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ARTIGO I ARTICLE

Towards an artistic Account of Nature: Morphology, Hylology, Hylomorphism

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Abstract: A long philosophical tradition has claimed the fact that the concepts of *physis* and *techne* should remain radically distinct. But an equally important tradition has instead considered the question in less abstract terms. What can encourage us to rethink the question of hylomorphism is the radical rethinking of the terms at stake. How should the relationship between matter and form (two fundamental Aristotelian concepts) be thought? How should the distinction

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between *natural* form and *artificial* form be considered? The attempt that is proposed here is to consider art as the conceptual mediator that holds together a morphological determination of nature and a technical determination of art. 'Artificiality' should not be understood as the *opposite* of 'naturalness': *art* here means the possibility of thinking of *techne* already at work in nature, justifying the sense of a coming hylomorphism.

Keywords: Nature, Morphology, Art, Metamorphosis, Technology.

Introduction

Any attempt to give back a metaphysical determination to art seems to be condemned today on principle. The predominant view of our times seems to revoke both the legitimacy of metaphysics *per se,* and the legitimacy of a determination of works of art that is not encapsulated in the experiential effect they provide. An elementary etymological investigation invites us, however, to reflect on the fact that art, considered in its essence, seems to be located in a much broader range of meaning than that mapped out by the prevailing contemporary sensibility. When we make an attempt to determine the authentic meaning of the term 'art', it is clear to us that it does not primarily concern an 'artistic' determination, in a strictly 'aesthetical' sense. On the contrary, it has much more to do with the idea of the *production* of Being, the very idea of a production through 'artificiality'. This idea of 'artisticity/artificiality' must clearly be considered in its opposition to the idea of 'naturalness'. Thus, the idea of the 'artistic' dimension of things, that is, their dimension of 'artificiality' or 'artefactuality' comes to be consigned to the orbit of its metaphysically symmetrical pole, that is, the idea of 'nature'. In a challenging paradox for our metaphysical tradition, it is to physics that the task of answering the question 'what is art?' is entrusted. What is proposed here is a rethinking of the emerging criteria by

which we can draw the line between 'art' and 'nature', or – more precisely – between the artefactual and the natural realm.

Towards a Physic of Art

That the legitimacy of the question 'what is art?' has been challenged in our current philosophical debates cannot be denied. For our contemporary sensibility, this type of question commits the sin of essentialism: every inquiry into the presumed 'metaphysical' character of all 'objects of art' seems to be philosophically inadequate. However, this objection falls away if we keep in mind the fact that the determination of the essence of art, in the centuries of our philosophical tradition, has not been presented as a question concerning aesthetics, but rather concerning the power/ability (*dynamis*) of nature or human beings to produce things as such. In this sense, 'art' – as opposed to 'nature' – should be immediately considered within the broader diameter of a metaphysical theory of nature. It must therefore be borne in mind that the term 'art', in our philosophical tradition all the way through to Kant, does not indicate the ability to produce and consume those cultural objects imbued with 'aesthetic properties', but is the name that human beings have given to their 'poietic' ability, i.e. the ability to produce artificial objects. In the western philosophical tradition, the theory of 'art' has been conceived as a theory of 'artifice', as a philosophy of 'artificiality'.

What is *téchne*?

Aristotle wrote most perspicaciously on the philosophical connection between a theory of τέχνη and its correlated pole, that is, a theory of nature, a physics. It is not surprising that the clearest conceptualization of τέχνη produced in the ancient world is to be found in Aristotle's *Physics*. In that text, Aristotle makes an elementary distinction. In the whole circle of beings, it is possible to group things into two realms: on one hand, there are the φύσει ὄντα, the entities which are determined by φύσις, which are such 'by nature', 'by virtue of φύσις'; on the other hand, there are 'artificial'

entities, made 'by art', ἀπὸ τέχνης, products of human action, effects of ποίησις, ποιούμενα. At the beginning of Book B, Aristotle makes clear that "τῶν ὄντων τὰ μέν ἐστι φύσει, τὰ δὲ δι ᾽ἄλλας αἰτίας", ("of beings in general, some are 'by nature', others through other causes") (Arist. *Ph.* 2.1 192b8). According to Aristotle, the question of 'technicality' or 'artificiality' is to be considered immediately in connection with a theory of Nature (it is only with respect to a 'natural' generation that one can speak of an 'artificial' genesis/production). *Physics,* as the *episteme* that presides over the conceptualization of the production of Being as such, is contemporaneously *Metaphysics*: it is the supreme thought of the Western world,

> wherein Western historical humanity preserves the truth of its relations to beings as a whole and the truth about those beings themselves. In a quite essential sense, meta-physics is "physics", i.e. knowledge of φύσις (ἐπιστήμη φυσική) (Heidegger, 1998, p. 185)

