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Matter as Contradiction A unified interpretation for Aristotle's Phys. A and Metaph. Γ

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«Tautologie und Kontradiktion sind nicht Bilder der Wirklichkeit. Sie stellen keine mögliche Sachlage dar. Denn jene lässt *jede* mögliche Sachlage zu, diese *keine*».¹ With these words Ludwig Wittgenstein described in his *Tractatus* his concise theory of tautology and contradiction: in his view, both tautology and contradiction lie on the borders of linguistic meaningfulness and, at the same time, of the possible description of reality. In fact, it is neither possible to see tautologies nor contradictions in the world (*they are never the case*). We may say that, centuries before him, Aristotle had expressed a very similar conception of contradiction, by putting it outside of the meaningfulness of language: as we will see, neither for Aristotle can a contradiction ever be an effective reality.

My purpose is, though, not only to merely explain how Aristotle's theory of contradiction works, but also to try to combine his concept of contradiction (ἀντίφασις) with that of matter (ὕλη), in order to demonstrate that both these concepts are firmly linked to each other so that we can fully comprehend Aristotle's idea of contradiction through his view of matter and potentiality. More precisely, I will argue that Aristotle's theory of the elements of nature (i.e. form, matter and privation), of which he speaks in the first book of *Physics* is compatible with his theory of contradiction (*Metaph*. Γ) and that the Aristotelian conception of matter must take account of both the substrate (ὑποχείμενον) and the contradiction to be fully understood.

1. Matter

1.1. Matter and potentiality

Before seeking to determine which relation there is between matter and contradiction, we are firstly to observe in what terms Aristotle describes 50 and what the main characteristics of this concept are.

^{1.} TLP, 4.462.

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It is, in this perspective, very noteworthy that Aristotle never gives a detailed definition for 'matter': every definition of matter that we find in his works makes use of negative expressions as if it were impossible to completely define what matter is. In spite of this indescribable character, it seems evident that matter is a component of the essence $(o\dot{0}\sigma(\alpha))$, which for Aristotle is, above all, the living.

An example for it can be found in *De Anima*:

We call 'essence' one genus of beings, and of it the one <component is> like matter, which is not something <determined> for itself (δ καθ' αὐτὸ οὐκ ἔστι τόδε τι), the other <is> aspect and form (μορφὴν καὶ εἴδος), with reference to which <the essence> is said something <determined>, and third the <compound> of them. Matter is potentiality, while form <is> actuality (ἔστι δ' ἡ μὲν ὕλη δύναμις, τὸ δ' εἴδος ἐντελέχεια) [...].²

What really characterises matter is its *potential nature* (δύναμις) and yet this feature can only be understood in reference to the opposing concept, actuality here ἐντελέχεια. For an essence to be effectively what it is, it must be composed of its matter and its form. We do not have to intend this conjunction of matter and form as an *external* process, but rather as a process of *becoming*: the matter is *potentially* the form and when it *becomes* the form, then an οὐσία comes into

^{2.} Aristotelis, De anima, B 1. 412a6-10.

^{3.} Aristotle uses two terms to express 'actuality', èντελέχεια and èνέργεια. These terms describe two different aspects of the same idea: on the one hand, something actual – that is something which effectively exists – must have achieved its proper nature or purpose (τέλος); on the other hand, this can only happen if something fulfils its proper function (ἔργον). Quite surprisingly, this actuality fully depends on matter: as Aristotle points out in Aristote, Les parties des animaux, A 1. 640b35-641a3, a hand will not be a hand if it is a wooden hand, since it cannot do what a hand usually does; a flute made from stone cannot be played, hence it is not a flute and a picture of a doctor cannot cure an illness. Something can fulfil its ἔργον only if its matter has the right δύναμις.

being.⁴ This may be clearer after we have seen how Aristotle himself explains what it means to say that a subject becomes a predicate.

