Journal of Ecohumanism
March 2024
Volume: 3, No: 2, pp. 157 – 168
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/

Received: 5 January 2024 Accepted: 5 January 2024
DOI: https://doi.org/10.33182/joe.v3i2.3183

Domestication and the Epimeletic Character of Man[1]

Roberto Marchesini[2]

Abstract

The epimeletic theory presented in this article intends to establish man's disposition towards the adoption of other species and the pleasure and gratification he receives from his relationship with the adopted animal. This theory is founded upon the hypothesis that man is strongly motivated towards parental caring and nurturing behaviour and that this can be explained by means of reference to certain characteristics possessed by human neonates, namely: 1) a very evident physical immaturity at birth, 2) a relatively late age of development, 3) membership of a complex social system. These characteristics not only demand greater and more articulated epimeletic motivation - propensity to give parental care - on the part of our species but consequently make man particularly sensitive and receptive to et-epimeletic signals - baby schema - generally and not exclusively with reference to his own young, thus encouraging the adoption of other species. Epimeletic theory aims to offer an explanation of three phenomenona: a) the domestication of animals by man, b) the relationship established through pet ownership, c) the beneficial nature of activities connected with the man-pet relationship (pet therapy, pet education).

Keywords: *Epimeletic; et-epimeletic; motivation; attachment; dimensional learning; zootropy*

Introduction

Care for the world outside of us is one of our most distinctive traits. In the Latin pantheon, there is a minor goddess called *Cura* (Care) who created the first human, and is mentioned by Heidegger in his work *Being and Time* (1927). Heidegger considers care an essential ontological characteristic of the human, a being who is always projected forward, in an uninterrupted relationship with the world. We acquire proximity to the things of the world by taking care of them, i.e., by freeing our potential through an act of participation that enables self-realization. In the mythographic handbook *Fabulae* handed down by Gaius Julius Hyginus (64 B.C. - 17 A.D.), *Care* moulds the human body with mud, while Jupiter later infuses it with the spirit of life. What arguably emerges from this myth is that the human essence derives, first of all, from this attitude, from this genetic inheritance that the divinity imparted on us as a legacy. Significantly, the term "medicine" might originate from the Latin "medeor" – "to heal, cure, remedy" (Oxford Latin Dictionary, vol. II) – or, as Umberto Curi suggests in his essay *Le parole della cura* (2017), from the Greek "medon" – the "custodian".

[1] Some of the ideas in this article were first presented in the Minding Animals Conference 2 held at Utrecht University in July 2012.

[2] Roberto Marchesini, Director at the Centro Studi Filosofia Posthumanista, Italy. E-mail: estero@siua.it

For Socrates, the Greek principle of "epimeleia" – from "epimeleomai" = to take care – is specifically what allows the being to flourish. The concept holds a central place in Plato's dialogues. In the *Apology*, it is an educational practice, or care of the self; in the *Phaedrus*, it is an essential trait even of divinities; and in *Alcibiades I*, it is care of the soul. In the *Republic, epimeleia* is the quintessence of the political disposition, i.e., the care devoted to the city, the art of good government. Through the term "therapy," care is also part of medical practice. Therapy does not primarily refer to iatrogenic intervention, but to the concern for, and dedication to, a person in all its complexity, what in the English language is indeed referred to as care. *Epimeleia* resurfaces in the political conception of the human expressed by Aristotle. In *Nicomachean Ethics* he underlines the relational constitution of humans, whose life is intimately conjugative rather than solipsistic. As Luigina Mortari points out in her essay *Filosofia della cura* (2015, p. 35): "per l'essere umano vivere è sempre con-vivere, poiché nessuno da solo può realizzare pienamente il progetto di esistere" ["for the human being to live is always to live together, because no one alone can fully realise the project of existence"].

For Edith Stein (1970), a relationship of care means hosting the other, making place within oneself, and giving. The German philosopher believes that care is mainly characterised by being close to, and in contact with, the outside world; it is a condition of sharing in *Einfühlung*, namely, in that empathic state that produces reciprocity. Hence, care originates from the human predisposing and affective condition that is elicited by encountering otherness: it is the appeal exercised by the other's face, which we find in Emmanuel Lévinas (1999). For Heidegger (1927) care is a projection, a journey towards something, the realisation of potentialities, a tendency towards *what is not yet*. We find here the proactive meaning of care, namely *epimeleia* as active life to recall the thought of Hanna Arendt (1958). Care means, therefore, going beyond oneself, taking responsibility for otherness. Yet it is also an emergence, an education of the self through the process of *educere*, i.e., thriving, flourishing. As Mortari observes (2015, p. 107), the verb *epimeleomai* relates to the verb *meletao*, which also means 'to practice, to exercise'. Care, therefore, is an attitude of openness towards the world that implies dedication, diligence, responsibility and attention. Care is a universal principle of sharing, where the relationality of Being comes centre stage, as suggested in approaches enhancing the value of fragility and the need for the other, such as Judith Butler (2003), Carol Gilligan (1982), Joan Tronto (2006) and Jean-Luc Nancy (2007).

