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WHEN DOES A MAN BEGET A MONSTER? (ARISTOTLE, *DE GENERATIONE ANIMALIUM*)

KIEDY CZŁOWIEK RODZI POTWORA? (ARYSTOTELES *O RODZENIU SIĘ ZWIERZĄT*)

Przedmiotem artykułu jest zagadnienie granicy pomiędzy narodzinami dziecka niepodobnego do członków swojej rodziny a przyjściem na świat „potwora” (τέρας). Oba te zjawiska zostały opisane przez Arystotelesa w IV księdze traktatu *O rodzeniu się zwierząt* (*De generatione animalium*) jako rezultat słabnięcia „ruchów” kształtujących płód na podobieństwo rodziców i przodków. W artykule polemizuję ze stanowiskiem T. V. Uptona, który do „potworów” zalicza obie wymienione grupy istot i uznaje, że – wobec osłabnięcia „ruchów” przekazujących cechy jednostkowe – za ich kształtowanie odpowiadają „ruchy” powszechników (odpowiednio gatunku i rodzaju). Staram się wykazać, że „ruchy” przekazujące cechy ogólnie nie są w stanie doprowadzić do końca procesu rozwoju embrionu, a za podstawowe kryterium odróżniające człowieka od „potwora” należy uznać deformację powodującą nie tylko zanik podobieństwa do przedstawicieli własnego gatunku, lecz także kalectwo uniemożliwiające spełnianie właściwych dla danego gatunku funkcji.

Słowa kluczowe: Arystoteles, *O rodzeniu się zwierząt*, dziedziczenie, potwory.

No mortal creature, composed of matter and form, can reach the state of individual immortality; thus, ‘for any living thing that has reached its normal development and which is unmutated (ὅσα τέλεια καὶ μὴ πηρώματα) [...] the most natural act is the production of another like itself, an animal producing an animal, a plant a plant, in order that, as far as its nature allows, it may partake in the eternal and divine. [...] it remains not indeed as the self-same individual but continues its existence in something like itself – not numerically (ἀριθμῶ) but specifically (εἶδει) one’ (*De an.* 415a26-b7; cf. GA 731b 24 – 732a 1). The Aristotelian belief on the duration and immortality of species, which has been expressed *implicite* here, was popularised by the famous statement from his *Metaphysics*: ἄνθρωπος ἄνθρωπον γεννᾷ – ‘man begets man’ (*Met.*1032a 25, 26; 1033b 32; 1070a 8; 1070b 34). This statement, while stipulating the general principle of procreation among living organisms, does not refer, however, to the

phenomenon of differentiation of individuals within species, the differentiation – as should be added – which is caused mainly by material factors, which occasionally impede the functioning of this perfect model (cf. Sober, 1980: 360–362; Asma, 2009: 48). The challenge of explaining the mechanisms responsible for this differentiation is taken by Aristotle in the 4th book of *De generatione animalium* (hereafter referred to as ‘GA’), where he attempts, among other things, to answer the following questions:

[...] why male and female are formed, why female offspring often resembles the father and male offspring the mother, and again the resemblance borne to ancestors, and further what is the cause why sometimes the offspring is human being yet bears no resemblance to any ancestor, sometimes it has reached such a point that in the end it no longer has the appearance of a human being at all, but that of animal only – it belongs to the class of monstrosities (τέρατα) (GA IV, 3, 769b 4–10; cf. GA IV, 3, 767a 36 – b 5, 769a 1–6).

The most translators and commentators refer the term *terata* (‘monsters’) exclusively to the last aforementioned group of beings – children whose appearance does not resemble humans. Thomas V. Upton in his article entitled *Aristotle on Monsters and Generation of Kinds* (Upton 2003) also ranks among the ‘monsters’ the previous group – the offspring which bears no resemblance to any family member. Both groups the author names as ‘generic individuals’ (of type A and type B) and assumes that their existence ‘clearly shows that the movements in the sperm of the universal species and/or universal genus can produce manifest effects independently of the effects of the movements in the sperm of the particular father as particular’ (Upton, 2003: 27). Thus, Upton is convinced that the creation of both types of ‘monsters’ is triggered by the same process – ‘resolution’ or ‘loosening’ (λύσις) of the ‘movements’ in the sperm (whose function is, to cut a long story short, to recreate in the offspring’s body the features of its parents or ancestors); in consequence, the task of completing the embryo’s development is taken by the ‘movements’ of universals present in the sperm. ‘I maintain’, concludes Upton, ‘that in the generation of type (A) monsters, the actual movements in the father’s sperm of the universal species and genus first produce the effects at the appropriate stages of development [...]. Then, instead of more particularized movements taking charge of the completion of the organism, the movements of the species again take charge and complete the formation of monstrous uniform and non-uniform parts. In type (B) monsters, the actual movements of the genus first produce their initial effects, and then these movements again take charge of the development process after both the movements of the particular, father, mother, maternal, and paternal forebears, as well as the movements of the species, are “confused” to the extent that they fail to take charge of development’. (Upton, 2003: 35–36)