Matter remains something undetermined as long as it does not receive the shape of a certain form. Its potentiality consists in the capability 5 of becoming determined.

1.2. Matter and predication

This process of becoming (γ i γ v $\epsilon\sigma\theta\alpha$) determined is to be intended as a predicative determination: that a matter becomes a formed-matter means that this form is related to matter just as a predicate is related to a subject. This predicative description of natural phenomena shows us that in Aristotle's perspective there is a propositional structure underlying every natural happening: this will be clearly understandable when Aristotle analyses the structure of every natural becomingness in *Phys.* A.

For now the question is what role matter plays in this process of becoming, i.e. when a matter, which has potentially a form, acquires this form and so becomes a real being $(o\dot{\upsilon}\sigma(\alpha)$. Also in this case Aristotle expresses himself clearly right in that section of his *Metaphysics* where he seeks to define the $o\dot{\upsilon}\sigma(\alpha)$:

^{4.} One could object that Aristotle often states that essence is form ($\epsilon \tilde{l} \delta \circ \varsigma$); we should indeed avoid interpreting this form as *pure form*, because an $\epsilon \tilde{l} \delta \circ \varsigma$ becomes an our only in conjunction with its appropriate matter ($\epsilon \tilde{l} \kappa \circ \iota \delta \circ \iota$

^{5.} The Aristotelian term δύναμις means both *possibility* and *capability*, as it is clear from Aristotelis, *Metaphysica*, D 12. Either way, Irwin 1988, 230 is right when he remarks that «[p]otentiality requires more than mere possibility, because it requires reference to a permanent state of the subject that explains the actuality in question».

Again we find in this passage the undetermined character of matter. But it is exactly this indetermination the factor that permits in general that a predicate (one of the categories) is predicated upon a subject: this subject must *already* be an οὐσία in order to be subject of predication of a predicate such as quantity or quality; in this view, the οὐσία herself becomes a *predicate for matter*, so that *matter is the subject of the* οὐσία. Just as an οὐσία can *potentially* obtain a predicative determination ("the cat is black"), matter can *potentially* become an οὐσία ("this matter is a dog"; and we should here consider the form as predicate).⁷

2. Potentiality and predication

We can now try to conceive matter as a fundamental function for Aristotle's theory of predication. As we have read in *Metaph*. Z, matter is *none of the possible predicates* (categories).

While the predicates refer to the essence, essence refers to matter. In other words, this means that essence can also be *the ground of predication* ("the dog is white", "Marco has brown hair", "Plato is older than Aristotle"), but matter can only be *either essence or nothing*.

Using Aristotle's jargon, we say that *matter is potentially an essence* (if combined with a form), otherwise it is nothing actual (pure matter *does not exist* anywhere).

3. Contradiction

3.1. A definitory introduction

Thus far, we have dealt with Aristotle's attempts to define matter and its position in natural beings. Now I will turn to his definition of contra-

^{6.} Aristotelis, Metaphysica, Z 3. 1029a20-25.

^{7. «}For Aristotle, 'actual' was a synonym for 'determinate'. What lacked actuality, or in technical language the potential, could therefore be positive. By establishing the concept of the potential as positive even though non-actual or indeterminate, Aristotle has been able to set up matter as a positive though entirely non-actual subject of predication. Because the potential is positive without being determinate, this concept of matter is possible to the human mind», writes Owens 1981, 46.

diction before I try to demonstrate my claim that contradiction should be intended as a particular sort of matter (of something particular).

The Aristotelian term which describes *contradiction* is ἀντίφασις; we can find its definition in *De Interpretatione*:

Let this be contradiction (ἀντίφασις), the opposing affirmative and negative sentences (κατάφασις καὶ ἀπόφασις αἱ ἀντικείμεναι) and I mean the opposition as the same upon the same (τοῦ αὐτοῦ κατὰ τοῦ αὐτοῦ) $[\dots]$.