As Elena Pulcini recalls in her work *La cura del mondo* (2009), care is strongly associated with the principle of responsibility. The latter refers both to pre-occupation as a tensional and projective sense of concern about the possible fates of others, and to the act of looking after them. Responsibility thus combines the two meanings inherent in the etymology of the term "care" – apprehension and solicitude. The emotional, hence motivational, value of care is emphasised by Michael Slote in *The Ethics of Care and Empathy* (2007), an essay stressing the importance of taking into account moral feelings in the development of ethics. In *The Intelligence of Emotions* (2004), Martha Nussbaum (2001) suggests that we should bring affectivity back to the centre not only of individual life, but also of social life, because affective dispositions – such as shame, love and compassion – are basic constituents of moral thought. This is a point of view shared by the neurobiologist Antonio Damasio who, in *Descartes' Error* (1994), considers affectivity a motive for behaviour. I want to begin by focusing on the dispositional component, something which precedes the rational, conscious and ethical meaning of the word care. Care is expressed in so many different human behaviours that its roots in parental behaviour become unrecognizable.

The Motivation Theory of Behaviour (MTB)

To fully comprehend the epimeletic hypothesis presented in this article, it is essential to refer to the motivation theory of behaviour (MTB). According to this theory, all animals have distinctive affective dispositions called motivations, which lead the individuals of each species to engage in specific activities, as argued by Joseph Lichtenberg (1989). MTB originated from studies in classical ethology that offered an *impulsive* explanation of behaviour (Tinbergen 1951, Lorenz 1963). It was later revised by scholars of affective psychology and cognitive ethology, who offered a dispositional explanation consistent with emotions, such as Jaak Panksepp and Lucy Biven (2012) and Donald R. Griffin (1992). In general terms, affectivity implies that responsive behaviour is triggered by emotional dispositions while proactive behaviour is triggered by motivational dispositions. The most important motivations include: (i) foraging behaviour: supported by the research system, it is triggered by dopamine, a neuromodulator stimulating interest and operativeness; and (ii) reproductive behaviour: supported by courtship and parental care, it is triggered by sex hormones and oxytocin.

Proactive behaviour occurs when an individual takes the initiative and engages in a certain activity; although it might be triggered by a stimulus or physiological circumstances, motivation is its primary cause. Unlike behaviourism, which focuses on stimulus-response, for MTB, behaviour is not the direct consequence of a stimulus. For example, a predator might chase something because it is moving (stimulus) and its predatory propensity will be influenced by metabolic conditions (such as hunger). However, its behaviour – what makes the subject responsive to movement and what induces predation when the subject is hungry – is its predatory motivation. In his psychohydraulic model, Konrad Lorenz (1978) used a powerful metaphor – emptying a basin – to illustrate how an external stimulus may influence behaviour but does not provoke it. In fact, if the motivation is high, there is no need for a stimulus to activate behaviour – behaviour manifests anyway (e.g., the hallucinatory hunts of the cat). Similarly, if a certain behaviour is not supported by motivation, no stimulus can trigger it.

The presence of a particular motivation can be detected in a species through a number of *revealing variables*: i) its responsiveness to the appeal of distinctive external entities – key stimuli – that unlock the "motivational safe," facilitating particular proactive behaviours; ii) *Gestalt* perception mechanisms that, by immediatly perceiving certain forms or completing them in amodal ways, detect external entities that comply with that particular behaviour; iii) the tendency to perform specific actions with a certain frequency and latency period; iv) innate choreograms, namely specific behavioural displays that precede experience; v) innate patterns of orientation, transforming the disposition into a way of making experience; vi) innate evolutionary patterns that make of a certain inclination a basic model applicable to multiple behaviours; vii) the tendency to apply particular expressive and behavioural patterns to a particular context; viii) the tendency to structure playful activities consistently with certain behavioural coordinates, as visible in cats' predatory games; ix) seeking gratification through particular actions and their results; x) distinctive expressive needs, which, if denied and impeded, jeopardise a subject's health; xi) the presence of distinctive gratification mechanisms related to certain neuromodulators, such as serotonin, which make the expression of the behaviour, regardless of the result, satisfactory in itself; xii) the tendency to adopt particular substitute behaviours to seek calm or relief from discomfort.

