

HUMAN AND NON-HUMAN POLITICAL ANIMALS: ARISTOTLE'S "METAPHYSICAL BIOLOGY" AS THE BASIS OF POLITICAL ANIMALITY

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Summary: In one of the most famous passages of the *Politics*, Aristotle claims that “man is a political animal” (*zoon politikòn*) (Pol. I.2 1253a4). Having led to countless interpretations, this formula is still a matter of contention. In this paper, some of the main interpretive strategies will be presented and evaluated. The first section will outline three major ones: the exclusive, the inclusive, and a wider, zoological one (or what might be termed as the “common *ergon*” interpretation). The rest of the paper will support a biological interpretation of *zoon politikòn*, which places a central emphasis on Aristotle’s literal treatment (as opposed to metaphoric) of some non-human animals as political in some of his biological works as well as in the *Politics*. The categorisations of human and non-human political animals in *History of Animals* suggest a complex non-dualistic picture, which entails the possibility of some humans becoming non-political and some animals being fully political. While providing a literal biological interpretation of political animality, it will also be necessary to specify that Aristotle’s biology is a “metaphysical biology”, as MacIntyre put it (2007). It is not a modern, evolutionary kind of biology, and it is grounded in a broader metaphysical concept of nature.

Keywords: political animal; Aristotle; politics; nature; ergon; non-human animal.

ANIMALES POLÍTICOS HUMANOS Y NO HUMANOS: LA "BIOLOGÍA METAFÍSICA" DE ARISTÓTELES COMO BASE DE LA ANIMALIDAD POLÍTICA

Resumen: En uno de los pasajes más famosos de la *Política*, Aristóteles afirma que "el hombre es un animal político" (*zoon politikòn*) (Pol. I.2 1253a4). Esta fórmula, que ha dado lugar a innumerables interpretaciones, sigue siendo objeto de controversia. En este artículo se presentarán y evaluarán algunas de las prin-

cipales estrategias interpretativas. En la primera sección se esbozarán las tres principales: la exclusiva, la inclusiva y una más amplia y zoológica (o lo que podría denominarse la interpretación del "ergon común"). El resto del documento apoyará una interpretación biológica de *zoon politikòn*, que pone un énfasis central en el tratamiento literal de Aristóteles (en contraposición a metafórico) de algunos animales no humanos como políticos en algunas de sus obras biológicas, así como en la *Política*. Las categorizaciones de animales políticos humanos y no humanos en *Historia de los animales* sugieren una compleja imagen no dualista, que implica la posibilidad de que algunos humanos se conviertan en no políticos y algunos animales sean plenamente políticos. A la vez que proporcionamos una interpretación biológica literal de la animalidad política, también será necesario especificar que la biología de Aristóteles es una "biología metafísica", como dijo MacIntyre (2007). No es un tipo de biología moderna, evolucionista, y se fundamenta en un concepto metafísico más amplio de la naturaleza.

Palabras clave: Política animal; Aristóteles; política; naturaleza; ergón; animal no humano.

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1. Three senses of the human as a political animal

Aristotle's famous idea that the human is a political animal is generally taken from the passage in *Politics* Book I, where he explicitly claims that "man is by nature a political animal" (*Politics* I.2 1253a4)¹. Broadly speaking, the proposition is taken to indicate the human impulse to live together and form bonds, as well as the tendency to aggregate in the organised community of the *polis*.

¹ The version used here is Oxford Classics edition of Barker's translation in the Oxford Classics edition. There may be a slight discrepancy between this one and the standard Bekker numbering, due to the longer lines in Barker's version. Nonetheless, I have endeavoured to minimize the discrepancy.

According to Mulgan (1974), Aristotle uses the term *zoon politikòn* in three senses: exclusive, inclusive, and a wider, biological one. In the first one, the political animal is said to be the one who takes part in the polis. In Aristotle's natural conception of the polis, human aggregations tend to develop from the household to the village (collection of households) to the polis. In this 'exclusive' sense of being political, human animals are city-dwelling animals, as opposed to members of a family or a village. Here, the organization of the polis is given a specificity that places it in contrast to other (lower) human institutions (NE VIII.9 1160a18-23, 28-30). On the other hand, the second – the inclusive – usage of the term “political” considers the polis as including the household and the village: hence the human is here a political animal as a member of a city both in its public and private dimension of aggregation.