We must firstly consider that the Aristotelian idea of contradiction is a *relation* between two opposed sentences: a contradiction, according to Aristotle, never takes place in only one sentence, as in "The cat is not-cat"; it is rather the result of the connection between two sentences in which *opposite predicates* are predicated upon *the same subject*: thus we might say that "The cat is black" and "The cat is not black" is an ἀντίφασις, i.e. the conjunction of an affirmative sentence (χατάφασις; "The cat is black") and the corresponding negative one (ἀπόφασις; "The cat is *not* black").

Secondly, we are to distinguish between contradiction and contrariety (ἐναντιότης) and other forms of opposition (ἀντικεῖσθαι). The main feature of the Aristotelian contradiction is related to the truth/falsehood of the two opposing sentences: the one is always true and the other is always false, and it is impossible for them both to be true or false, unlike contrary (ἐναντία) sentences.

It is evident that oppositions as affirmative and negative sentences are not opposed in the same way as the others: for it is necessary for them only that the one is always true and the other always false (ἀναγκαῖον ἀεὶ τὸ μὲν ἀληθὲς τὸ δὲ ψεῦδος αὐτῶν εἶναι). It is not necessary for contrary <sentences> that the one is always true and the other always false [...].

Contrary oppositions do not consist in the opposition of two predicates of which the one is the *exact negation* of the other; two contrary predicates can be predicated upon the same subject and, although two contrary sentences can never be both true, they can be both false: "The

^{8.} Aristotelis, Categoriae et liber De Interpretatione, 6. 17a33-35.

^{9.} Aristotelis, Categoriae et liber De Interpretatione, 10. 13a37-b4.

cat is black" is contrary to "The cat is white". These two sentences cannot be both true at the same time, but they can be false (the cat is actually grey).

3.2. Contradiction and predication

The previous observations have sufficiently shown that contradiction is possible only in a predicative context: as soon as something is said upon something (τ ì κατά τινος), this predication generates either truth or falsehood. Every statement of the sort τ ì κατά τινος has a corresponding opposite sentence of the sort τ ì ἀπό τινος: the ἀντίφασις subsists between κατά and ἀπό, that is to say, there is no contradiction without predication.

A contradiction is generated by the predication of two opposite predicates upon the same subject; this predicative structure produces the main feature of contradictory sentences so that the one must be true and the other must be false.

So far we can say that both matter and contradiction play a fundamental role in the predicative functioning. Matter is the ground on which essence is predicated, while contradiction is the result of the predication of opposing predicates. In order to bind the two concepts more deeply, we shall see how far contradiction is related to potentiality.

3.3. Contradiction and potentiality

It has been explained how contradiction depends on predication and this might after all result easy to conceive. I will argue now that contradiction is not only linked to potentiality, but also that they have the same ontological structure. In fact, this assumption cannot *eo ipso* be found in any Aristotelian work; it is, however, Aristotle himself who suggests such an interpretation, as it may be clear from the following passage of *Metaphysics*:

We have already said that the firmest opinion of all is that opposing sentences (τὰς ἀντιχειμένας φάσεις) [contradiction] cannot be true at the same time (ἄμα), what happens to the ones who say so and why they say so; [...] if then it is impossible to affirm and deny truly and at the same time (ἄμα καταφάναι καὶ ἀποφάναι ἀληθῶς), it is also impossible for contrary predicates to belong <to the subject>

at the same time, but either both in a certain way, or the one in a certain way and the other in a simple way. 10

If we look at the truth/falsehood of a whole contradiction, i.e. the two opposing sentences taken together, we can notice that they cannot coexist simultaneously, which means they cannot have the same truth-value. If we then consider the two sentences of a contradiction at the same time, we must realise that they are both true and false *potentially only*.

It is impossible for a contradiction to be *actually* predicated at the same time and in the same reference. In this sense we are to interpret the so-called "law of non-contradiction", whose meaning is still often misunderstood:¹¹ as long as we have a contradiction, this can only be in a potential status, that is to say, a contradiction cannot be an effective reality.