Beyond Hylology

The distinction made by Aristotle between φύσει ὄντα and ποιούμενα does not constitute a simple analysis of differentiation and classification. At the center of his *Physics*, i.e. the fundamental Meta-physics of the Western World, there is a *kinetic theory of being*: the specific object of physics is the universal κίνησις, the general 'motility' of Being, the essential transformation from within. The task of Physics, far from drawing up a mere theory of 'matter' (which would then be a sort of 'hylology', a general theory of ὕλη – our modern Physics seems to be, in this sense, a hylology), lies in understanding this mysterious dimension that presides over the genesis, development and corruption of natural bodies. The philosophical operation of Physics comes from the fact that the tree is born from the seed, becomes encapsulated in the formal fullness of its ἐνέργεια, and eventually dies and decomposes. The object of Physics, according to the Aristotelian conceptual tradition, far from simply being the 'matter' (hyle), is the κίνησις of beings, the universal shaping force that operates in the birth/production and

development of things. Strictly speaking, we would not need Physics, if the totality of Being were 'immobile', if it were an 'ἀκινούμενον', not generated, not becoming, without γένεσις and without τέλος. This is why Aristotle writes, in book A of his *Physics*, that "ἡμῖν δ'ὑποκείσθω τὰ φύσει ἢ πάντα ἢ ἔνια κινούμενα εἶναι" ("we must have made clear that the *physei onta*, both in their totality and taken individually, are *kinoumena*") (Arist. *Ph.* 1.2 185a12-13). All 'natural' entities are intersected by the κίνησις, they are, in each section of their morphological process of becoming, traversed by a transforming force, which presides over their genesis, their encapsulation in the essential profile of ἐντελέχεια, as well as their decomposition (φθίσις).

What is Nature? – again

What, then, is nature – what is the meaning of the Greek concept of φύσις? Is it simply a collection of natural entities, of φύσει ὄντα, pragmatically distinct from artifacts? Certainly not. φύσις, according to an Aristotelian determination, seems to be the absolute field of universal κίνησις, the "void" that allows the general motility of beings. The physical and philosophical problem that arises here is not only the analytical determination of this κίνησις (what exactly is this general motility of everything? why does everything 'become' rather than remain in universal 'stasis'? has this cosmic metamorphosis a γένεσις and a τέλος?), but also the determination of the principle, of the command, of the ἀρχὴ, which presides over such motility. It is at this point that we encounter the decisive passage of the Aristotelian argument: "τούτων μὲν γὰρ ἕκαστον ἐν ἑαυτῷ ἀρχὴν ἔχει κινήσεως" ("each of them – each of the entities that draw from physis what they are and how they are – has in itself the *arché* of the *kinesis*") (Arist. *Ph.* 2.2 192b13-14). It is easy to understand that the essential determination of a natural entity must have *within itself* the principle, the command, of its own transformation, the origin and the code of its metamorphic development. An "original command" (*arché*) is embedded in the essence of the natural entity, a point of kinetic insurgency which presides over its 'animation'. "φύσις" – writes

Heidegger about this central Aristotelian argument – "is the ἀρχὴ, it is the beginning and disposition of motility and stillness, and precisely of something 'moved' that has *in itself* this ἀρχὴ" (Heidegger, 1998, p. 191). He went on to underline that the "φύσις is ἀρχὴ κινήσεως – the provision that initiates change, in the sense that everything that changes has this provision within it" (Heidegger, 1998, p. 192).

Téchne between Art and Technology

What, then, is τέχνη, 'art'? τέχνη is nothing but the ἀρχὴ κινήσεως of the artifacts. The artificial entity, the entity made such by virtue of a 'poietic', 'artistic', 'technical' disposition, is certainly an entity intersected by the κίνησις, but the origin, the command of its genesis and its motility are not embedded in its essence, but "come from outside". The poietic disposition – the human capacity to create artificial entities – is thus 'outside' the space of natural κίνησις, it transgresses the command that presides over the birth, development and corruption of entities that are 'by nature'. This metaphysical determination of nature is the background that allows us to understand the authentic meaning of the term 'art'. This 'origin' cannot in any way be a historical threshold, a point of insurgence in the past of human 'creativity': it is rather a differential device of metaphysical order, which gives rise to the intimate 'command' that forces matter to take on an 'unnatural' form. 'Art', in the western philosophical tradition, is the name given to this transgression of natural *kinesis*, this human power to 'make appear', in the circle of what exists, entities that do not have within themselves the principle/command of their own genesis and metamorphosis.

Kinesis

What does the universal κίνησις preside over? What is this metamorphic force that passes through all entities? How should nature be understood, considering this essential connection with the idea of an original 'transformative' command? The φύσις, in this

sense, is nothing other than "the disposition that initiates the motility (κίνησις) of a becoming entity (κινούμενον)" (Arist. *Ph.* 2.2 192b27-28). Aristotle, in a later passage, clarifies how the determination of φύσις should not be limited to a theory of matter. The latter, understood as a 'hyletic', or a 'hylology', introduces two fundamental philosophical aspects: firstly, that the essential question of physics is the κίνησις and its ἀρχὴ, and not the constitution/composition of 'matter' as such; secondly, that the determination of φύσις originally implies the concept of μορφὴ, of 'form': ὥστε ἄλλον τρόπον ἡ φύσις ἂν εἴη τῶν ἐχόντων ἐν αὐτοῖς κινήσεως ἀρχὴν ἡ μορφὴ καὶ τὸ εἶδος ("So, in another way, the physis would be the eidos, the morphé, of those [entities] that have in themselves the *arché* of [their] *kinesis*") (Arist. *Ph.* 2.2 193b3-4). Every theory of φύσις implies that the μορφὴ has metaphysical precedence over ὕλη, and that φύσις is μᾶλλον [μορφὴ] τῆς ὕλης: μορφὴ is therefore 'more φύσις' than matter can be. Why? Because, in some way, "the μορφὴ satisfies the essence of authenticity better than ὕλη" (Heidegger, 1998, p. 209). Matter, according to this Aristotelian conceptualization, is what is 'available' to form, what it is 'subservient' to it.