The study of animal behaviour through MTB is common practice in ethology. It is used not only to explain behaviour, but also to set up projects of animal welfare. Based on a hypothetical hierarchy of needs, ensuring the satisfaction of basic needs or providing comfort is often regarded as sufficient for animal welfare. This is clearly contradicted by the condition of many animals in zoos. Although welfare parameters are carefully observed most of the time, animals manifest compulsive behaviours, show behavioural anomalies, perform self-mutilations, and suffer from depression. Their problem is that their motivational expression is thwarted and repressed, their motivations cannot be expressed.

The MTB still finds limited application to human behaviour. Humans keep on believing that they are not animals. They reject or underestimate the influence of the phylogenetic heritage, and prefer to explain the desiring drive – which directs towards an action and an objective – as a deficiency. According to this explanation, we desire something because we do not have it. This interpretation explains desire as a motion of appropriation, actually confusing desire for its target. This interpretation denies or underestimates the role played by the action in fulfilling desire. In my work *Etologia del desiderio* (2023), I have reversed these assumptions and argued that desire: i) does not derive or is not driven by a lack of interest in the world, but by an excess of it; ii) is not a form of appropriation but of proactive giving, such as devoting oneself to a certain activity; iii) views the target only as the opportunity or excuse to perform the action; iv) is not fulfilled by the result, which only provides temporary gratification, but by the expression of the behaviour.

The purpose of *Etologia del desiderio* was to investigate our most important motivations and their role in our most common activities. Just as a cat's predatory propensity can be expressed in different activities, leading to the development of specific skills – a cat can engage in different predatory behaviours including playing with a ball – similarly, in the human, the syllegic motivation, i.e., to collect, underpins not only collecting hobbies, but also activities such as the preparation of a museum, palaeontology, a boy's pastime of picking up flowers or seashells. Motivation is similar to a *verbal predicate*, what a particular species does: so, while the doing of a cat expresses itself in chasing, namely trying to reach a moving entity, the doing of a human expresses itself in collecting, namely hoarding entities that are visible through their iconic structure: they stand out from a backdrop, as a shell on the sand or a flower in a meadow.

Epimelesis is one of the most important human motivations. It was priviledged by natural selection because of its contribution to the survival of offspring. It has also favoured the development of general behaviours that can be considered its ephiphenomena or side effects. For reasons that will be explained later, epimelesis is a very strong characteristic of our species as evidenced by what I have defined revealing variables: i) we are very susceptible to the pedomorphic appeal; ii) we tend to enhance juvenile forms in ourselves as well as in cartoon characters; iii) acts of care are widespread in all human activities; iv) some responses, such as tenderness, betray this inborn tendency; v) we tend to prefer and priviledge juvenile and childlike shapes; vi) we have developed different forms of care-taking; vii) we exercise care within our living environment; viii) children's plays often revolve around caring activities, e.g., playing with dolls; ix) many of our activities are based on goals and objectives that derive from caring, e.g., farming; x) we need to engage in caring activities and we often search for appropriate targets; (xi) to care for someone or something makes us feel good; (xii) caring activities are often forms of compensation.

The epimeletic behaviour

Epimeletic behaviour, in the ethnography of birds and mammals, is rich in both expression and function and, while predominantly ascribable to parental care, is also manifested in the inter-group relationships of social species (Gubernick and Klopfer 1981, Alcock 2005, Ward and Webster 2016). Epimeletic motivation, which in mammals is instrumental in the development of the bonding process, indicates: 1) a sensibility on the part of the young with regard to their capacity to elicit caring behaviour and support; 2) a disposition and orientation towards mutually supportive, adoptive and referential behaviour within the group; 3) gratification from demonstrating caring and supportive behaviour. In common with other motivations, epimeleia refers to a sensibility towards specific signals, an orientation towards certain types of behaviour and feelings of gratification which result from particular actions. Epimeletic motivation and its consequent epimeletic expression, as distinct from the bonds of attachment, have a low degree of target specificity, which is to say that epimeletic behaviour is not necessarily directed towards: a) a legitimate target, for example the young of one's own species or even for that matter another live being (as demonstrated by the 'adoption' of inanimate objects by bitches during pseudopregnancy); b) one's own young or that of another following a genuine process of attachment. The only prerequisites for epimeletic behaviour are: 1) that the subject is epimeletically motivated – in the sense that endocrine mechanisms such as haematic levels of progesterone and prolactin are present; 2) that the subject recognizes and is attuned to the et-epimeletic signals of the young. The epimeletic relationship which is established between a mother and her young (for motives of gratification on the part of the parent and the satisfaction of needs on the part of her young), forms the basis of the attachment process. The latter has a high degree of target specificity in that it explicitly refers to the union between mother and her offspring. As Lorenz already noted, the strength of epimeletic motivation in mammals and the presence of shared et-epimeletic characteristics among young mammals of diverse species – such as the shape of the cranium, the size of the eyes, the characteristics of the fur – is at the basis of the phenomenon of interspecific adoption and similarly is able to explain the overwhelming desire humans have to caress and cuddle young animals and have them as pets. It further explains the overwhelming tenderness we feel whenever we interact with them. It is not necessary for us to have developed any specific bond with the animal, nor a more general attachment, to evoke such feelings as it is the animal's morphology itself which elicits our caring behaviour– just in the same way that a moving ball stimulates a dog's predatory motivation and induces its predatory behaviour.