Matter and contradiction have turned out to be connected in their potential and predicative nature, but we could hardly state that they are one and the same thing, since matter was found to be ground for predication rather than predicate, whereas contradiction is a potential status of predication – two contradictory predicates are potentially predicated upon the same subject.

As it appears evident, we are supposed to comprehend how Aristotle describes the functioning of predicative processes if we aim to understand the connection between matter and contradiction; but it is essential to remember that Aristotle does not distinguish predicative processes as they happen in propositional contexts and generative or natural processes as they take place in the natural world: if we do not forget this assumption, the first book of *Physics* may reveal unexpected aspects of Aristotle's theory of predication and contradiction that would get lost with a distinct separation of nature and language.¹²

^{10.} Aristotelis, Metaphysica, Γ 6. 1011b13-22.

^{11.} Aristotelis, Metaphysica, Γ 3. 1005b19-20: τὸ γὰρ αὐτὸ ἄμα ὑπάρχειν τε καὶ μὴ ὑπάρχειν ἀδύνατον τῷ αὐτῷ καὶ κατὰ τὸ αὐτό [...]. We have tried to give an interpretation of this principle by observing Aristotle's usage of the term ἀρχή in Rincione 2013a.

^{12.} We fully agree with Wieland 1962's interpretation of Aristotle's method of studying natural phenomena: as the author points out, «[w]enn Aristoteles sprachliche Formen untersucht und sich dabei ständig auf ein $\lambda \acute{\epsilon} \gamma o \mu \epsilon \nu$ oder ein $\lambda \acute{\epsilon} \gamma \epsilon \tau \alpha \iota$ beruft, so

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4. The predicative process

4.1. Υποχείμενον and ἀντιχείμενα

It is now time to examine how Aristotle himself discusses and analyses the phenomenon of predication: this is the main subject of the first book of *Physics*, in which he seeks the elementary components ($\sigma \tau o \iota \chi \epsilon \tilde{\iota} \alpha$) of natural becomingnesses. It might therefore appear unusual that, as he searches for the causes of natural beings, he also deals with linguistic structures. "But we need to see how all this works in the language too", ¹³ that is to say, we must take into consideration that linguistic and natural phenomena happen in the same way or, even better, that we explain natural phenomena in linguistic terms.

untersucht er daher *unmittelbar zugleich* das in diesen sprachlichen Formen Gemeinte. Daher ist auch das Sprachliche für Aristoteles kein Bereich, der noch auf etwas außerhalb seiner verweisen würde. [...] Indem er sprachliche Formen untersucht, analysiert er also zugleich die Strukturen der Wirklichkeit» (1962: 145). In the same way, Berti 1989, 53 writes that «per Aristotele probabilmente il linguaggio era una specie di riflesso, o di pre-comprensione, dell'esperienza».

^{13.} Aristotelis, *Physica*, A 5. 188a30-31: ἀλλὰ δεῖ τοῦτο καὶ ἐπὶ τοῦ λόγου σκέψασθαι πῶς συμβαίνει. It is undeniable that here the term λόγος turns up abruptly in the discussion of the possible principles of nature. That Aristotle here refers to sentences of Greek language and not to any reasoned result, it may become clearer if we do not abandon the linguistic perspective of predication.

How does predication effectively work?¹⁴ What does it mean to predicate something upon something? This particular process is described by Aristotle with the usage of a new acuminous terminology: the nexus ὑποχείμενον - ἀντιχείμενα.

