

Rethinking Production. A Step Beyond the Hylomorphic and Anthropocentric Approach

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ABSTRACT. This research examines three thematic areas: philosophy, education, and ecology. It aims to be an interdisciplinary study, fundamentally based on the importance of the philosophy of environmental education and the practical implications that it can have. The problem of the contemporary *hylomorphic* production approach is first examined and then educational solutions are outlined towards a holistic understanding of the environment and of producing *with it* and not *on it*. By environment, in research, we also mean the human being because this is only one of his many appendages; therefore, as such, we try to relocate him to a non-privileged place (a place where he has been autonomously placed for centuries). It aims to be a militant study towards a different *anti-anthropocene educational approach* that finds its paradigm in the “Green Schools” of Bali, as we will see in the conclusion.

Keywords: *Hylomorphism, ontology, environmental education, philosophy of education, ecosophy*

Introduction

Until a few years ago, authors who dealt with environmental issues, natural philosophy or educational philosophy used to begin their work by trying to convince the reader that the environment was really in crisis and that there really was an environmental issue. Today it is different. The authors who want to define themselves

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as environmentalists or educators to a different approach to nature take it for granted that that environmental issue so reviled and criticized is in front of our eyes and no one can really deny it, everyone more or less tries to do something, even if even more less than more.

In this article we will talk about those who seem to do or have the potential to be able to do something more, not only for the environment, but for the whole environmental issue and this also includes the human because he too lives with and thanks to the nature that hosts him. We will talk about *the Anthropocene*, about *morphogenetic* education in complete antithesis to the classically Western *hylomorphic education* and with which we have soaked in the last two thousand years. We will talk about education: the world needs training, different educational models and different visions of the place that human beings should occupy with respect to the same planet that hosts them. In this regard, it seemed essential to remember authors such as: Ingold, Simondon, Deleuze, Guattari, Naess, Descola. Authors committed to the morphogenetic front and above all eager to break down that Aristotelian dogma according to which nature is available to man, the only being capable of attributing a form to it and to what it offers us. A little further on, it will be a small possibility of getting out of Aristotelian hylomorphic dogma: the possibility for which it is still possible to think of a world in which the environment and the human will no longer be placed in a dichotomous direction, but it is necessary to change the productive approach of the human towards the environment, towards the matter that it grants. Moreover, in philosophy, whether we speak of the philosophy of nature or of the philosophy of education, one can almost never avoid discussing the *relations of production*, the relations between *subject* and *object*. These are key elements, they seem to be almost recurring notes even between different scores. Without these notes, you never really compose a melody, even if it is dissonant.

However, although we are talking about production, the landing place that this article seems to arrive at is that of Green Schools in Bali and that is the real purpose of the paper because, if it is true that we can think beyond the nature-culture dichotomy through a different production approach, it is also true that we cannot think of really implementing it without a healthy school education, to all students. We therefore want to talk about *the ontology of nature*, about a different way of conceiving ourselves in front of it: who are we? What can we do? What are our limits that evidently, by now, we must impose on ourselves, by our very *nature*? These are the questions that we try to answer in this article and we want to do it with one of the most powerful weapons that human beings have always had at their disposal, often unconsciously and often too consciously: education. Education to a different productive, environmental approach will be the keys to reading the following

writing. It is problematized at the beginning, but in the end we want to see in Green Schools the solution, the possibility of awakening that *ecological ego* that, perhaps, can still put the human in its place.

To know or to appropriate?

«*Est pabulum animorum contemplatio naturae.*¹»

One day, while in the north of the Peloponnese, Pythagoras had the opportunity to have a learned conversation with the lord of the city of Iliunte, Leontes. To the latter, who was admired by the knowledge and fame of Pythagoras, the mathematician replied that he was not an expert in any discipline, nor worthy of fame, but said that he was a philosopher. To Leontes' question, who on earth were the philosophers and in what way they differed from the rest of the experts, Pythagoras replied by comparing human life to a feast. At a celebration there are many guests and many other games and competitions arranged for guests. In these games, however, some participate in them by competing, others go to sell their goods, still others, the best said Pythagoras, do not seek either applause or profit, but observe carefully only what happens around them and try to understand why.

“So also among us [...] some, a few, do not care at all about everything else, and devote themselves to carefully observing the nature of things: they call themselves lovers of knowledge, that is to say, philosophers”².

This tradition is ancient that sees Pythagoras as the first individual to make use of the term *philosopher*, but from him onwards it is known that the term designated that figure in search of an explanation about what constitutes wonder for the human being. And what more than *φύσις* (*physis*) constituted in antiquity and still constitutes, even today, wonder for the human being? Nothing. Nothing more than *φύσις* constitutes for the philosopher the object of knowledge, of wonder par excellence. And we have seen this with Thales, with Heraclitus and with all Greek antiquity, but not only, also with philosophical modernity³.