Thirdly, there is a sense in which humans are political animals that does not fundamentally differentiate them from other political animals. This is a wider biological usage, which is perfectly encapsulated in the following passage from the *History of Animals*: “Political animals are those of which the work [or function, *ergon*] becomes some one common thing, which not all gregarious animals do. Such are the human being, the bee, the wasp, the ant and the crane.” (HA I.1 488a7-10)². On the basis of such a wider understanding, *zoon politikòn* is sometimes translated as ‘social animal’ rather than political animal. *Qua* social animals, humans simply tend to aggregate in cooperative ways, just like the other social animals mentioned by Aristotle do. More specifically, it is those animals that have a *common ergon* that are called *politikòn*: it is not simply about sharing space and occasionally interacting, but it is cooperation on common objectives that mark the difference. Even more specifically, one might add common objectives

² *Ergon* (ἔργον) is generally translated as both work and function. Each fits best in certain specific contexts. The *ergon* of an eye is to see: hence one might say seeing is a function of the eye. It is more difficult to say that sculpture is the function of a sculptor: it is rather its work, although it is its *ergon qua sculptor*. In general terms, *ergon* might be said to be a functionally oriented activity or product towards which an object or person reaches a good state. (Baker, 2015)

of the group as opposed to occasional cooperative behaviour aimed at the satisfaction of individual needs when they arise³. As it will become clearer, however, I concur with Mulgan in maintaining that “social animal” is an unsatisfactory translation of *zoon politikòn*: not only because of the obvious etymological connection between polis and politikòn (Aristotle uses the word “πολιτικὸν” – politikòn – from “πόλις”, which means “polis”), but also because it obscures the continuity between human and non-human “polis-like” aggregations, which are distinct from mere gregariousness.

Differently from Mulgan, Miller (1989) and Keyt (1987) classify different uses of *zoon politikòn* only in two groups: one narrow and one wide. The narrow one, endorsed for example by Keyt (1987: 62), entails Mulgan’s ‘exclusive’ and ‘inclusive’ ones: political animal as a polis-dwelling animal. While the wide one points to the same biological sense with which Mulgan speaks of ‘social animals’, we might say that Miller does not separate the ‘inclusive’ sense as a specific category. Yet he stresses even more than Mulgan how narrow the first one would be. For not only is it confined to humans, despite Aristotle speaking explicitly of the existence of non-human political animals, but it would only apply to *some* humans. The social arrangements of most barbarians, for example, are not included under the category of “polis” by Aristotle (Miller, 1989: 199).

It should be added that in the narrow interpretation (especially in the exclusive), the human specificity makes *logos* the most plausible candidate to be the differentiating criterion between political and non-political animals. For if humans are the only political animals *qua* inhabitants of the polis, and the identity of a polis is its constitution (Pol.III.3 1276b1-4), then *logos* becomes a necessary presupposition of the polis, in the form of deliberation and law-making. For the polis needs a lawmaker and a lawgiver – although the polis is part of a natural teleological process, there is an ele-

³ Depew (1995: 166) prefers to translate *ergon pantōn* as “the work of all” rather than “work [that becomes] some one common thing”.

ment of craft in its actualization⁴. Thus, while in the wider interpretation the defining criterion for political life is common *ergon*, as mentioned above, such a place is occupied by *logos* in the exclusive interpretation. Within the inclusive one, *logos* could not be taken as the criterion of political life without any specification, given that here children, women, and slaves are included and that their rational capacities are limited in Aristotle's perspective. The inclusive one is still confined to human beings, but it does mark a shift toward less rational modes of living together. Hence within the exclusive interpretation, one should consider whether these categories of human beings could be considered political animals at all, even though they physically reside in the polis. One would also have to think about how to integrate Aristotle's claims that slaves can be potential friends of masters (NE VIII.11 1161b5-8), and that husband and wife are friends by nature (NE VIII.12, 1162a16): for in the exclusive interpretation, it would then seem possible to be friends with someone who is not a political animal at all.