After these distinctions, we can assume this from every becoming, if we look at what we said, that there must always be something that lies under the becoming, and this is one numerically (δεῖ τι ἀεὶ ὑποχεῖσθαι τὸ γιγνόμενον, καὶ τοῦτο εἰ καὶ ἀριθμῷ ἐστιν ἕν) but not one for form – I mean the same with 'form' and 'definition' –: for it is not the same "to-be-a-man" and "to-be-unmusical", and the one [to-be-a-man] stays under, the other does not stay under: the not-opposing stays under (καὶ τὸ μὲν ὑπομένει, τὸ δ' οὐχ ὑπομένει· τὸ μὲν μὴ ἀντιχείμενον ὑπομένει) – the man stays under –, the not-musical and the unmusical do not stay under, and neither does the compound of them, for example "the unmusical man". 15

Aristotle describes the process of becoming in terms of *lying-under* and *lying-against*, ὑποχεῖσθαι and ἀντιχεῖσθαι: for something to become something else, it is necessary that something underlies and stays, while something else goes away from or comes into the underlying. We can try to somehow depict Aristotle's example:

[åvtí] opposing(+): musical opposing(-): unmusical [$b\pi \delta$] underlying: a man

^{14.} Up to now I have spoken of predication as one of the main topics of Aristotle's philosophy. Nevertheless we should remember that not all scholars are in agreement about the effective value of this aspect of Aristotle's thought. In several works, Charles KAHN 1966; KAHN 1972; KAHN 1973; KAHN 1976; KAHN 2003; KAHN 2004 has expressed the idea that the Greek verb ɛἰμί should primarily be interpreted as "sign of predication", so that « ϵ iμί can function as sign for the belonging of the predicate (i.e. attribute) to the subject quite in general, regardless whether the predicate phrase is provided by a copula construction or by any other verb in the language. This is the generalization taken for granted by Aristotle when he says 'Belonging (ὑπάρχειν) signifies in just as many ways as being (εἴναι) and as It is true to say this (is) that' (Pr. An. I.36, 48b2)» KAHN 2003, 396; on the other hand, DE RIJK 2002, vol. 1, p. 32 states that «to ascribe a subject-predicate analysis to Aristotle is anachronistic, and bound to lead to wrong assumptions and conclusions». I believe that Aristotle had a very complete theory of predication and therefore I find in Kahn's works a more convincing explanation of Aristotle's philosophy of language. A solution for this problem can be found in MATTHEN 1983, who has tried to bind predication and existence in the occurrences of the Greek verb εἰμί.

^{15.} Aristotelis, *Physica*, A 7. 190a13-21.

It is of utmost importance that the two opposing predicates be parts of a contradiction: something cannot become something else randomly, but only within a contradictory line (from + to - or vice versa): this is clearly stated in Aristotelis, *Physica*, A 5. 188a30-b11, where Aristotle denies that any process of becoming could be $\delta\tau\iotao\tilde{\upsilon}\nu$ èx $\delta\tauo\upsilono\tilde{\upsilon}\nu$ and els $\tau\dot{\upsilon}$ $\tau\upsilon\chi\dot{\upsilon}\nu$, but it only takes place between contradictory or, at most, contrary terms.

Whereas it is rather easy to understand that the ἀντικείμενα are here contradictory opponents, 16 the question now is: What is, strictly speaking, this *underlying subject*, the ὑποκείμενον? In the previous example it was *the man*, and it was defined as something *numerically* one, but not one according to the form or definition. What does this statement exactly mean?

The underlying is numerically one, but is two for its form – <it is> man, gold and generally speaking the *countable matter* (ή ὕλη ἀριθμητή): <this is> more like something determined, and the becoming does not become from it accidentally; or <it is> privation and contrariety as accident – [...]. This is why we can either say that the principles are two or that they are three (διὸ ἔστι μὲν ὡς δύο λεκτέον εἶναι τὰς ἀρχάς, ἔστι δ' ὡς τρεῖς) [...]. 17

The ὑποχείμενον is *some* matter. ¹⁸ But it is, more precisely, a determined type of matter so that it is possible to *count* it or to determine its quantity: this ὑποχείμενον must be *one* for quantity but it can acquire two forms; these two forms are the ἀντιχείμενα, i.e. a contradiction. Hence we can either say that the principles are two – ὑποχείμενον and the whole ἀντίφασις – or three – ὑποχείμενον, χατάφασις and ἀπόφασις.