Poiesis

But this very ambivalence also makes it impossible to ascribe to it the possibility of determining the essence of entities: the latter must be ascribed to the μορφὴ, which guarantees, in a more essential way than the ὕλη, the determination of 'what a thing properly is'. There is, therefore, an original link between the entrance of the entity in the presence (its breaking into the space of truth, "ἀληθεύειν") and the installation of matter in form. Giorgio Agamben outlines the problem in this way:

According to Aristotle, the production made by ποίησις always has the character of the installation in a form (μορφὴ καὶ εἶδος), in the sense that going from non-being to being means assuming a figure, assuming a form, because it is precisely in form, and starting

from a form, that what is produced enters the presence (Agamben, 1999, p. 37)

How can 'art' be based on these conceptualizations? τέχνη is the ἀρχὴ of κίνησις of ποιούμενα, it is the principle/origin/command that presides over the transformative motility of artificial entities, of artifacts. What must always be kept in mind is that, for Greek thought, ποίησις, the act on the basis of which something is produced implies a passage from 'non-being' to 'being', the appearance, in the circle of the totality of beings, of a 'new' thing. A famous passage from Plato's *Symposium* clarifies the question: "What then is *poiesis*?" Ἡ γάρ τοι ἐκ τοῦ μὴ ὄντος εἰς τὸ ὂν ἰόντι ὁτῳοῦν αἰτία πᾶσά ἐστι ("it is any cause capable of inducing an entity from non-being to being") (Pl. *Smp.* 205b). Many philosophers see in this Platonic passage the decisive question of metaphysics *tout-court*. Western thought has imagined this act as a ποίησις, as a poietic act: an entity enters into being thanks to the action of ποίησις.

Genesis

As Agamben reminds us, it is therefore evident that "nature, the φύσις, in as much as everything in it is spontaneously brought into existence, also has the character of ποίησις" (Agamben, 1999, p. 37): the poietic process presides over the appearance of all things, obliterating the previous Aristotelian distinction between natural bodies and artifacts, however close that distinction seemed to be to common sense. But there is another problem. At this point, it is no longer clear in which sense the relationship between φύσις and τέχνη should be understood. This is the radical question posed by Heidegger, when, on the basis of Aristotelian solicitations, he asks whether it is possible to think of φύσις as a certain application of τέχνη. The problem is presented as a dispute over the genesis of Being, or rather as the problematization of the idea of γένεσις as such. How should γένεσις be thought of? Heidegger focuses on a famous passage of *Physics* that resembles a truism but actually hides a fundamental problem. Aristotle states: ἔτι γίγνεται ἄνθρωπος ἐξ ἀνθρώπου, ἀλλ 'οὐ κλίνη ἐκ κλίνης ("Besides, a man is born of a man,

but a bed not of a bed"; Arist. *Ph*. 2.2 193b8-9). And so, freely translating, Heidegger comments:

> Moreover, in the context in question, it is the birth (γένεσις) that is different for man and the bed, that is for the φύσει ὄντα and for the ποιούμενα, for the natural bodies and for artefacts (Heidegger, 1998, p. 198)

Technica naturalis

Heidegger hypothesizes that, in the Aristotelian passage reported, two ways of birth were in opposition: there is the 'natural' birth/genesis that causes a man to be born of a man, as if their μορφὴ were transmitted and confirmed in the subsequent genesis of men; and there is the 'unnatural' or 'technical' birth/genesis, which installs *hyle* in the essential eidetic profile of the table. But this 'installation' is in no way transmission 'from within', a form that operates internally and productively in the heart of the thing. Heidegger sees danger in confusing the two levels, in confusing the two poietic processes. He fears that this position misunderstands the φύσις "by reducing it to a self-made artifact", as if the only way to conceive of nature was to think of it as a kind of τέχνη. This fear is all but realized when Heidegger turns his thoughts to the fate of modern metaphysics, hinting between the lines – something very rare in his work – at the Kantian *Critique of Judgment*:

> That almost seems to be the case, because modern metaphysics, in the impressive terms of, for example, Kant, conceives of 'nature' as a 'technique', such that this 'technique' that constitutes the essence of nature provides the metaphysical ground for the possibility, or even the necessity, of subjecting and mastering nature through machine technology. (Heidegger, 1998, p. 220)

This Heideggerian passage, even in its one-sided view, poses a decisive question. It seems that, for Heidegger, reactivating an original determination of φύσις immediately involves removing nature from a 'metaphysical' or 'proto-scientific' conception that

would conceal its true essence. This misunderstanding of the metaphysical tradition lies in attributing to nature an originally 'technical' character, an attribution that would pave the way, according to Heidegger, for the planetary domination of modern technology. In these pages, Heidegger radically supplants the most reliable theories that philosophical thought has elaborated on the problem of modern technology: firstly, the theory according to which technique has the character of a prolongation, of a prosthesis of nature; secondly, that technique is the compensation for a lack of human praxis. Considering these pages, it is clear how much more radical is Heidegger's reflection on technique: he understands that the problem of technology can in no way be resolved in a sort of phenomenology of 'technicality', but rather that the problem lies in the intrinsic presence, *in nature itself,* of a 'technical-technological' element. According to Heidegger, modernity reaches its climax precisely when Kant sketches the hypothesis of a '*technica naturalis*' operating in nature itself, and it is from this foundation that the great and disrupting enterprise of modern technology begins.