Indeed, logocentric and exclusive interpretation of the political animal would have the advantage of connecting the etymology of "polis" with "political" as well as highlighting the link between reasoned speech and Aristotle's idea of the polis as the arena of deliberation. However, it might also lead to confusion between *zoon politikòn* and citizen. This, in my view, would be an obvious mistake, given that Aristotle claims explicitly that some political animals have rulers while others do not: "Of these [political animals], some live under leaders (*hup' hegemonia*), while others are anarchic (*anarcha*). For example, the crane and the genus of bees follow leaders, while ants and many other kinds are leaderless." (HA, 488a11-13; Depew's translation, 1995: 166). But the very essence of the citizen – as defined in the *Politics* – is to be capable of ruling and being ruled (Pol. III.4 1277b13-

⁴ This opposition between nature and craft in relation to the naturality of the polis is most saliently underscored by Keyt (1987). In his view, their co-presence constitutes a fundamental tension in Aristotle's philosophy, which forces him to agree with Hobbes on Aristotle's own principles.

18). The category of rule is not a necessary component of the concept of political animality, while it is in the definition of the citizen. Indeed, being citizens is an expression of being political animals – most likely the highest expression thereof, for Aristotle. Yet, while one might think that Caravaggio is the highest expression of figurative art among all painters, no one would maintain that he is the only painter. The conflation of the citizen with the political animal that is suggested by the exclusive interpretation suffers from the same fallacy.

*2. Towards a zoological interpretation of *zoon politikòn**

Textual evidence

To be sure, the three usages of *zoon politikòn* are all backed up by some textual evidence. Aristotle does seem to use them all in different contexts. As Mulgan notices, in the ethical treatises, Aristotle uses *zoon politikòn* in both the exclusive and inclusive sense (1974: 441). I would specify that the exclusive sense is mostly used in the *Eudemian Ethics*, rather than in the *Nicomachean Ethics*⁵. In the *Politics* the treatment is similar but more ambiguous. Overall, it should not be overly surprising that in treatises dedicated to the study of human affairs, the usage of the term is restricted to human beings, for such is the domain of enquiry. The zoological sense is not only widely employed in his biological works, but there are traces of it also in the *Politics*.

In NE Book I, for example, man is said to be “born for citizenship”

⁵ For example, as he notes, in Eudemian Ethics 1242 a 21-26 (Mulgan, 1974: 440). The only passage that he quotes from NE as proposing an exclusive interpretation is, in my view, not really endorsing the central claim of the exclusive interpretation. It is the following: “man is naturally inclined to form couples - even more than to form cities, inasmuch as the household is earlier and more necessary than the city.” VIII.12 1162a16-19. It is true that here Aristotle treats the city and the household as separate entities, but there is no suggestion that the human is a political creature on the grounds of belonging to the former as opposed to the latter.

in the context of Aristotle's intersubjective notion of self-sufficiency: "by self-sufficient we do not mean that which is sufficient for a man by himself, for one who lives a solitary life, but also for parents, children, wife, and in general for his friends and fellow citizens, since man is born for citizenship" (NE, I.7 1097b9-12). Despite the reference to citizens, here the opposition is mainly between solitary humans and humans who live together, rather than between membership in a polis and membership in another institution like the village. A similar opposition can be found in the book on friendship: "Surely it is strange, too, to make the supremely happy man a solitary one ... man is a political creature and one whose nature is to live with others" (NE, IX.9 1169b 17-19). Here, too, the political animal is contrasted to the solitary man.

In the *Politics*, men are said to be political "by nature". This entails both that they have natural impulses towards political association and that, given Aristotle's teleological framework, the polis is the best enabler of justice and *eudaimonia*. Although the *Politics* is an enquiry on actual human constitutions, Aristotle does not forget to contextualise human political nature with the rest of the biological world: "man is a political animal in a higher degree than bees or other gregarious animals" (1253a7-8). Crucially, and compatibly with the classification of bees, ants, and cranes as political animals in HA, this claim does not deny that bees are political animals: they are only "less" political. This suggests that there is a spectrum of politicality among the animal realm, which neither the *Politics* nor the ethical treatises can adequately cover, as they focus exclusively on human affairs.