Contradiction and *countable* matter are the primary constitutive elements of every process of becoming, which has in this view the structure of a sentence ($\lambda \acute{o} \gamma o \varsigma$) in which either of two opposite predicates can be predicated upon an underlying subject.

^{16.} In a formula we may resume that κατά(φασις) + ἀπό(φασις) = ἀντί(φασις).

^{17.} Aristotelis, *Physica*, A 7. 190b23-30.

^{18.} We do not mean to say that matter is, in every case, a 0π oxe(µevov. The 0π oxe(µevov is not *pure* matter because it is not *pure potentiality*: to some extent it is already an actual reality upon which either of the contradictory terms is potentially predicated, while pure matter is subject for the essence only.

4.2. Contradiction and meaningfulness

Any natural process of becoming must presuppose an underlying substrate upon which either of the contradictory terms can be predicated. ¹⁹ As Aristotle points out, it is impossible for a predicate to be predicated and not predicated upon the same subject at the same time and in the same reference (Aristotelis, *Metaphysica*, Γ 3. 1005b19-20: τὸ γὰρ αὐτὸ ἄμα ὑπάρχειν τε καὶ μὴ ὑπάρχειν ἀδύνατον τῷ αὐτῷ καὶ κατὰ τὸ αὐτό), which means that *only one* of the contradictory sentences can be true at one time.

This is *not* a law that a good legislator gave the whole world, but rather the essential condition that a sentence must fulfil to be *understandable*. ²⁰ In order to *understand* something, we need to *mean* something:

Not to mean one (something determined) is to mean nothing $(\tau \grave{o} \gamma \grave{a} \rho \mu \grave{n})$ en squainer où dèn squainer èstin), and if words do not mean <anything>, any dialogue among people perish, and actually also towards yourself: for it is impossible to understand anything but one $(o\mathring{v} d\grave{e} \gamma \gamma \grave{a} \rho \ \mathring{e} \nu \delta \acute{e} \chi \epsilon \tau a \nu o \epsilon i \nu \mu \gamma \nu o o \bar{v} \nu \tau \ e \nu)$.

If someone then says that *this* dog is white and not white at the same time and under *the same conditions* (white and not white exactly in the same part of the body), we immediately lose the sense of their words and we are allowed to ask: "What do you mean?". It is impossible for two contradictory sentences to be *effectively understood* at the same time.

^{19.} Dancy 1975, 79 also points out that language and world are firmly bound in Aristotle's theory of meaning: «This is the distinction we have to get across to Antiphasis: between something talked about and what is said about it. We could say: between subjects and predicates. But in putting it that way we have to bear in mind that the subject is not the word or expression that is the grammatical subject of the sentence uttered: when we say that Cleinias is wise, we are talking about Cleinias, the man».

^{20.} We may rather say that this $d\rho\chi\eta$ is the *shortest description* of the world and of language at the same time. A similar interpretation is given by Berti 1966, 83: «il principio di non contraddizione non solo esprime qualche cosa di reale, ma più esattamente esprime tutto il reale». See also Berti 1968 on the theological value of this principle.

^{21.} Aristotelis, *Metaphysica*, Γ 4. 1006b7-10.

There are, of course, people who do not agree with this statement and claim to say a contradiction meaningfully.

The starting-point against them is not to claim to say that something is or is not [...], but to mean something for themselves and for another: for this is necessary, if someone speaks (shuaívein yé ti xaì aûtỹ xaì ắλλ ω - τοῦτο yàp ἀνάγχη, εἴπερ λέγοι τι). And if they do not <mean anything>, then they will have no speech either for themselves or for someone else. But if someone admits this, then there will be a demonstration, because we will already have something determined. 22

The predication of a contradiction is *potentially meaningful*. As long as we do not choose either of them, the meaning of our words will be *pending*.