Zoology

It is now clear that it is no longer possible to think of τέχνη along the lines of Aristotelian conceptualization, according to which it simply presides over the γένεσις of artificial things, instead imagining that, in some sense, τέχνη is already operating within nature. It is against this 'dangerous' metaphysical determination that Heidegger tries to warn us. τέχνη can certainly be understood as the ἀρχὴ κινήσεως of the ποιούμενα, but the technical destiny of man, the inevitable human transgression in 'artificiality', seems to include nature itself, forcing a technical aspect right into the heart of φύσις, which would pave the way for the banishment of metaphysics to the planetary domain of Technique. Nevertheless, the determination of φύσις – as Heidegger seems to suggest – cannot in any way be thought as an 'autopoietic' activity of natural entities, because, as we have seen, ποίησις should not be understood as the mere irruption of the entity from nothingness to being, as the encapsulation of matter

in a form: the birth of the natural entity is similar to that determination, but distinct from it. In those pages, Heidegger suggests that it is true that the same ποίησις appears to be operating in the genetic κίνησις of things, but the γένεσις of φύσει ὄντα also preserves the sense of a 'hatching', of 'taking root in itself' in order to 'develop' and 'blossom'. These processes are essentially distinct from the mere 'arrangement' of wood into the table εἶδος. If it is denied that the φύσις can be thought of as the totality of the 'natural' artifacts 'that make themselves', writes Heidegger:

> Then it would appear to us that doing, ποίησις, is a kind of producing, while 'growing' (returning in itself to self-enclosure [*das In-sich-zurück-, Aus-sich-Aufgehen*]), φύσις, it is another. Here 'pro-duction' cannot mean 'to make', but to place in the revelation of the aspect, to bring it to the presence, to present itself (Heidegger, 1998, p. 221).

If the whole of Western metaphysical tradition can be read as a gigantomachy around the question of the genesis of Being, the issue of the stasis between a 'physical' determination and a 'technical' determination of the ἀρχὴ κινήσεως becomes a decisive question. It is the issue of the γένεσις of things that bears the weight of the fundamental metaphysical question: "why is there something rather than nothing?" In those passages, Heidegger focuses on the question of genesis, stating:

> In γένεσις the production is in all respects the coming to the presence of the same appearance, without the addition of an instruction and an aid that characterizes every "making" (Heidegger, 1998, p. 222).

Furthermore, 'what produces-itself' does not need to wait for a poietic operation in the sense of a '*Mache'*, of a 'making'. If the natural thing needed it – Heidegger adds, not without irony – "this would mean that an animal would not be able to reproduce if it were not master of its own zoology" (Heidegger, 1998, p. 222).

Creating Nature

In this light, a fundamental passage of Aristotelian *Physics* where it is said that ἔτι δ 'ἡ φύσις ἡ λεγομένη ὡς γένεσις ὁδός ἐστιν εἰς φύσιν ("and also the *physis* should be understood as a *genesis* and a *path* towards *physis*"; Arist. *Ph.* 2.2 193b12) can be better understood. It is now possible to formulate a more convincing determination of φύσις: φύσις is certainly not the mere circle of natural entities, distinct from artifacts; the φύσις does not even coincide with the mere circle of 'self-made' entities, as if they were 'natural artifacts' to which a command of autopoiesis was attached. According to those decisive words by Aristotle, it should instead be understood as an infinite generative process, the essential circulation of the genesis of Being, which celebrates, in the birth of each of its 'products', the power of the ἀρχὴ κινήσεως in seeking out itself.

In this sense, φύσις becomes a sort of ὁδός εἰς φύσιν (that is, according to Heidegger's interpretation, a path "of what is available to itself as what is to be produced, so that the installation itself is all of kind with that which arises and which is to be produced"). φύσις is therefore intended as the procedural space in which things, at the height of their κίνησις, are installed in their μορφὴ, in their eidetic profile, but in this κίνησις the same process of nature is always at work, a sort of infinite circulation of its γένεσις, the path that leads from nature to nature. We can now draw two conclusions: on one hand, this idea seems to give a metaphysical foundation to every "morphology", that is, to the idea that φύσις, being essentially μορφὴ (ἡ ἄρα μορφὴ φύσις) rather than ὕλη, should be thought of as *starting* from its *forms*; on the other hand, it seems to negate the possibility of any 'genetic technicality' of the natural entity (if φύσις coincides with this infinite circulation of its own genesis, an inherent process lying within itself, no external 'process of making' can preside over the genesis of its 'products'). The solicitude with which Heidegger challenges modern metaphysics, and in particular the Kantian *Critique of Judgment*, seems to be motivated by the idea that ascribing a technical character to the genesis of natural entities,

projecting human poietic operations onto the φύσις, would be a conceptual aberration.