Indeed, the fact that humans are said to be political animals "by nature" is a major reason for leaning towards a zoological interpretation. This is not to say, as we shall see, that the study of nature is synonymous with biology in Aristotle's conception. Yet, once human institutions are said to occur "by nature", they are put in a context of explanation that is broader than mere convention. This means that there are patterns that go beyond the merely human but involve the functioning of nature itself, of which human beings are a part. Additionally, although it is possible that Aristotle used

zoon politikòn in different senses indiscriminately without some common unity, it would nonetheless be odd. A zoological interpretation has also the advantage of avoiding such an oddity.

Aristotle’s categorisation of animals: essences and continuums

Human-centric interpretations tend to focus on the “political” side of the “political animal” while underplaying the “animal”. To reach a more complete understanding, we must focus on both. In this perspective, Aristotle’s biological works can be informative. In *History of Animals*, which some see as the foundation of zoological science⁶, Aristotle provides four categories to map animal sociality: solitary, scattered, gregarious and political (HA 1.1.488a2-4). Note that the same categories are used in the *Politics* (e.g., Pol.I.8 1256a20-45). As mentioned earlier, not all political animals have mechanisms of rulership: some are hierarchic, and some are anarchic. In the following table are some examples of Aristotle’s categorisation of animal sociality.

Animal	Political	Gregarious	Scattered	Solitary
Non-human	Bees, ants, cranes, wasps	Cows in herds, birds in flocks, schooling fish	Ground larks, Homeric cyclops	"Crooked-talon birds" and some carnivorous quadrupeds
Human	Living in a polis	Living in small, relatively isolated villages	Pastoral nomads	Solitary humans, barbars

(Depew, 1995: 160-161, 169)

⁶ Leroi, A (2020) “Aristotle’s Biology — Armand Leroi / Serious Science”

The distinction between gregarious and political animals implies that being political is not simply about being together: it is about being capable of cooperation such that there is something that is the common *ergon* of all (HA I.1 488a7-10). Thus, the political character of an animal is not determined by mere density of association, but by a certain role differentiation and organizational complexity, whose best expression is the polis⁷. Those animals that live in physical proximity but are not significantly dependent on each other in their decision-making – be it spatial location (fixed territory or migrations), food provision, reproduction, or offspring rearing – are not gregarious but scattered. Solitary animals, on the other hand, are wholly independent in their decision-making and meet partners for reproduction only at specific times with no further tie. It is now evident how the translation as “social animal” is inadequate: for it does not capture the difference between gregarious and political animals.

One may find it surprising that Aristotle calls humans “political animals by nature” and, at the same time, humans appear in all four categories, not only in the political one. This is because human beings “dualise” toward both the political and the solitary life (HA I.1,487b34–488a7; see O’Rourke, 2012: 34). With “dualise” it is meant “to tend toward both sides”, although it is debated whether they dualise toward the political-solitary life or the political-scattered one⁸. In both cases, however, Aristotle’s point that human life corresponds to a plurality of different ways of social life still holds. Indeed, this plurality is most radically manifested in the claim that humans who escape society are either beasts or gods (Pol. I.2 1253a28-32). While both are radically different forms of life, Aristotle considered an approximation of such ascension or declension to be possible. This applies to both intra-species differences and single individual change over a lifetime. Con-

⁷ It should also be specified that, in the case of the human polis, such differentiation is not merely economic division of labour, but it involves the proper relation between household, village, and with other cities (Depew, 1995: 173). It may thus be characterised as a legal-practical criterion of differentiation rather than a purely economic one (despite its origins may well be economic and tied to food provision)

⁸ For an overview on this debate see, for example, Depew, 1995: 176.

sequently, although rare and difficult, it is possible for humans to lose their politicality⁹. Firstly, because the beast and the god are apolitical humans (although this is probably more the case for the beast than for the god: for the latter would be *capable* of entertaining common projects: yet he simply does not need them). Secondly, given that Aristotle considers friendship (*philia*) as the seed of political association, radically unfriendly acts betray the political nature of the human animal. Those who “desire by nature to wake war” and enslave others without cause¹⁰, for example, resemble “isolated pieces in a game of draught”: there is a clear sense in which they fall into the condition of *solitary* beasts (Pol. 1.2.1253a3-7, Depew 1995: 177). Here, losing one’s political nature is taken to be something broader than losing membership (or, even more exclusively, citizenship) in the polis. It rather suggests the loss of one’s own nature, premised on a connection with other political beings, on the basis of which common ergons can emerge.