Although I do share Upton’s opinion on the issue of the independence of the ‘movements’ which demonstrate general features – genus and species, acknowledging

the fact that they can and should be differentiated from the movements which carry particular traits and that the role they play in the process of embryonic development must precede the activity of the latter one (Sowa, forthcoming), I still find it unjustified to believe that it is possible to ‘substitute’ movements of universals with movements of particulars in further stages of development; above all, however, I strongly object to classifying ‘generic individuals’ of both types as ‘monsters’.

The main problem related to this last issue is that the works by Aristotle lack a precise definition of ‘monster’ and the closest you get to one, while searching through his writings, is the following:

1) ‘[...] anyone who does not take after his parents is really in a way a monstrosity (τέρας), since in these cases Nature has in a way strayed from the generic type’ (GA IV, 3, 767b 6–7)¹;

2) ‘[...] a monstrosity is really a sort of deformity (ἀναπηρία τις)’ (GA IV, 3, 769b 30);

3) monsters are born relatively rarely, since ‘their formation is contrary to the general rule and to what is usual (παρά τὸ ἐπὶ τὸ πολλὸν καὶ τὸ εἰωθὸς)’ (GA IV, 4, 772b 1)²;

4) ‘[...] they are not necessary so far as the purposive or final cause is concerned (πρὸς τὴν ἕνεκά του καὶ τὴν πρὸς τοῦ τέλους αἰτίαν)’ (GA IV, 3, 767b 13–14), or even ‘will be failures in the purposive effort (ἀμαρτήματα ἐκείνου ἕνεκά του)’ (*Phys.* II, 8, 199b 4);

5) they appear ‘whenever the “formal” nature (κατὰ τὸ εἶδος φύσις) has not gained control over the “material” nature (κατὰ τὴν ὕλην)’ (GA IV, 4, 770b 16–17).

As it can be easily noticed, when each of the aforementioned points is scrutinised separately, it offers a scope too broad to meet the requirements of the sought-after definition. Point 1 renders it possible to classify – ‘in a way’ – as monsters not only all female individuals (as discussed by Aristotle in a further part of the text), but also every single male individual who fails to be an accurate copy of his father; and since accurate copies do not practically happen in real life, we would be forced to assume that ‘everyone is just a little bit monster’ (Asma, 2009: 48). The same scope is offered by Point 5, because – as mentioned above – material factors are responsible for any deviations from the perfect ‘model’ of procreation. The criterion of frequency (Point 3) makes it possible also to nominate twins as monsters (GA IV, 4, 772a 35–37), similarly to the criterion of purpose (Point 4). Thus, relatively closest to the sought definition seems to be the term of mutilation or deformity (Point 2), although its application

¹ Cf. GA IV, 4, 770b5: ‘for monstrosities come under the class of offspring which is unlike their parents’.

² Cf. GA IV, 4, 770b 9–11: ‘A monstrosity, of course, belongs to the class of “things contrary to Nature”, although it is contrary not to Nature in her entirety but only to Nature *in the generality of cases*’.

in the works of Aristotle is also extremely broad. In the introduction to his translation of *Generation of Animals*, Peck states that ‘The underlying notion is that φύσις has not succeeded in achieving her proper τέλος’ (Peck, 1953: xlv). This approach is developed by Witt, who postulates ‘the normative/functional interpretation’ of deformity (Witt, 2012: 86), according to which ‘deformity is a structural, functional and teleological notion for Aristotle’ (Witt, 2012: 87). Such an interpretation renders it possible to understand why Aristotle considers as deformed, mutilated or not completely developed not only individuals but also whole species (e.g. seals or moles) or groups of animals (terrestrial aquatics, all female animals). Since this approach is, again, too broad for our needs, we may refer to the individual application as proposed by Witt: ‘An individual is deformed relative to the functional parts and the life activities that individuals of that kind naturally and regularly achieve’ (Witt, 2012: 84). It should also be added that in the case of ‘monsters’ these deformations occur during foetal development – Aristotle classifies as monsters, apart from the aforementioned ‘generic individuals’, mainly individuals created as a result of embryos merging with one another (GA IV, 4, 773a 3–4), as well as those who are characterised by a lack of or extra vital body organs (GA IV, 3, 769b 25–27; IV, 4, 770b 9).