Art as a conceptual Mediator

It is perhaps possible to raise a convincing philosophical objection to one point of Heidegger's argument. In his conceptualization of τέχνη, there is a conspicuous omission, i.e. the conceptual triangulation with the Latin concept of '*ars*' (art), essential unless the metaphysical determination of nature is to be altered. On one hand, the term *ars* draws on the Greek the meaning of 'artificiality' or 'technicality', close to the essence of τέχνη, but, on the other, it corresponds to a sense of the seductive 'artisticity' of beings. What Heidegger seems to conceal is the sense of a 'technicality' of the natural entity that does not necessarily involve the destruction of φύσις' purity, but speaks to the idea of an 'artisticity' – a sort of an artistic conformation or articulation – of natural entities, entities whose κίνησις is originated by a 'natural' emerging process, but which – at the same time – exhibit, in their forms, an 'artistic' modulation of their profiles and their morphological configurations. It is precisely this 'artistic' character of the natural entity – their secret hylomorphism – that is ousted by Heideggerian argument. It should not be forgotten, however, that a long philosophical tradition has defended the idea that it is precisely from the intersection of the 'natural' dimension with the 'artistic-artificial' one that it is possible to have access to the authentic understanding of Being. It could even be said that the Western metaphysical tradition in Heidegger's sights (and to which he perhaps unconsciously belongs) has been hypnotized by the issue of the essential *genesis* of things, forgetting the issue of their '*formativity*', the issue of the enigmatic 'artistic' determination of their morphological configurations. Despite Aristotle's clear intention to determine Physics as a theory of μορφὴ and not of ὕλη (a *morpho*-logy and not a *hylo*-logy), in our tradition of thought, the idea of a "Physics" as "Morphology" never really took hold, and morphology as such, despite the admirable attempt by Goethe, has never been able

to establish itself as a *strenge Wissenschaft*. Analysis of matter has been pushed to its utmost limits: what we need to do is imagine a reconciliation between matter and form, between *hyle* and *morphé,* between physics and morphology. 'Hylomorphism', by its very name, brings these two polarities together. And, surprisingly, a determination of art reconciled with natural sciences could act as a conceptual mediator between these poles.

Again on *ars*

The "works of nature" seem to place themselves in another dimension than this anthropic action: they grow from within, they grow in themselves, on themselves, by themselves, difficultly detaching themselves from a physical Unity, from the genetic totality that precedes them, that makes them grow, that supports them and that brings them back to it (i.e. the Greek determination of φύσις). But we have already seen how the differential threshold between these two dimensions (the artistic dimension and the physical dimension) becomes problematic in front of some entities that, while natural, seem to exhibit an "artistic", i.e. "technical", "human" configuration; and, symmetrically, it becomes problematic in front of those "artistic" entities that tend to mimicry with nature, which strip off human poietic determinations to rejoin an "absolute" natural "formativity". If our philosophical tradition has called "art" the concept of the "technical" difference of human doing, how must the possibility of their ultimate μίμησις be determined? How should "art" be conceived, if it no longer holds the fundamental signature of a "technicality" opposed to nature? Do we still know what "art" is, if it is no longer the absolute name of the "artistic" and "artificial" character of Being? To clarify once again the difference between τέχνη and *ars*: τέχνη and *ars* seem synonymous, they seem to identify two identical things, namely the technical-artistic transgression of human doing. But if τέχνη is a term that evokes the problem of "technicality", or rather the mere technical genesis of reality, *ars* instead appoints, in addition to the technical dimension of the genesis of artificial things, their artistic configuration, which can be

morphologically seductive. Art thus becomes the place where human beings question the "artistic" configuration of nature, the morphological configuration of Being.

Arché kinéseos

Is it therefore possible to draw up a definition of art, starting from the premises developed so far? Looking back at the Aristotelian definition of τέχνη, we can agree that the term '*ars*' also determines the differential threshold between natural entities (the φύσει ὄντα) and artifacts (the ποιούμενα). With a clarification: the term 'art' corresponds to that type of ποίησις that masters the κίνησις of every artificial entity, but this determination does not seem to be entirely included in a 'technical' determination of things. Somehow, the term 'art' seems to indicate the sense of an intimate 'articulation' of things, revealing a mysterious 'intention' in their formal configuration, the impossibility of ascribing their internal 'design' to pure chance. All these features have nothing whatsoever to do with intentionality – in the strict philosophical meaning – indicating 'purposes' or 'uses' or 'means', for the simple reason that these characters also seem to operate in natural entities. What appears to emerge from Heidegger's Aristotelian interpretation is the idea of a dispute between φύσις and τέχνη, as if a metaphysical enmity were raging between these two terms: we cannot avoid the impression that τέχνη, in that context, functions as the 'opposite' of nature. Not only is τέχνη defined *by difference* from nature, but it has been clarified that it is also misleading to determine nature on the basis of some intimate 'technical' trait. It is clear that the fundamental question concerns the essence of γένεσις, that is, the ἀρχὴ that presides over every ποίησις, be it natural or artificial.

The Peacock's Tail

If the fundamental metaphysical problem of the rational justification of the presence of Being as a whole is linked to the justification of its 'formative' nature, its problematic morphogenesis, then it is possible that art, far from being a merely anthropic practice,

becomes the decisive term for considering the ultimate issue of Being morphological configuration. In an era in which Technology certainly represents one of the predominate historical forces, it is perhaps useful to think once more of art within the greater context of Nature, and to reflect more analytically on the nexus that envelops, in a triple knot, what we – still vaguely – call 'nature', 'art' and 'technology'.