Moreover, the possibility of such radical “dualising” suggests treating the categorisation of humans as political animals with some flexibility. Once one takes into account that humans “dualise” towards more and less political forms of life, it becomes possible to see humans as *zoon politikòn* without the need of resorting to exclusivist interpretations: if barbarians or hermits can be coherently included in the notion, membership in the polis

⁹ It is rare because one should not exaggerate Aristotle’s belief in the possibility of change. Recall, for instance, Aristotle’s words on the difficulty of achieving moral virtue without having had a proper upbringing (EN I.4.1095b3-8). The same applies to the naturally vicious individual, if we take his doctrine of natural virtue to imply the existence of natural vice (E.N. II.1.1103a23-26). Not only nature but habits themselves can be extremely hard to change, as he most markedly expressed in the book on *akrasia*, where habit is described as a “second nature” (EN VII.10.1152a27-34). In addition, Aristotle did not miss the occasion to remind us that the force of habit is limited – despite being the main motor for achieving *phronesis* in his philosophy. These considerations may not apply as easily to non-human animals, but the point is simply to not over-emphasise the extent to which Aristotle saw change as always possible.

¹⁰ “Without cause” leaves open the possibility for natural slavery, while this consideration would be confined to those who enslave unjustly, i.e., not for mutual benefit of the master and the slave, but out of vicious desire to enslave.

becomes only one aspect – however central – of being political animals. It is not who fails to conform to the laws of a polis that is apolitical (e.g. the criminal), but it is who radically breaks the possibility of a common *ergon* with fellow humans that is condemned to be apolitical.

Similarly, Depew advises a flexible treatment of Aristotle’s animal categorisations in general, especially in *History of Animals* (1995: 165). As he explains, Aristotle’s intentions behind this book are less geared towards causal explanation than in other biological works such as *Parts of Animals* or *Generation of Animals*: HA can be seen as a great collection of animal traits and characteristics aimed to construct a “trait-vocabulary” (Depew, 1995: 162). In contemporary terms, it could be called a “database”. On this basis, it is suggested to treat the categorisations of animals along the lines of a continuum, rather than as rigid classifications *à la* Linneus.

In relation to this point, Depew notes that “[t]he worst mistake one can make about ‘political animal,’ for example, is to think that this phrase picks out the defining essence of humankind” (1995: 162). I would like to agree with him while qualifying his claim. Certainly, the fact that humans are political animals “by nature”, in Aristotle’s terms, does not mean that all humans must fall under the category “political”. But there is another sense in which *zoon politikòn* can be seen as the essence of the human. In this conception, which is more Aristotle’s and less modern, “all things derive their essential character from their function and their capacity” (Pol. I.2 1253a22-23). The human could be taken to be *zoon politikòn* in its essence *only* if we highlight the specific Aristotelian meaning of “essence”, which is strictly tied to “function” and flourishing, or *eudaimonia*. In other words, the essence of a thing is inseparable from what is *good* for it, rather than simply what it is. In this sense, it is not problematic to see politicality as the human essence: because, in the Aristotelian framework, the human final good – *eudaimonia* – is best achieved within a city with good laws, educational institutions, and social practices that nurture good habits.

This qualification to Depew’s claim is especially important. While

agreeing with him that politicality should not be seen as an unchanging *fact* about *all* human beings, his definition may mask the centrality of such a concept in Aristotle's philosophy. Being political animals is not simply a feature that human beings have among others, such as being of a certain height or having brown hair. Besides the crucial contribution of human political nature to the achievement of *eudaimonia* and to the naturalness of the polis, when Aristotle declares that the solitary man must either be a beast or a god, he condemns human beings to be *in essence* political animals. For both beasts and gods undergo a radical change that challenges their very humanity. The contemplator now resembles a god (which, in Aristotle's context, is more similar to a cosmic entity than to the Abrahamic anthropomorphic deities), while the solitary hunter becomes similar to a beast by living like one. This is why the priority of the contemplative life leads Aristotle to an uncomfortable position when tested against human political nature, such that it is "strange ... to make the supremely happy man a solitary" (NE IX.9, 1169b17)¹¹.