Making the distinction between the two phenomena –epimeletic behaviour and attachment– is extremely important. In the latter, we refer to caring which is explicit in its reference and results from a specific bond, whereas in the former, we refer to a general motivation towards caring. Epimeletic motivation is instrumental in both parental nurturing and the bonding process as the mother becomes the main focus of reference for her young (a secure base) and a relational model is established which will provide the archetype for all interaction with social counterparts or, to be more precise, with those beings with whom the subject is socialized. It should also be noted, however, that due to its dual features of caregiving (epimeleia) and care seeking (et-epimeleia), epimeletic behaviour also acquires a very specific zoo-semiotic significance within social interaction. Et-epimeletic signals are also displayed by adults in order to solicit assistance or collaboration from their social counterparts or for the purposes of pacification or social cohesion. Many social animals, as for example wolves and dogs, use et-

epimeletic signals when they want to pacify or calm the aggressive or competitive behaviour of a co-species. For this reason, a variety of submissive rituals of an et-epimeletic nature are established within the pack in order to solicit from the others a behaviour, attitude or stance which is the absolute reverse of assertive competitive behaviour. Dogs lying on their back in order to display the stomach and genital area, licking another dog's nose or muzzle, offering their paw, are all examples of et-epimeletic semiotics. Other animals, such as dolphins regularly emit et-epimeletic signals when faced with difficulty and it is common to witness explicit examples of epimeletic behaviour performed by members of the group towards a companion who has been hurt or is in distress. Dolphins, for example, will even bring a companion up to the surface so that it can take air. Even amongst adults et-epimeletic signalling (high pitched vocalization, crying or infantile behaviour) is quite frequently used to encourage epimeletic behaviour within the group.

The epimeletic character of a species is commensurate with the parental needs of its young and the social complexity of the species itself and is consistent with the parameters of survival and successful reproduction. Birds and mammals, for example, have taken a very particular path in terms of their reproductive behaviour, reducing numbers of offspring and focusing on parental care. This demonstrates the needs of their young for parental nurturing, nursing and protection, as well as the need for parental instruction in order to become fully integrated into the adult world and themselves become reproductive beings. We refer here to dimensional learning or, to be more precise, the social transmission of models which permit the construction of species-specific identities. The epimeletic index of any particular group of mammals will depend on the following factors: 1) the relative development of the young at the time of birth; 2) the relationship between age of development and average life span; 3) the social complexity of the species. As regards the first of these factors, it is obvious that the less developed the young are at birth (we refer here to unfledged birds or other species which young are similarly incapable) the more significant and apparent epimeletic behaviour will be in the care, nursing and protection of those young. Dogs and cats, for example, are, physiologically speaking, extremely immature at birth and consequently the parent has to pay close attention to its young if it is to be successful in reproducing and rearing its offspring. As for the second factor, if we compare the time necessary to reach full physical development with average life span, we can observe that the comparative age of development among the different species varies considerably. As John Webster (1995) notes, man's rate of development is eleven times slower than mammals of the same size, as for example, sheep. While the relatively later age of development is a phenomenon which can be observed among primates in general, it is particularly apparent among the great apes, our species being the prime example. As regards the third factor, it is evident that the social characteristics of a species will clearly influence the need for dimensional learning and hence the establishment of educational processes to codify species-specific identities.

