and Linden 1981: 116); see also Zlatev et al. (2005: 30).

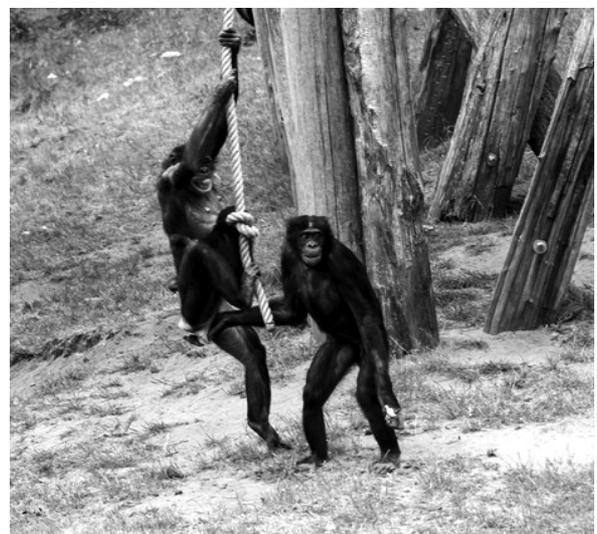


Fig. 6: A bonobo female gets a reassuring tap on her vulva from another female (photo taken in the Apenheul Zoo, Netherlands, by Jacqueline Ruijs).

Macaque (*Macaca*)

- Hindquarter presentation – reaction to aggression, appeasement, submissive (Maestripiერი 1997: 201).
- Infant holds nipple in mouth, infant manipulates nipple of carrier – no reason given (Thierry et al. 2000: 11).
- Lateral embrace, faces opposite direction plus inspection of genitals – no reason given (Thierry et al. 2000: 8).

**South American Primates**Black Howler (*Alouatta caraya*)

- Vulval and clitoral display – appeasement (Dixon 2012: 207; Jones 1983: 35).

Marmoset (*Callithrix jacchus*)

- Genital presentation to lower rank – agonistic (Dixon 2012: 207).

Squirrel Monkey (*Saimiri sciureus*)

- Vulval display and clitoral erection – aggressive, agonistic (Ploog et al. 1963: 97).

The behaviour of male primates has also been included in this appendix, given that this provides the opportunity for comparison. They have the same kind of range of behaviours with the same kinds of meanings.

**Male**

## Bonobo, chimpanzee, gorilla

- Touching the penis and/or scrotum – affiliation, appeasement (Smith and Delgado 2013: 895 f.).

Bonobo (*Pan paniscus*)

- Genital massage from adult to adolescent male – reassurance (de Waal 1990: 381).
- Penis rubbing – tension regulation (de Waal 1988: 233; Dixon 2012: 200).

Chimpanzee (*Pan troglodytes*)

- Mounting, presenting, genital inspection/touch – affiliation, reconciliation (Arnold and Whiten 2001: 657; Wittig and Boesch 2003: 1535).
- Shaking own and/or partner's testicles – appeasement (Arnold and Whiten 2001: 657).
- Erection followed by mutual handling of the genitalia – reassurance (Dixon 2012: 201).
- Nipple fumbling – self-reassurance (Zamma and Matsusaka 2015: 512).

Baboon, Meerkat (*Cercopithecus*), Proboscis monkey (*Nasalis larvatus*), Mantled guereza (*Colobus guereza*), King colobus (*Colobus polykomos*), Patas monkey (*Erythrocebus patas*)

- Sitting with erect penis – guarding the troop (Dixon 2012: 206; Wickler 1975: 250).<sup>22</sup>

Macaque (*Macaca*)

- Mounting – agonistic, aggressive (Maestripiერი 1997: 198 f.).
- Hindquarter presentation, genital presentation and/or manipulation, hip touch – reaction to aggression, appeasement, submission (Maestripiერი 1997: 201; 2005: 68).
- Genitalia rubbing – territorial marking (whether females also do this is not clarified in the text) (Bertrand 1969: 111).

Macaque, Capuchin monkey (Cebidae), tamarin (*Saguinus*), Dusky Leaf-Monkey (*Trachypithecus obscurus*)

- Hold-bottom (grasping the rear of an individual) – reconciliation (Call et al. 1999: 165; Arnold and Whiten 2001: 678).

**South American Primates**Black Howler (*Alouatta caraya*)

- Scrotal display – aggression reduction (Dixon 2012: 207).

Marmoset (*Callithrix jacchus*)

- Genital presentation to lower in rank – agonistic (Dixon 2012: 207).

Squirrel Monkey (*Saimiri sciureus*)

- Genital display with penile erection – aggressive, agonistic (Ploog et al. 1963: 95).

**Female and Male**Chimpanzee (*Pan troglodytes*)

- Involuntary defecation – in alarming situation (Goodall 1990: 63 f.; de Waal 1982: 55, 56; Lumsden and Wilson 1983: 96).
- Brownnosing or grooming of the anus area – reconciliation (de Waal 1982: 128).
- Anal massage, idiosyncratic – unknown but habitual (Nakamura and Nishida 2006: 38).<sup>23</sup>

Night Monkey (*Aotus trivirgatus*), Howler (*Alouatta*), Capuchin monkey (Cebidae)

- Defecate and urinate in captivity – in hostile situations attack and escape tendencies (Moynihan 1964: 21; Kortlandt and Kooij 1963: 78).

Not specified

- “Wild individuals of many other species of New

<sup>22</sup> Dixon (2012: 206) does not support Wickler's ideas: “The evidence presented in support of his ideas was limited and circumstantial.”

<sup>23</sup> The authors think that this behaviour could also be the result of a parasite.

World monkeys frequently urinate and/or defecate upon predators or potential predators passing beneath them in the forest” – No reason given (Moynihan 1964: 21).

### Worth Considering

The Spanish researchers (urologists) Javier Angulo and Marcos García-Díez (2009), counted almost 100 male representations with an ithyphallic status (portable and rock art) from the European Palaeolithic age. According to them, these refer to a context of serious danger or death. At the end of the 1960s, Wolfgang Wickler presented his theory about guarding the troop by male members of different species of primates. As soon as danger threatened, the guard males would react with an erect penis (1975: 250). It is a similar behaviour, therefore, but with an apotropaic meaning.

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