In parallel, politicality can be seen as the essence of all political animals: for how can the final good of a bee not be best expressed within the collectivity of bees? The similarity between human and non-human political animals is further backed up by textual evidence that brings them closer than what logocentric interpretations of Aristotle allow for. As Arnhart puts it, "Aristotle believes other animals show traces of all the psychic dispositions and capacities that are more clearly manifested in human beings" (1994: 467). Among these are art (*techne*), judgment (*sunesis*), memory (*mnesis*), thought (*dianoia*) and practical wisdom (*phronesis*) (HA 589a10-633b9; PA 648a6-8, 650b24-26, 686a24-87a23; see Arnhart 1994: 467). These allow some animals to develop social behavior through habituation and learning,

¹¹ On this basis, he then suggests the philosopher to contemplate in the company of others: for "if he were a solitary, life would be hard for him; for by oneself it is not easy to be continuously active; but with others and toward others it is easier. With others therefore his activity will be more continuous, and it is in itself pleasant, as it ought to be for the man who is supremely happy" (NE IX.9 1170a4-9).

such as the bird who teaches the offspring how to sing. Moreover, while generally denying to non-human animals a share in *nous* and *logos*, Aristotle does stress the existence of remarkable communicative powers in the animal realm (HA 488a30-35, 504b1-6, 535a28-36b24, 608a10-18; PA 659b28-60b1, 664a18-65a6; GA 786b6-88a32; DA 420b5-21a7; see Arnhart, 1994: 467).

This highlights the fact that when Aristotle speaks of humans as political animals, they should be seen in the broader context of nature as a whole. In Aristotle's philosophy, nature has an order: for although it sometimes fails in achieving its intentions (Pol. I.5 1254b32-33), "nature makes nothing in vain" (Pol. I.2 1253a8-9). When it comes to ordering phenomena, Aristotle was greatly influenced by the Eudoxean theory of proportionality. Briefly put, the idea is that magnitudes can be divided into equal parts, each of which is equally distant from one another. In NE, for example, he sometimes makes use of geometrical proportions; most famously in the theory of the mean¹². The four aforementioned animal categories are likely used in the same way, such that there is a proportional distance between each of the four. But Aristotle's usage of mathematics is not the Galilean one, who believed that nature is written in mathematical code: it is rather a useful tool to categorise, which applies in conjunction with a sense of the appropriate sense of generality and precision that a given inquiry demands. This reinforces the idea that in the human-centred treatises, animals are often taken as lacking completely in some human characteristic largely for heuristic reasons: namely, to make a point about the human rather than about the other animals. For, in biological works, these stark differences are often replaced by the similarity of a continuum of proportionality.

¹² "In everything that is continuous and divisible it is possible to take more, less, or an equal amount, and that either in terms of the thing itself or relatively to us; and the equal is an intermediate between excess and defect. By the intermediate in the object I mean that which is equidistant from each of the extremes". (NE II.6.1106a26-30). The same language of proportional graduality is used in the theory of natural slavery: "all men who differ from others as much as the body differs from the soul, or [as much as] an animal from a man" (Pol. I.5 1254b16-18)

The application of Eudoxean proportionality to interspecies differences further highlights the continuity between human and non-human animals. For Aristotle, as D’Arcy W. Thomson puts it, “the essential differences between one 'species' and another are merely differences of proportion, or relative magnitude, or as he phrased it, of 'excess and defect’” (Lennox, 1980: 321). In both HA and PA, members of different species are said to differ not only by excess or defect but also by “the more and the less” (Lennox, 1980: 323). This language of graduality indicates that the differences are better interpreted as dissimilarities along a continuum rather than unchangeable essences¹³. The same expression is found at Pol. I.2.1253a7-8, when man is said to be a political animal *more than* bees. The human-centric interpretations of *zoon politikòn* – whether it be a member of the polis exclusively or inclusively of other social institutions – fail to account for these aspects of Aristotle’s usage of *zoon politikòn*.

There are two strategies to discard the biological considerations as irrelevant to the concept of *zoon politikòn*. One is to declare, as Keyt (1987:60) and (partly) Mulgan do (1974: 441), that when Aristotle includes non-human animals as members of a polis-like organization, he does so metaphorically. The second one involves questioning Aristotle’s biological *intentions* in NE and *Politics* (O’Rourke, 2012). I shall now turn to these objections.