What seems to be crucial for the comprehension of Aristotle’s thought is the statement explaining the cause behind the fact that monstrosities are more frequently born among those species which bring into the world more offspring:

[...] the way to the production of monstrosities has been already prepared for Nature by the fact that they generate offspring which, owing to its imperfect state, is unlike its parents (μη γεννᾶν ὅμοια διὰ τὴν ἀτέλειαν) (GA IV, 4, 770b 3–5).

This explanation shows even more clearly that the aforementioned ‘partial’ definitions of a ‘monster’ are by no means independent from one another, and that they can be perceived as a constituent of a larger whole which is generated by their fusion. In consequence, we are presented with a definition of a ‘monster’ in a narrower meaning of the word, according to which all criteria of ‘monstrosity’ are met by a descendant who does not bear a physical resemblance to his parents, due to a deformation resulting from disorders occurring during the foetal development, which were triggered by material factors; as such, he is born rarely and has no final cause. This definition, by narrowing the term of a ‘monster’ to a relatively small group of individuals who suffer from various developmental deformations, allows us to exclude female individuals (having final cause) (GA IV, 3, 767b 8–10; cf. Sowa, 2014: 47–48), as well as all non-deformed individuals, even if they do not physically take after their father or their birth is a rare occasion (e.g. twins).

If this definition is applied to Upton’s ‘generic individuals’, we can state that both ‘types’ meet the majority of the criteria it mentions: they belong to the group of offspring that bears no resemblance to their parents due to some developmental

disorders; they are born relatively rarely and their birth is not triggered by any final cause, but by an accidental necessity, i.e. a material one, since the movements that shape the offspring are weakened by the resistance of matter (cf. GA IV, 3, 768b 15–29). Nevertheless, the most crucial issue still remains open to debate, namely the question of to what extent the representatives of both groups can be recognised as deformed individuals. This is easier to settle as far as the second group is concerned, which – beyond any doubt – Aristotle himself describes with the term *terata* and explains its genesis in the following manner:

[...] in the end, when the movements [...] relapse (τῶν μὲν κινήσεων λυομένων) and the material [...] does not get mastered (τῆς δ' ὕλης οὐ κρατουμένης), what remains is that which is most 'general', and this is the [...] animal. People say that the offspring which is formed has the head of a ram or an ox (GA IV, 3, 769b 11–14).

An individual presented in such a fashion can indeed be described as a 'generic individual', since – despite the fact that he is undoubtedly an animal – it is difficult, at a glance, to decide which species he belongs to. From this description, however, it does not result – as Upton would wish – that movements of the genus do not confine their operation to completing their primary task, i.e. shaping the initial 'outlines' of the embryo (cf. GA II, 6, 743b 20–23), but instead they 'again take charge of the development process' once the movements carrying the features of a species and an individual have weakened. On the contrary, the description quoted above clearly refers to the situation in which the correct process of development is, due to the resistance of matter, halted at an early stage; in consequence, any further growth of the foetus is conditioned – as a whole or partially – exclusively by material factors, which are not controlled by the form (since form is carried by means of movements, which – in this case – cease to work at a specific moment). Movements of the genus are, by definition, unable to control further stages of development, during which parts of the body are differentiated in accordance with species affinity. If, for instance, due to the weakening of movements of the species, a human leg is not tipped with a foot (which is a feature of our species), but it resembles claws or a hoof, this will not depend on the operation of movements of the genus (which do not carry the features of the species), but merely on material factors, i.e. the quantity and quality of the seminal or nutritive residues, which are available at the right place and time during foetal development (GA II, 6, 743a – 745a; cf. GA IV, 3, 768b 25–33).