'Art', in this sense, could represent the conceptual mediator between physis and techne, indicating the ξυνὸν – the common trait – overarching the two poles, and becoming the ideal place in which those two polar terms are conceived in their essential nexus. What must be analyzed is precisely the degree of 'artisticity' of natural entities that human thought recognizes in them, and it is when faced with the problem of the morphogenesis of φύσει ὄντα that the matter enshrined in the question 'what is art?' acquires all its urgency. Perhaps it is precisely because of this surprising symmetry between φύσις and τέχνη that the essence of art corresponds to the relationship of human intelligence to the shape of a crystal, to a peacock's tail, or to the twisting contours of a shell.

Metamorphosis

The third book of Ovid's *Metamorphoses* contains an instructive recurrence of the term *ars*. Generally, the term *ars* seems to operate as a conceptual mediator: on one hand, it shares the meaning of the term τέχνη, constituting a valid translation of the Greek semantic field to which it is related, but, on the other, it provides the verbal matrix of the word 'art' in modern languages. Even more than the term τέχνη, the term *ars* seems to preserve a useful ambivalence of meaning, fluctuating between a 'technological' production and an 'artistic' configuration, between a 'scientific' and an 'aesthetical' dimension. Ovid's passage, not easy to translate without altering its original poetical and conceptual tension, plays wittily on all the word registers. The verses quoted evoke the myth of Actaeon, the hunter who, having entered a wood sacred to Diana, is punished for surprising the goddess in her nakedness. The symbol of the man who

sees the divine 'face-to-face', Actaeon is transformed into a deer and his dogs, not recognizing their master, pursue him and tear him to pieces.

> *Vallis erat piceis et acuta densa cupressu,*
> *nomine Gargaphie, succinctae sacra Dianae,*
> *cuius in extremo est antrum nemorale recessu*
> *arte laboratum nulla: simulaverat artem*
> *ingenio natura suo; nam pumice vivo*
> *et levibus tofis nativum duxerat arcum*
>
> (Ovid *Met*. 3 155-159)[1]

The description of the landscape, a fundamental model for Renaissance imagery, is a fine example of *locus amoenus*. The poet places the scene in an unspoiled valley, somewhere between a sacred wood (the *nemus* evoked by the adjective *nemoralis*) and a garden. The place is called 'Gargaphia' and is consecrated to Diana. In its innermost and inaccessible recess, in the most sacred inner point of the wood (*in extremo nemorale recessu*), there is a cave (*antrum est*). The cave/*antrum*, writes Ovid, is *laboratum*. It is certainly the product of a '*labor*', it is 'worked', 'elaborated': it is the product of a creative effort, of a 'work'; but it is also placed, geographically and conceptually, in a place untouched by human hands. It represents an effect of a mysterious 'labor', of a 'making', and yet this work can only be *natural*, '*naturalis*': such an entity can only be 'born by itself'; an internal 'labor', an intimate natural work must have presided over its genesis, its formation, its production.

Ovid specifies that this cave is worked *arte nulla*, "without art". The exact translation of this expression would require penetration into the ancient conceptualization of 'art', and in the original resonances of the word 'τέχνη'. "With no art" means that no artificial or human intervention, no external molding force has determined its form. The cave is a natural entity, it belongs to the order of the φύσει ὄντα, embedded in the realm that Aristotle had so clearly distinguished from ποιούμενα. However, its form seems to elude the human

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[1] Translation follows in the text.

faculties and we see, in the regularity of that configuration, the signs of an 'unnatural' ability, the traces of a human, artistic, artificial intervention. The cave seems to be an artifact, an '*arte-factum*', it seems to be 'artful', it seems to possess the character of the 'artifice': however, it is produced "*arte nulla*" ("with no art"). The cave looks artificial, it looks like a 'work of art', but it is not: it is the technical cogency, the artistic configuration of its form that makes its origin elusive.

Morphology

The 'artificial' production of a thing is determined on the basis of 'art' and the capacity according to which the artificial production of the entity becomes possible is symmetrically named 'art'. Are we not moving in a circle? Thinking about art means to investigate the metaphysical mechanism that is at work in its essence. This determination must be related to a precise determination of its opposite pole, or of that creative and shaping force that articulates from within the origin and form of the entities, that is, nature, φύσις. The imitative polarity between nature and art did not stem from the problems of aesthetics: it is embedded in the lexicon of metaphysics, since it pertains to the way in which entities as such are produced, and by virtue of what force they take on a certain form. Greek metaphysics leaves no doubt: to clarify the essence of art, it is necessary to draw up a philosophy of nature. There can be no philosophical determination of art unless it is symmetrically elaborated through a philosophy of nature, of φύσις. Perhaps, when aesthetics reconsiders its essential connection with physics, we will embrace the original determination of art. An 'artificial' entity (which is, from this point of view, simultaneously both 'artistic' and 'technological') is determined by its 'blooming', transgressing the metaphysical threshold drawn between nature and art. The term 'art' indicates the transgression encapsulated within the verb φύω. No doubt that Ovid's cave is a natural entity (it is a mass of rock, lost in a thick wood); no doubt that the ἀρχὴ of its κίνησις is inscribed in the order of φύσις. Nevertheless, something mysteriously 'artificial'

seems to have produced its configuration: its shape and its genesis do not appear sufficiently 'natural' to be classified as a natural entity. We should then try to answer the fundamental question: which traits suggest to human perception the positive and '*non-naturality*' (i.e. the technical and artistic) features of a thing?