3. Literal or metaphoric? The biological intentions of a metaphysical biology

With respect to the differentiation between exclusive, inclusive, and zoological kinds of interpretation, Mulgan takes the first two to be “literal” and the third to be “metaphoric”. This is partly because of the etymologi-

¹³ For a case against essentialist interpretations of Aristotle’s biology, see Balme (1980) and Lennox (1980)

cal connection between “political” and “polis”¹⁴. Although he is careful to establish a connection between the inclusive and the zoological “polis-like associations” (1974: 439), he still thinks that Aristotle resorts to a metaphorical usage of “politikòn” in the zoological sense. Non-human animals are not “really” political because they do not live in a polis. In parallel, other than underplaying the textual evidence for a wider interpretation of *zoon politikòn* (1987: 60-63), Keyt settles the matter in a sentence: “Since a polis composed of lower animals is an impossibility ... strictly speaking man is the only political animal” (1987: 60).

Now, I do not mean to say that an anthill is a polis in the same way as Aristotle lived in a polis. Rather, ants live in a social environment whose functional differentiation and organizational complexity orient them toward a common *ergon*. To believe that Aristotle was speaking metaphorically when referring to non-human political animals seems an unjustified assumption, which underplays Aristotle’s treatment of the issue in biological works. Interestingly, neither Mulgan nor Keyt propose that Aristotle uses *zoon politikon* metaphorically *in the biological works*: indeed, it would be odd if he wrote loosely within his rigorous enquiries on animals. It is only in the narrower context of a study on human flourishing (NE) and constitutions (*Politics*) that speaking of non-human animals as political can appear as metaphoric. But then, why would he be using it metaphorically in one context and not in the other? I concur with O’Rourke’s claim that appreciating Aristotle’s biological intentions undermines a metaphoric interpretation of *zoon politikòn* (2012: 21). In anthills we find the seeds of the same structure of politicality that is expressed more fully and abstractly through language in a human polis. However, this by no means entails that Aristotle is using “politikòn” metaphorically when applied to non-human political animals.

Having stressed Aristotle’s biological intentions, however, it is also im-

¹⁴ On this point, Depew brings our attention to Aristotle’s distinction between semantic and explanatory meaning as a way to relax the criterion of etymological connection between polis and *politikòn* (1995: 63)

portant to contextualise their meaning. While highlighting Aristotle's biological treatment of political animals, I do not wish to argue that Aristotle's intentions were *only* biological. By claiming that humans are "by nature" political – thus bringing in the concept of nature – Aristotle cannot be taken to mean that politicality can be exhaustively studied within biology. For "bios" – life – is only a part of nature: in particular that which possesses a soul (*psyche*), as the inner source of movement¹⁵. Aristotle's biology differs from the contemporary reductionism in biology and natural sciences overall, which often seek to explain the entirety of (human) nature through the lenses of a single discipline. Aristotle's biology is, in MacIntyre's words, a "metaphysical biology" (2007: 58, 148).

O'Rourke rightly emphasizes that the biological and the metaphysical in Aristotle are hard to separate (2012: 23). Yet, he divides his intentions into biological, metaphysical and rational. Though agreeing that Aristotle does have biological intentions, O'Rourke argues that Aristotle's political anthropology is not *primarily* biological, but it is mostly metaphysical and rational. He then retains a fundamentally logocentric interpretation of what it means to be a human political animal, i.e. discussing about the good, which he contrasts to bare life. The main problem with a primarily biological interpretation of *zoon politikòn*, O'Rourke concludes, is to overstress the role of needs and instincts.

While taking all the content of his points, I would discard the idea that these are incompatible with a biological interpretation of *zoon politikòn*. Even more so – and here lies his inconsistency – when biology is indissolubly tied to Aristotle's teleological metaphysics. It is true that one should not overstate the role of instinct behind the human need for political association, but a multi-layered teleological biology need not entail that. If the essence of a creature is defined by its capacities and functions – such that "the eye of a corpse is no true eye" (Lennox, 2012: 304) – it would be inconsistent

¹⁵ To highlight the connection between soul and life in general, in *De Anima* Aristotle maintains that the soul is also a principle of plant life, not only animal life. (Lennox, 2012: 308)

to confine its life to merely lower functions. Hence human biology – as an expression of a metaphysical concept of nature – will present those multiple potentialities which include both instinct and learning. If the life of a soul entails both its origin and development, it is plausible that, as Arnhart argues, the dichotomies “nature-nurture” and “instinct-learning” do not easily apply to Aristotle’s biology (1994: 467).