While it is possible to observe explicit examples of adults instructing their young among many animal species, the great apes demonstrate particularly complex cultural traditions or, perhaps better, the intergenerational transmission of habits and customs. We can summarize the above observations as follows: 1) the less developed the offspring the more articulate epimeletic performance will need to be; 2) the later the age of development the longer epimeletic motivation will need to be maintained; 3) the more complex the species social organization the more important the epimeletic role and function of the parent. Consequently, it can be concluded that the more extensive epimeleia is within a species the more: a) sensitive its

members will be to et-epimeletic signalling and hence the more disposed towards epimeletic behaviour; b) developed the zoo-semiotic regarding epimeletic and et-epimeletic social behaviour will be. The three factors outlined above all describe the human species. By deferring the time it takes to reach social maturity, we, as primates, have made the age of development the foundation of our behavioural system. As we have already noted, however, this deferment is even more marked among the great apes –the chimpanzee, bonobo (pygmy chimp), gorilla and orangutan– all of which reach maturity much later than other mammals.

Our human entity is therefore attributable first and foremost to our anthropoid phyletic lineage, characterized by ontogenetic variety and deferred adulthood. However, in addition to these characteristics which are shared with other primates, there are others peculiar to the human species, such as the very evident physical immaturity of our newborn. Distinct from other primates, whose cranial diameter at birth is half that of the developed adult, human neonates have an encephalic volume of no more than 20-25%. The reason for this is clear: if the pre-birth cranial diameter of a human were to measure half that of the adult, the delivery would be dystocic. This physical immaturity, witnessed in the very specific needs of the human neonate who, for example, is not even capable of supporting its own head, demands even greater and more articulated epimeletic motivation. Other important characteristics which are peculiar to the human species are: a) an extremely complex neurobiological structure (which requires substantial social input) capable of highly elaborate adjustments; b) the completion of neurobiological development not within the closed environment of the womb, but through direct contact with the external world; c) a particularly long socialization period which allows for the construction of a social identity which is receptive to secondary socialization and hence cultural hybridisation with other species). It can therefore be argued that the epimeletic motivation of man is exceptionally strong and being indispensable to human survival has a major bearing on the behaviour of our species. Indeed, so needy is the human neonate that only sufficient epimeletic motivation can guarantee its survival. I would argue that many discussions regarding human nature, invariably described as being aggressive, petulant and generally deficient, fail to take due account of human kinds' exceptional predisposition for caring and consequently the fundamental importance this motivation has in shaping human identity.

What is all the more remarkable about this oversight is that it is probably this very characteristic which led human nature along the path towards domestication. And yet, when seeking to determine why the human species regularly adopts the young of other species, to the extent that this has become one of our distinguishing features, explanations invariably focus on the performative role of domesticated animals. There are, in my opinion, a number of flaws in this argument, the first being the notion that the utility value can be determined without the performative value having first been verified. In his book *In the company of animals* (1998), James Serpell correctly stresses the epimeletic nature of human-animal relationships, in other words, the importance of epimeletic gratification in adopting and caring for a pet.

The question we need to pose therefore is whether the performative role of pets precedes their epimeletic role or vice-versa. The question can be formulated thus: was the primary motive behind the adoption, for example of wolf cubs, only functional and was it only subsequent to this that emotional bonding took place (hypothesis 1) or (hypothesis 2) was the initial reason for adoption attributable to the epimeletic predisposition of our species and did the functional role only make itself apparent subsequently? The first hypothesis leads us to

conclude that the et-epimeletic character of pets is an epiphenomenon and that it was only later that this characteristic acquired key importance. The second hypothesis acknowledges that the strength of man's epimeletic motivation is so great that it has made him extremely sensitive to et-epimeletic signals and not only those communicated by his own kind but also those of other species (epimeletic motivation having become a fundamental characteristic of man). In accordance with what I have expressed above, I favour the second hypothesis and, in further arguing my case, I would cite the fact that the et-epimeletic appeal of animals to man is not limited to young domestic pets but applies to virtually all young mammals, be they wolf cubs, fallow deer, baby chimpanzees or whatever. Indeed, the epimeletic character of our species is so pronounced that we have become experts in raising, fostering, caring for and adopting other species within the human group.

Recognizing the existence of an epimeletic dimension to the human practise of domesticating animals also helps to explain: a) the phenomena of breast-feeding –a custom which is practiced throughout all human cultures and which is difficult to put down to anything other than motivational factors; b) the allocation of parental resources to the young of other species. Indeed, the co-operation of species-specific behaviour, which has evolved in line with the Darwinian model, precludes us from ascribing the phenomena to any other mechanism. The human predisposition towards the adoption of other species does not itself require explanation, being but a secondary consequence of the intra-specific parental caring process. As man evolved, his epimeletic motivation increased, consequently making him increasingly susceptible to the et-epimeletic signals of other species.