We then begin to understand that τέχνη does not simply represent the 'opposite' of φύσις, it does not only mean a type of kinesis different from 'natural' kinesis: τέχνη seems to constitute a transversal level that crosses both nature and art (both the configuration of φύσει ὄντα, and that of ποιούμενα). The problem then arises of determining not only the absolute difference between 'natural' and 'artificial' production, but also which kind of 'engineering skills' preside over the configuration of beings, as if an internal structure of productive potentialities were embedded in Nature itself. The field of 'art' is so close to 'nature' that it evokes a new synthesis of possibilities between the 'aesthetic' and the 'scientific' realms. Only by granting this hypothetical synthesis can we imagine morphology as a new '*scientia prima*', a fully scientifically-acknowledged science, according to the indications of Goethe. Human beings seem to be endowed with the faculty of recognizing the 'naturalness' of an entity but, at the same time, they can discern whether a natural body bears sufficiently 'artificial' features to shape the determination of its origin, or to render the grammars of its production highly problematic (or even impossible). The contemplation of a form seems capable of triggering in human intelligence the question about the origin of things, and the very process of their production.

A new Ontology of Art

Close to the essence of Aristotelian metaphysics, a conceptual interweaving binds the form/μορφὴ to its οὐσία (ousia, essence) and its ἀρχὴ (that is, the ἀρχὴ of its κίνησις). Human beings seem to possess the faculty of deducing the origin of beings from their forms, shapes and configurations. Metaphysics can be understood as the

nexus of those three words. What else is metaphysics, if not a general theory of κίνησις, for determining the essential link between a thing's ἀρχὴ, its μορφὴ, its οὐσία and its ὄνομα? The shapes of things exert a specific pressure on man's ability to orient himself in the world, to be able to deal with things, to imagine functions from forms.

At stake here is not only the 'technical' problem of the origin of things (it is not only the metaphysical problem of establishing the ἀρχὴ of the κίνησις of things, at play), but also a question of 'aesthetical' order, in the sense that what fascinates human judgment is the complexity of natural entities, their regularity, their mysteriously 'artistic' features, the harmonic cogency of their parts, their beautifully-shaped configurations and their metamorphoses. The 'aesthetic' or 'artistic' phosphorescence emanating from certain natural entities originates from the 'quantity' of τέχνη that we assume is operating in its morphogenesis. In line with that, we can even say that τέχνη presides over an immanent engineering articulation of nature, an organization that allows certain natural entities (regularly shaped caves, pieces of wood that appear to be rough-hewn, shells with elegantly curled shapes...) to impose themselves as artistic and technological entities, exhibiting an enigmatic naturalness drawn from human art. Hylomorphism is the name we give to the problematic artistic presence seen through nature's productions. A general theory of hylomorphism should combine an artistic account of nature (i.e. an aesthetic theory of natural forms), an Aristotelian determination of μορφὴ, a specific interpretation of Kantian *Critique of Judgment* and Goethe's morphological writings. In this way, morphology would not have a simple descriptive character of the morphogenesis and metamorphosis of entities, but would become an attempt to understand nature as *process* and *form*.

Nature's Genius

Human beings and nature reciprocally play with the possibility of disguising the origin of things, pretending that the 'artistic' object could be a product of nature, and, vice versa, that a product of nature could be an 'artistic' object. The question of μίμησις, a fundamental

conceptual device with a glorious history across the centuries, does not represent so much the problem of 'imitation', in the broader sense of the term, but it is rather connected with the problem of *simulation, camouflage, mimicry* (in the strong sense – and not simply 'aesthetical' – of animal mimicry, in the sense of a real 'simulation'), which reactivates the artificial thing features in the productive logics of nature. The essence of μίμησις would therefore be determined as the tension, the effort, of canceling the artistic/artificial aspect of things, to simulate, without any fractures, the uniform natural biological growth of 'physical' beings, removing those signifiers that could mark the positive, poietic, technical, anthropic aspect of things. It can be said that art is 'camouflaged' in nature, insofar as, on the stage of Being, artistic objects – like 'artificial' chameleons – 'disguise themselves' as natural entities, acquiring the traits and production processes of nature. In two following lines, Ovid, with both an ironic and explanatory tone, identifies the philosophical tension of this mimetic reversibility of nature and art:

<div style="text-align:center">

simulaverat artem
ingenio natura suo. (Ovid *Met.* 3 158-159)