Aristotle’s biological intentions are then to be *integrated* within the study of politicality, rather than being seen as the only ones. Arnhart supports the possibility of a naturalistic political theory and brilliantly shows how it could be justified on Aristotelian grounds. However, although he may be sociologically right in claiming that Aristotle’s political naturalism has revived Darwinian political theory, he overlooks significant differences between a modern, Darwinian, approach and Aristotle’s (1994: 465). Besides the mechanism of natural selection, the crucial difference is a greater reliance on metaphysics in Aristotle’s biology. Consequently, Aristotle’s is not a materialist (or “physicalist”) biology: though material preconditions matter, he does not reduce the study of reason to the study of the heart (in the same way as contemporary non-physicalist philosophers of mind deny that knowledge of the mind can be reduced to knowledge of the brain) (Lennox, 2012: 310). I would also add that Darwinian approaches tend to place an egoistic individual at its centre, whose interest is to survive and maximize utility, whereas in Aristotle even the concept of self-sufficiency is not confined to the individual alone. These considerations are meant to show that, by keeping in mind that Aristotle’s biology was a “metaphysical biology”, (i) O’Rourke’s rejection of *primarily* biological intentions behind *zoon politikòn* does not undermine all biological interpretations of this notion and (ii) a biological interpretation does not necessarily amount to a Darwinian interpretation of *zoon politikòn* nor to contemporary reductionist tendencies.

I shall also specify that the proposed interpretation is biological and includes some non-human animals among political animals, but it does not

necessarily deny human specificity, both in general and in terms of politicality. The issue of the political relevance of *logos* deserves a space larger than the scope of this paper. The aim of this article has been to delineate an interpretive space in which Aristotle's political animal can be seen as one with a common *ergon* rather than one endowed with *logos*. Therefore, the main claim proposed here is that there is sufficient evidence to believe that Aristotle identified political animals as those endowed with a common *ergon* before than *logos*, and that this discredits the human-centred interpretations that place too much emphasis on the literal meaning of "polis". This, however, is not to deny the political consequences of *logos*, whether they be constructive or destructive – as Hobbes maintained in his famous criticism of Aristotle's notion of the political animal¹⁶.

4. Conclusiones

Overall, the first section outlined the three senses of *zoon politikòn*: exclusive, inclusive and the wider, biological one. In this essay, a case was made in favour of the third one. Firstly, the exclusive interpretation risks a conflation with the concept of citizen and the zoological interpretation avoids the oddity of Aristotle using the three different senses without any theoretical coherence. Secondly, human-centric interpretations tend to limit attention to the "political" side of the political animal, while underplaying the "animal". Similarly, they downplay the textual evidence in favour of a biological interpretation – especially in HA, where some non-human animals are clearly categorised as political animals. While the concept of "dualizing" and the influence of Eudoxean proportionality suggest that Aristotle's classification of animals is not essentialist in the modern sense, I pointed out how he treats humans as political animals *in their essence*, given

¹⁶ For a critical overview of Hobbes' criticism of Aristotle on the consequences of *logos*, see "Geoffrey Bennington. Political Animals. 2011" *European Graduate School Video Lectures*. Arnhart (1994: 472) lays down Hobbes' six points against Aristotle on the difference between human and non-human political animals, and why the former need coercive sovereignty.

that loss of politicality entails a shift from humanity to either divinity or bestiality.

In the last section, the objection that inclusion of non-human political animals is metaphoric was met by bringing attention to how biological intentions undermine a metaphoric interpretation. It was also specified how a biological interpretation does not commit oneself to the scientific reductionism that is often associated with materialist biology and Darwinist political theory. Any biological interpretation of *zoon politikòn* has to keep in mind that Aristotle's biology is firmly inscribed in a teleological metaphysics. The fact that humans are political animals "by nature" invites a study of biology, but it cannot be reduced to it: for, on Aristotelian grounds, the study of nature is as much biological as it is metaphysical.

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