5. Matter as contradiction

5.1. Υποκείμενον and ἀντίφασις as potentiality

As we have already seen, *matter* is something potential. It is now noteworthy that both the underlying subject and the contradiction have a potential existence: the ὑποχείμενον is potentially the subject upon which either of the contradictory terms is predicated; contradiction keeps being potential until either of its components becomes truly predicated upon a subject.

We may say that they are both matter. But to what extent are they different kinds of matter?

5.2. The ὑποχείμενον as ὕλη αἰσθητή/ἀριθμητή

In only three passages²³ of his *Metaphysic* – and *explicitly* in no other work –, Aristotle draws a distinction between two kinds of matter: the one kind is matter that can be perceived ($\mathring{0}\lambda\eta$ $\mathring{a}\mathring{0}\eta\eta\tau\dot{\eta}$), the other

^{22.} Aristotelis, *Metaphysica*, Γ 4. 1006 a18-25. «Aristotle [...] certainly accepted the idea that our ability to communicate depends on our being able to say the same thing of different things [...] and the correlate idea that our ability to think, to talk to ourselves, depends on our being able to think the same thing about different things», writes Dancy 1975, 86.

^{23.} Aristotelis, *Metaphysica*, Z 10. 1036a8-12; Z 11. 1037a4-5; H 6. 1045a34-36.

kind is matter that can be thought or understood (ὕλη νοητή). What Aristotle actually means is not at first sight clear:

Matter is for itself unknowable. Matter can either be perceivable or understandable (5 η dè $\dot{\eta}$ mèn alord η th èstin $\dot{\eta}$ dè north, perceivable such as bronze, wood and movable matter (cinqth 5 η); understandable such as the <matter> which does belong to perceivable things but not as they are perceivable, for example in the mathematical objects. 24

We have already seen that the ὑποχείμενον is defined by Aristotle as *countable matter* because it has to be a determined quantity of matter; it is not hard to understand that it also belongs to the kind of perceptible matter, since it is a determined amount of matter which belongs to the natural world and hence to movable objects. Matter can be ἀριθμητή and αἰσθητή on condition that it is possible to sensibly perceive it in a determined quantity. Every ὑποχείμενον fulfils this condition, otherwise it could not be substrate of predication.

5.3. The ἀντίφασις as ὕλη νοητή of a sentence

But if contradiction has a potential nature as well, it has to be a kind of matter. My claim is that contradiction is understandable matter ($\u03945 \u0394 \u0394$

Aristotle himself describes the $\lambda \acute{o}\gamma o\varsigma$ as a compound of actuality and potentiality exactly after pointing out – for the third and last time in his works – that not every matter is perceptible:

^{24.} Aristotelis, Metaphysica, Z 10. 1036a8-12.

^{25.} The λόγος has a perceptible matter as well, which is voice ($\varphi\omega\nu\eta$). This is clearly stated in Aristotelis, *De generatione animalium*, E 7. 786b21-22: «voice is the matter of the language (τοῦ δὲ λόγου ὕλην εἴνοι τὴν $\varphi\omega\nu\eta\nu$)». Also Cassin and Narcy 1989, 51 makes explicit the "matérialité signfiante" of the λόγος, although she does not recognise contradiction as part of the matter of language. For the conceptualisation of voice in ancient Greek literature, see also Lachenaud 2013 and our review of this work (Rincione 2013b).

Matter can either be understandable or perceivable, and there is always matter [voice and contradiction] and actuality [meaningfulness] of the sentence (καὶ ἀεὶ τοῦ λόγου τὸ μὲν ὕλη τὸ δὲ ἐνέργειά ἐστιν).²⁶

It follows that ὑποχείμενον and ἀντιχείμενα are to be intended as two different kinds of matter that, if combined, constitute the basis of every process of becoming and predication.