At the same time, it should be borne in mind that their resemblance shall only be external and superficial in its nature, since human semen does not contain any movements which could carry features of other species, for example of the eagle or the horse; therefore, a foot that resembles a hoof is, in fact, an extremely deformed human foot, in the same way as the example of the head of a ram or an ox, as quoted by Aristotle, is an extreme deformation of a human head. The fact that the concept of deformation has a basic meaning there is clearly confirmed

later in the same text, where Aristotle emphasises the difference between real ‘monstrosities’ and ugly people who are often jokingly compared to animals:

[...] at the same time, in no case are they what they are alleged to be, but resemblances only, and this of course comes about even when there is no deformation involved (καὶ μὴ πεπηρομένων). Thus, humorists often compare those whose strong point is not good looks (τῶν μὴ καλῶν) in some cases with a fire-spouting-goat, in others with a butting ram (GA IV, 3, 769b 16–20).

Thus, the class of ‘monsters’ includes creatures whose resemblance to other species is, in fact, caused by serious developmental dysfunctions and disorders, resulting in a visible deformation of the whole body or its parts. As it can be easily deduced – and as mentioned by the author of the GA in a further part of the treatise – this deformation obstructs or makes them unable to function normally or even to lead a normal life³.

The situation is completely different when it comes to individuals – or, more appropriately, persons, as Aristotle describes it solely in reference to people – who are classified by Upton as ‘Type A generic individuals’. The causes of their dissimilarity to members of their immediate and distant family Aristotle explains by means of the same mechanisms that govern the process of heredity, i.e. the transformation into contradiction and/or the weakening of the movements responsible for carrying individual features, both in the line of the father and the mother; the operation of those two mechanisms usually results in the offspring inheriting, in a more or less differentiated manner, recognisable features of both parents or ancestors (GA IV, 3, 768a 21 – 768b 3). Occasionally, however, the origins of the features cannot be recognised, which is explained by the author of the treatise in the following manner:

In the end, they [*scil.* movements – J.S.] become so confused (οὕτως συγχέονται) that the product does not take after any of its family or kindred, and all that remains is what is common to the race – i.e. it is just a human being. The reason for which is that all particular individuals are accompanied by this characteristic [...] (GA IV, 3, 768b 10–13).

The interpretation of this fragment depends mainly on the sense that we assign to the crucial verb συγχέονται. According to the Liddell & Scott Lexicon, its basic meaning is: ‘pour together, commingle, confound’, ‘obliterate, demolish’, ‘confuse, blur’, ‘confound, make of no effect’, ‘frustrate, violate’. As can be concluded from the aforementioned quotation from Upton’s statement, the same phenomenon of ‘confusion’ of movements is, in his opinion, responsible for the creation of ‘generic individuals’ of both Type A and B; in both cases the

³ Cf. GA IV, 4, 771a 11–14: ‘Those which depart only slightly from the natural usually live; those which depart more than that do not – i.e., when their unnatural conformation lies in the parts that control the creature’s life’.

movements of universals (of species and type respectively) ‘again take charge’, when all other movements ‘are *confused* to the extent that they fail to take charge of development’. Once we ignore the fact that there is no reason to perceive this mechanism as the cause of ‘Type B monsters’ being born – since, in this case, Aristotle’s text only focuses on the weakening and not on the ‘confusion’ of movements, it becomes visible that Upton understands ‘confuse’ as ‘confound, make of no effect’, and thus, he concludes that, in the case of ‘Type A monsters’, the final shape of the offspring’s body is not influenced by the movements that carry individual characteristics, but only the movements of the universal which carries the features of the species. A similar and yet slightly different interpretation of the text is presented by Coles, who states that ‘the movements which carry the individual characteristics of this or that individual may [...] lose their sharpness or articulation. [...] the outcome is the reproduction of a form which itself loses all the sharpness or specificity of the movements themselves’ (Coles 1994: 80–81). Coles interprets ‘confuse’ rather as ‘blur’, but the final outcome seems to be similar to the interpretation provided by Upton – although both authors fail to present a more detailed description, they, in all likelihood, imagine some kind of an anthropomorphic creature rather than a fully developed human being. Such a creature could really be considered a ‘monster’, since its ‘blurred’ shape – described exclusively by the features of the species – is hard to be understood differently than as some sort of deformation or deficiency.