I have coined a term –"zootropy"– to describe this human disposition (Marchesini 2003, pp. 23-55). The term refers to mans' motivational orientation towards other animals and thus differs from Edward O. Wilson's hypothesis of "biophilia" (1986) manifested in terms of a general interest towards living beings. It is precisely due to its epimeletic nature and the fact that it is sustained by epimeletic motivation that zootropy generates specific affiliation processes, thus providing the basis for hybrid forms of behaviour to develop between humans and animals. When an animal is adopted by humans it immediately and inevitably becomes a point of reference for the group: in other words, human offspring are brought up in the presence of other species and are thus exposed to different behavioural models. This in turn leads to the creation of hybrid forms of behaviour and action, namely, to the performative use of animals. Yet, I would argue that this should be regarded as an outcome rather than the motive for the adoption of another species. In addition, it does not conflict with the premise that animal rearing has tended to favour those animals who exhibit strong et-epimeletic characteristics. This might also explain, perhaps, the fact that compared to their undomesticated ancestors, domestic animals exhibit neotenic or pseudoneotenic characteristics. In other words, in accordance with the human epimeletic condition, man has chosen to raise animals who have displayed more marked et-epimeletic characteristics. Here, epimeleia is based on the direct relationship between a) young mammals who exhibit certain et-epimeletic traits which operate as a lingua franca between different species and, b) man's enhanced sensibility towards the (et-epimeletic) signals articulated by the young and his tendency to respond with epimeletic acts of behaviour motivated by intense gratification. The adoption process therefore has a motivational explanation and it is for this reason that man still continues to foster the young of a wide range of animals and still gains immense satisfaction and pleasure from caressing and caring for these young creatures.

The expanded dimension of care

No doubt, the epimeletic motivation must be assigned to the reproductive motivational system. This is demonstrated by the shared origin of the neuromodulators that constitute its physiological basis as well as by the activities it directs. Yet, motivation produces an appetite for expression that transcends its function, as suggested, for example, by the predatory motivation in felines. Moreover, when a particular motivation is very strong in a species, its evocability is very high. As a consequence, the related behaviour can be internally induced without external elicitors, or without the subject having to search for something towards which to direct its behaviour. A strong motivation, for example, can easily be expressed in playing or through a surrogate activity. This extends both the motivation's declinability and its expressive horizon. When a motivation is very strong, the subject tends to interact with the external world predominantly through that particular verbal predicate. The epimeletic motivation is so strong in humans that we can direct caring behaviors towards multiple entities in diverse situations. Epimelesis thus becomes a sort of passkey that allows us to interact with external reality and feel psychologically fulfilled.

Having evolved along a path that fostred epimelesis, hominization also exposed itself to its side effects. Many of our caring behaviors should be considered *expressive epiphenomena*. Other than parental care, there are multiple and diverse behaviours associated with this human motivation. To understand them, we must consider the *gradient of declinability* related to the strength of this motivation. An increase in declination possibilities indicates: i) a broader sensitivity towards potential elicitors; for example, being attracted to objects with juvenile features; ii) a broader behavioural repertoire related to that motivation, with caring activities emerging, for example, in agriculture; iii) the presence of that particular disposition in multiple behavioral areas, for example, in the social dimension or in technical-artistic activities; iv) vulnerability or exposure to the appeal exercised by entities that may take advantage of it, as the cuckoo does towards other birds; v) a limited tolerance towards the impossibility of exercising that motivation and the risk of developing motivational psychopathologies, such as compulsion for order and control.

Significantly humans are highly sensitive to the pedomorphic appeal. Even objects can elicit our care, especially if they display morphological features, such as roundness, tininess, and structures that imitate large eyes. The baby schema has evolved in parallel with epimeletic evocation. This has produced common traits among mammals and birds, and therefore transversal elicitative characteristics. Pedomorphic traits elicit in us benevolence and a sense of protection that prompt adoptive behaviors. Arguably, like movement triggers in a carnivore the predatory behaviour – i.e., chasing and snapping –, pedomorphies induce in humans caring and nurturing. This helps us understand why puppies have such a strong appeal to us humans. Yet it also shows why we tend to infantilize animal characters, for example in cartoons – *Mickey Mouse* and *Donald Duck* –; in the shapes of toys; and even in many objects of common use. The most successful car models, for example, such as the Beetle, the Fiat 500, and the 2CV display round and childish shapes.