</div>

In 'producing' the cave, Nature "has simulated", "has imitated" art, through a paradoxical conceptual reversibility between physis and techne. The long-debated question of μίμησις of nature and art seems to be summarized in those five words: they clarify how imitation, in this way superseding aesthetics and approaching a real theory of form, works as an imitation of a genetic and formative process. Once again, the field of aesthetics is transcended into the higher field of physics and metaphysics. Not satisfied at the philosophical density of those verses, Ovid offers us the theoretical possibility of a curious reversibility of the relationship between nature and art. Subverting the tradition, it is not 'art that imitates nature' (*ars imitatur naturam*) here, but it is nature that imitates human productive activity. Following the consequences of this paradox, nature, which seems to abide by an original blindness in the formation process of things, is here sketched out as what imitates the human (technical and artistic) productive capacity. What is a

consequence (art), in those Ovidian lines, functions as a causal entity (nature). Moreover, nature, in producing the cave, has imitated art *ingenio suo*, "with her own talent", "with her genius" (the Latin ablative is quite vague on the effective determination of the operation). Nature seems to have produced, sculpted and elaborated the cave by virtue of an intimate engineering, by virtue of an immanent genius, by virtue of an '*in-genium*', ideally related to the human 'genius' that presides over the production of art.

Here nature seems to obtain an intimate and secret ability to design the shape of natural entities, sharing with human beings the same ability to product artistic objects. Kant dedicated the final pages of his *Critique of Judgment* to this intricate question. In a *crescendo* of philosophical cogency, Ovid explains that nature has drawn an arch "with live pumice and light tuffs". It is worth mentioning the two adjectives that 'vivify' and 'lighten' the inert mass of stone, conferring a biological vitality to the rock. The poet connects the term '*arcum*' with the adjective '*nativum*', in which the semantic field of '*nascor*', of 'nativity' clearly resounds, transferring to the poetic image a further determination of natural life, of biological growth, of generative spontaneity:

> nam pumice vivo
> et levibus tofis nativum duxerat arcum.
> (Ovid *Met*. 3 158-159)

To attribute lightness and vitality to a block of 'native' rock means transferring to the mineral domain typical traits of the biological domain, porosity of ontological levels and materials, that are at the center of the global construction of the *Metamorphoses*. In fact, the whole poem suggests the philosophical inconsistency of the expression 'inanimate thing', postulating – in thousands of Latin hexameters – the picture of a cosmic life, Being's total animation, the symphonic interpenetration of the most diverse ontological morphological levels of things and bodies.

Conclusions

Modern determinations of art currently tend to overshadow that philosophical tradition which, rather than establishing the absolute difference between the two realms of art and nature from a metaphysical point of view, plays with those liminal areas in which the production of things mutually mimetizes. It is clear that the great theme of 'imitation', which for centuries has determined the way we look at 'art' (and therefore the way we deal with 'technique'), loses its abstractly 'aesthetic' features, and resumes its authentic value as reciprocal *camouflage*. The metaphysical theme of the genesis of things gives way to a determination that preserves the ontological enigma of its 'absolute generation', but which is also enriched by the quality of the 'formativity' of things. The fundamental question 'why is there something rather than nothing?' should be broadened into the question 'why has what exists been constituted and articulated in this way and not in another?' What morphogenetic processes preside over the formation of the entire constitution of Being? It is not only a question of analyzing the genetic and metamorphic grammars of the production of things, but also demands reflection on the origin of those processes. The question of *form,* of *metamorphosis* and of *morphology* is therefore pulled into the orbit of a radical question about the ἀρχὴ of Being. It is only at this metaphysical level that the question about the essence of 'art', of 'nature', of 'form' and of 'matter' retains its philosophical fascination.

Bibliography

AGAMBEN, G. (1999). *The Man without Content*. Stanford, Stanford University Press.

ALEXANDER, C. (2005). *The Nature of Order. An Essay on the Art of Building and the Nature of the Universe*. Berkeley, The Center for Environmental Structure.

BERTRAM, G. W. (2014). *Kunst als menschliche Praxis*. Frankfurt am Main, Suhrkamp.

BLUMENBERG, H. (2013). *Ästhetische und metaphorologische Schriften.* Hrsg. v. A. Haverkamp. Frankfurt am Main, Suhrkamp.

BLUMENBERG, H. (2015). *Schriften zur Technik*. Frankfurt am Main, Suhrkamp.

DI NAPOLI, G. (2011). *I principî della forma*. Torino, Einaudi.

GOETHE, J. W. (2009). *The metamorphosis of plants*. Cambridge, MIT Press.

HEIDEGGER, M. (1998). *Pathmarks*. Cambridge, Cambridge University Press.

KANT, I. (1974). Kritik der Urteilskraft. In: *Werkausgabe*. Bd. 10. Hrsg. v. W. Weischedel. Frankfurt am Main, Suhrkamp.

MARTIN, C. (ed.) (1954). Ovid. *Metamorphoses*. Berkeley, University of California Press.

MAZZOCUT-MIS, M. (1995). *Gli enigmi della forma*. Un'indagine morfologica tra biologia ed estetica a partire dal pensiero di D'Arcy Thompson. Milano, Edizione dell'Arco.

MAZZOCUT-MIS, M. (1997). *I percorsi delle forme*. I testi e le teorie. Milano, Bruno Mondadori.

PINOTTI, A.; TEDESCO, S. (ed.) (2013). *Estetica e scienze della vita*. Milano, Cortina.

ROSS, W. D. (ed.) (1952). Aristotle. *Physics*. In: *The Works of Aristotle*. Oxford, Clarendon Press.

TEDESCO, S. (2010). *Morfologia estetica*. Palermo, Aesthetica Preprint.