Nevertheless, I do not find this interpretation of the text correct, as Aristotle never mentions that the offspring who is not similar to its family was, at the same time, a victim of disability or deformation. Therefore, the view expressed by Lennox seems to be more plausible, as he claims that ‘if none of the particular features of parents or their immediate ancestors emerge, what is left is a human being that lacks any of *that family’s* particular features – Aristotle cannot mean that the result is human being in general. As he puts the point in *Metaphysics* Λ.5: [...] human being is the source of human being in general; but there is no such thing’ (Lennox, 2009: 360; cf. *Met.* 1071a 21–22).

In order to solve this issue, it is worth referring to other fragments of texts by Aristotle, where various forms of the verb *συγχέω* appear. Those which deserve our particular attention are these that allow us to perform an analysis based on comparison; and this is possible where the process of ‘confusion’ influences – just like in the case of ‘movements’ – several separate elements. Among these elements we find, for instance: various tubules and ducts (*πόροι*) that are part of the body (GA 747a 12; HA 515a 23; *Probl.* 870b 21), foam cells (PA 669a 32), egg yolks (HA 562a 25), traces of odours (*Probl.* 942b 14) and sounds (*De aud.* 801b 18, 802a 4). The reading of the aforementioned sections univocally indicates that the basic meaning of the used verb is the ‘merging’ of elements that used to function as separate constituents; this phenomena is accompanied by the transformation of shape (a reduction in the amount of foam, ducts growing together or overgrowing,

overlapping of odours and sounds), which is sometimes combined with a dysfunction, as well as the difficulty or impossibility to recognise the primary constituents due to the ‘merging’ of the whole. Thus, this newly developed whole is not a simple sum of all constituents, but a new quality that functions on the basis of different principles, even if it may mean the loss – complete or partial – of the appropriate function of the elements that precede it. This transition is not, however, tantamount to their annihilation or their inability to operate – ‘merged’ odours can still be smelled, ‘merged’ sounds still reach our ears (sometimes even stronger) (*De aud.* 802a 4; cf. *Phys.* 184a 22).

Translating these observations into the mechanism of heritage, we can, with a high degree of probability, state that the ‘merger’ of movements that carry individual characteristics of parents and ancestors results in a dysfunction that consists in an inability to carry, by one movement, a single feature that can be easily singled out and categorised; it does not mean, however, that there is a complete loss of operational ability. We may encounter the situation described by Aristotle, for instance, when an offspring’s eye colour is not carried by the movements on the father’s or mother’s side, but by ‘merged’ movements in the line of an uncle and a second grandmother, which result in an unprecedented – in this family – colour of eyes, which are hazel with some green spots; such a hue, however original, is still a colour of human eyes, shaped by ‘merged’ movements of particulars, and not by the movement of genus. Therefore, in my opinion, this process is most aptly construed by Henry, who interprets ‘merging’ as a genetic mutation (Henry, 2006: 451) and compares this phenomenon to the transformation (μετασχημάτισις) – described in the treatise entitled *De sensu* – of individual sounds in words while moving in space and air; this transformation results in listeners hearing different words to those which are actually uttered by the speaker (Henry, 2006: 451; cf. *De sensu* 446b 6–10).

The fact that the birth of a child who does not resemble anybody in the family does not mean a ‘monster’ is born is also proved by the words that open Chapter IV, 3 GA. Their content is identical to the beginning of Section 769b, and yet they are formulated in a slightly different manner. The words regarding the issue of interest here read as follows:

Some take after none of their kindred, although they take after some human being at any rate (ὅμως δ’ ἀνθρώπων γέ τι νι); others do not take after a human being at all in their appearance, but have gone so far that they resemble a monstrosity (GA IV, 3, 767b 4–5).

In the fragment quoted above the author clearly states that a child that takes after none of their family members still bears a resemblance to ‘some human being’, i.e. a man characterised by certain features, which are different than the rest of their family, and therefore, it does not resemble some abstract species; more clearly than in section 769b 4–10, the author also differentiates between the dissimilarity to family members and similarity to monstrosities.

Thus, the mechanism of ‘merging’ movements that carry individual characteristics to offspring is not identical to the mechanism that generates ‘monstrosities’, even though both mechanisms stem from the resistance of matter to the movements that shape it. In the first case, however, these movements – although changed – still remain active, leading to the final development of any given individual and equipping him with some typical features, not only as far as any given species is concerned, but also when it comes to individual traits; in the case of a ‘monster’, however, matter ‘wins’ and grows in an uncontrollable way, which translates into a deformation that not only results in the lack of resemblance to any representatives of its own species, but also in disability.

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