Juvenile forms have an evocative capacity that we find appealing because it complies with our motivational predisposition. Hence, it is not mistaken to speak of "pedomorphic aesthetics" among humans. Juvenile traits are synonymous with beautiful; they both satisfy our taste and are reassuring. If we want to add a seductive touch on anything, we need to emphasize

childlike traits. On the contrary, pedomorphic features must be reduced if we want to enhance monstrosity and repulsiveness. Examples in art abound. Our epimeletic tendency guides our aesthetic orientation: our strong parental disposition makes us perceive anything with a childlike form as beautiful, satisfying, reassuring, engaging, and peaceful. Hence, we find pedomorphic reshaping in domestic breeds, in the characters in comics, in dollies, cars, and robotic interfaces. After all, also in sexual selection we can observe that the human male has tended to look for infantilized feminine traits, females that look like dollies.

The pedomorphic character of domestic breeds is also interesting. As we know, they originate from human-operated artificial selection. We know that natural selection derives from the convergence of two selective factors: i) performative selection, based on environmental selective pressures that, collectively, mould the adaptive characteristics of a species; ii) sexual selection, namely the selection operated by partners, especially the female ones, in defining certain phatic or self-presentation traits, such as the color of feathers in birds. Regarding performative selection, humans did evidently play a part by requiring specific performances and modifying: 1) morphological characteristics, such as the muscles in cattle, or features such as the size and coat of dogs; 2) physiological characteristics, such as milk or egg production; 3) behavioral characteristics, such as docility or expressive tendencies. Regarding sexual selection, which is in all respects an aesthetic selection, we observe that domestic breeds exhibit a more pronounced morphological and behavioral infantilization compared to their wild ancestors. The pig, for example, looks like a wild boar cub rather than an adult swine. This infantilization is certainly due to multiple factors. Human intervention, however, cannot be excluded, as it was exercised through the selection of individuals displaying juvenile traits because they were considered more gratifying and safer to nurture.

The process of domestication starts with the human adoption of puppies from another species, followed by the phenomenon of mothering, i.e., breastfeeding by women. The process of domestication would be inconceivable outside the epimeletic dimension: mothering is a process of adoption that cannot be explained without making reference to the affective dimension. This is demonstrated by the fact that, even today, in many populations, the slaughter of animals that have been mothered requires complex community rituals. Weaning also involves adoptive behaviors: as reported by Irenaus Eibl-Eibesfeldt in the work *Human Ethology* (1989), it is performed through mouth-to-mouth feeding among many populations. Because of their high physiological and psychological involvement, these behaviours can only be explained in terms of motivational expression. Wolf domestication – which led to the development of dogs – is estimated to have occurred at least 25,000 years before the Neolithic revolution, since the earliest paleontological dog remains date back about 33,000 years ago. This domestication could not have occurred without the practice of mothering. Even today, dog and cat owners display primarily caring and nurturing attitudes towards their four-legged friends and, when interviewed, they confess having parental feelings towards them.

Today, we know that domestication occurs when humans and everything that is related to them (for example, the characteristics of the anthropized environment) become the primary element of fitness and selective pressure. By rewarding pedomorphic traits, most likely also in pleiotropic relationship with the docility trait, humans must have been a selective factor. This orientation, however, which betrays the epimeletic nature of adoption, is visible not only in relation to domestic animals. If we observe the physiognomies of interactive robots, we can

notice that they always have pedomorphic traits. The same is true for several devices of common use, such as mobile phones, computers, and household appliances. Many of these objects receive our care. Someone taking care of their car or home – how they caress and almost pamper these objects while cleaning them – betrays an underpinning parental behavior. Indeed, every expression of diligence, dedication, and care bestowed upon any of these objects resembles the ones devoted to a cub in need of care. Caring activities are so important to our species that they stimulate our imagination and extend to manifold behaviors, transcending the parental dimension and originating a very articulated, varied, and complex family of daily occupations.

For all these reasons, epimelesis cannot be confined to parental care, even when it is directed towards non-humans. We find it, for example, in agriculture and gardening. Even though it is here expressed differently, it still involves caring activities, such as: i) contributing to the growth of the object of care consistently with its needs; ii) protecting its integrity and development; iii) monitoring its development on a daily basis and taking joy at its growth; iv) preparing an appropriate hosting place – preparing the soil and planting is like preparing a nest; v) working diligently and responsibly, trying to build a relationship or attributing meaning to the job. If there are pedomorphic universals that transcend species, and if a motivation can be easily elicited the stronger it is, we should not be surprised that humans are receptive to et-epimeletic signals and enact caring behaviors also towards baby animals of other species. Care becomes a general attitude that can apply to all our activities, and fosters the development of important predicates, such as decentralization, empathy, dedication, diligence, and responsibility.