6. Nature and language

6.1. The common principles of φύσις **and** λόγος

Contradiction (ἀντιχείμενα) and underlying subject (ὑποχείμενον) are described by Aristotle as the principles of nature. But if contradiction is something which takes place between two opposed sentences, i.e. between two sentences in which two opposed predicates are predicated upon the same underlying subject, it becomes clear that natural and linguistic processes have the same structure, and hence the same principles.

These principles are called *form, matter* and *privation* in *Phys.* A, while in *Metaph.* Γ Aristotle only uses the expression "firmest principle" to describe the functioning of them together; in particular: the $\delta\pi$ oxe(μ evov was found to be the $\delta\lambda\eta$ adodyth/drid $\mu\eta$ th of every process of becoming and predication, while contradiction plays the role of the $\delta\lambda\eta$ voyth of the same process; as actual results of it, we find on the one hand the exdox, which is not hard to recognise as a katárasic and as a positively connoted compound (suggestion), on the other hand the stérhsic, that is to say the correspondent aπόφασις or negatively connoted compound.

Aristotle did not write two different doctrines in *Phys.* A and *Metaph.* Γ , but rather he has shown how in natural phenomena the entire theory of predication and contradiction is to be seen as the deepest paradigm to understand such happenings at best. ²⁷

^{26.} Aristotelis, Metaphysica, H 6. 1045a33-35.

^{27.} OEHLER 1984, 10 describes the relation between physics and first philosophy as a mutual involvement: «Das Verhältnis von Physik und Erster Philosophie bei Aristoteles involviert ein Verhältnis partieller wechselseitiger Implikation bei spezifischer Aspektverschiedenheit. Von dieser Voraussetzung aus erscheinen Versuche, die

6.2. Φύσις and matter

My interpretation might hopefully reveal that the common opinion, according to which Aristotle considered matter as something evil in nature, is to be rejected. Matter has such a necessary role in nature that Aristotle affirms that, to a certain extent, matter *is* nature itself.

The cause that lies under the form of the becoming is like a mother (ή μὲν γὰρ ὑπομένουσα συναιτία τῆ μορφῆ τῶν γιγνομένων ἐστίν, ὅσπερ μήτηρ) [...], but this is matter [...]. Matter degenerates and generates somehow, but somehow it does not. As far as it is in something, it degenerates for itself (for what degenerates is in a state of privation); as far as it is potential (ὡς δὲ κατὰ δύναμιν), it does not <degenerate> for itself, but it is necessarily incorruptible and never-generated. And even it was generated, there must already have been something underlying from which it would be generated: and this is nature itself, so that it will be before being generated (εἴτε γὰρ ἐγίγνετο, ὑποκεῖσθαί τι δεῖ πρῶτον ἑξ οὕ ἐνυπάρχοντος τοῦτο δ' ἐστὶν αὐτὴ ἡ φύσις, ὤστ' ἔσται πρὶν γενέσθαι) – I define 'matter' the first underlying subject for any thing (τὸ πρῶτον ὑποκείμενον ἑκάστω), from which something is generated but not accidentally[...]. 28

6.3. Mater Matter

Matter plays so the role of a *mother*, whether it generates a natural being or a meaningful sentence. Matter and contradiction are therefore the ground on which both natural and linguistic processes take place, since Aristotle himself does not distinguish between world and word. This matter-contradiction expresses the full potentiality which can never be effective; but far from being sterile and unproductive, this is the real mother of *natural substances* (linguistically expressed by nouns or definitions) and *linguistic intelligibility*.

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Unabhängigkeit und Priorität der 'Physik' gegenüber der 'Metaphysik' nachzuweisen, als philosophisch bedeutungslos».

^{28.} Aristotelis, *Physica*, A 9. 192a13-32.

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