Epimeletic activities are fulfilling, gratifying, and produce a sense of self-efficacy. This is why many co-therapeutic activities or activities that foster well-being involve animal care, horticultural therapy, or gardening. The type of behavior on which these activities are based comply with a particularly strong human desire. The habit of keeping plants at home or on the balcony, for example, expresses an epimeletic motivation – as well as having, of course, also other reasons. Engaging in social services and environmental protection, volunteering in animal shelters or feline colonies, attending to museums or cultural artifacts, are all activities that, besides their social importance, are also self-fulfilling. There are also jobs that are totally or predominantly guided by the epimeletic motivation, such as that of doctor, nurse, lawyer, coach, psychologist, social worker, interior designer, and, to a large extent, teacher. It is no coincidence that the Italian term "alunno" ("pupil") derives from the Latin verb "alere," meaning "to nurture".

Once it has reached a particular level, care as a trait that developed for species-specific reasons to guarantee the survival of offspring, transcends the species' perimeter and acquires a universal character. This universal applicability refers to the relationships humans may establish with the entire living universe. Our propensity for care may extend without limits; hence it can provide the basis for a new alliance between humans and the biosphere. As observed in the volume *Symbiotic Posthumanist Ecologies in Western Literature, Philosophy, and Art*, edited by Peggy Karpouzou and Nikoleta Zampaki (2023), the concepts of citizenship, moral conduct, and existential participation are currently undergoing profound changes, changes that entail a reconciliation of the human with and within nature through shared destinies. Being aware of how deeply resonant epimelesis is to humans can, I believe, help us continue on this journey.

References

Alcock, J. (2005). *Animal Behavior: An Evolutionary Approach*. Sinauer Associates Inc.
Arendt, H. (1958). *The Human Condition*. University of Chicago Press.
Butler, J. (2003). *Giving an Account of Oneself: A Critique of Ethical Violence*. Van Gorcum.
Curi, U. (2017). *Le parole della cura*. Raffaello Cortina Editore.
Damasio, A. (1994). *Descartes' Error: Emotion, Reason, and the Human Brain*. HarperCollins.
Eibl-Eibesfeldt, I. (1989). *Human ethology*. Aldine De Gruyter.
Gilligan, C. (1982). *In a Different Voice: Psychological Theory and Women's Development*. Harvard University Press.
Griffin, D. R. (1992). *Animal Minds: Beyond Cognition to Consciousness*. The University of Chicago Press.
Gubernick, D.J. and Klopfer, P.H. (Eds). (1981). *Parental Care in Mammals*. Plenum Press
Heidegger, M. (1927). *Being and time*. Harper.
Karpouzou, P. and Zampaki N. (Eds). (2023). *Symbiotic Posthumanist Ecologies in Western Literature, Philosophy and Art*. Peter Lang.
Lévinas, E. (1999). *Alterity and Transcendence*. Columbia University Press.
Lichtenberg, J.D. (1989). *Psychoanalysis and Motivation*. The Analytic Press.
Lorenz, K. (1963). *Das sogenannte Böse: Zur Naturgeschichte der Aggression*. Deutscher Taschenbuchverlag.
Lorenz, K. (1978). *Vergleichende Verhaltensforschung: Grundlagen der Ethologie*. Springer.
Marchesini, R. (2003). *Animal Appeal. Uno studio sul teriomorfismo*. Hybris.
Marchesini, R. (2023). *Etologia del desiderio*. Lindau.
Mortari, L. (2015). *Filosofia della cura*. Raffaello Cortina Editore.
Nancy, J.L. (2007). *The Creation of the World or Globalization*. Suny Press.
Nussbaum, M.C. (2001). *Upheavals of Thought: The Intelligence of Emotions*. Cambridge University Press.
Panksepp, J. and Biven L. (2012). *The Archaeology of Mind: Neuroevolutionary origins of human emotion*. W. W. Norton & Company.
Oxford Latin Dictionary, Glare, P.G.W. (Ed.) (2012). Oxford University Press, 2 vols.
Plato (2008) *Dialoghi*. Mondadori
Pulcini, E. (2009). *La cura del mondo*. Bollati Boringhieri.
Serpell, J. (1998). *In the Company of Animals: A Study of Human-animal Relationships*. Basil Blackwell.
Slote, M. (2007). *The Ethics of Care and Empathy*. Routledge.
Stein, E. (1970). *On the Problem of Empathy*. Springer.
Tinbergen, N. (1951). *Über den Instinkt bei Tieren*. Springer.
Ward, A., and Webster M. (2016). *Sociality: The Behaviour of Group-Living Animals*. Springer.
Webster, J. (1995). *Animal Welfare: A Cool Eye Towards Eden*. Wiley-Blackwell.
Wilson E.O. (1986). *Biophilia*. Harvard University Press.