¹ Cicero, *Academician*, (1 century B.C.), quoted by L. De Mauri in *Proverbi e motti latini*, edited by Gabriele Nepi and Angelo Paredi, Milan, Noepli, 1990, p. 390.

² Cicero, *Tuscolane*, (45 b.C.), in *Cultura e letteratura a Roma, profilo storico e testi*, edited by Maurizio Bettini, Gioachino Guarini, Alessandro Fo, Gianni Guastella, Renato Oniga, Giuseppe Pucci, Firenze, La Nuova Casa Editrice, 1999, V libro, p. 378.

³ Cf. *Ancient Philosophy: from Ancient Greece to Augustine*, edited by Giuseppe Cambiano, Luca Fonnesu, Massimo Mori, Bologna, Il Mulino, 2018.

In fact, however, this is precisely the problem, the fact that the *φύσις* is the “object” of philosophical inquiry, that it has the *status* of an object. But let’s continue in order.

The term *φύσις* in ancient Greek indicates “a living whole that grows, a whole that moves continuously towards an infinite becoming”. This whole, however, is not a set of “dead things”, but a living whole, that is, a set of living parts that move and grow together with that whole that makes them move. So, it’s not just “something that grows,” but also “something that makes you grow.” In fact, the verb *φύω* (*phyo*) in ancient Greek is an ancipite verb, that means it has both a passive form and an active, transitive form. It means both “to give birth”, but it also means “to be born, to grow”. With the passage of time, this “living whole” has been translated more easily (and rightly, I dare say) with the term *nature* or, better still: *natural world in its processes of generation, development, dissolution* and it is Aristotle who uses it specifically in this sense⁴.

“It is because of the wonder aroused by the natural world that men, both at the beginning of time and now, have begun to practice philosophy [...]”⁵.

So, human beings, amazed by the silent darkness of the starry nights, the warm rising of the sun, as well as the development and growth of plants and animals, began to investigate what was the engine of all this and investigating the functioning of what they rightly called *nature*, they ended up appropriating it. In short, remembering the example of Pythagoras in Fliunte, the guest at the party who did not care about selling goods, nor playing games, the one who only cared about investigating the reason for the ceremony, ended up taking possession of the ceremony and all the guests! The philosopher who tried to investigate what aroused wonder concluded his investigations by appropriating wonder itself. And this “misappropriation” of nature by human being has always been justified by ancient and modern philosophers⁶ and especially by Aristotle. The Stagyrte does not limit himself only to creating a hierarchy of beings and dividing them according to the functions of their soul into nutritive, sensitive and intellectual,⁷ but also affirms that the only intellectual beings are human beings and that as such, since

⁴ Cf. Aristotle, *Metaphysics*, trans. it., *Metaphysics*, Greek and Latin translation opposite, edited by Giovanni Reale, Milan, Giunti Editore, 2022, book I, p. 2.

⁵ *Ibidem*.

⁶ Cf. Philippe Descola, *Par-delà nature et culture*, Paris, (2005), trans. it. *Oltre natura e cultura*, edited by Nadia Breda, Milan, Raffaello Cotina Editore, 2021, p. 133-137 and p. 321-340.

⁷ Aristotele, *De Anima*, trans. it. edited by Giancarlo Movia, Latin text opposite, Milan, Giunti Editore, 2021.

they are endowed with superior intelligence (not only sensitive), they are “masters of nature, by nature”⁸.

The question that arises spontaneously is the following: why did Aristotle and with him a long group of philosophers have to believe that the true place of human being is to stand above nature and appropriate it? Why believe that plants, animals, the world “it is for human being that nature made them”?⁹ Perhaps, this “humanism” has been and still is one of the greatest evils of the world¹⁰.

Human beings, in short, according to science and according to the very concept of *φύσις*, are a natural species, yet human beings seem to mean transcending this belonging. Seeing everything that surrounds us as our rightful property, always and forever. It seems that we can aspire to the truth of this world only through a kind of justified emancipation that distances us from it, making us strangers to ourselves, without a real place of belonging, or more simply, ignoring it.

The Aristotelian hylomorphic paradigm has done nothing but increase this presumed and justified detachment of the human from the natural world. What the concept of ilomorphism expresses is on closer inspection a relationship of subordination: from the Greek *ὑλη* (*hyle*), that means *matter* and *μορφή* (*morphé*), that means *form*, in union with each other indicate a relationship between matter and form. However, ever since Aristotle gave rise to the term, this is a relationship of subalternity¹¹. If it is true that it is the soul that gives shape to the body, as Aristotle says¹², it is logically true that only an animate being (and therefore endowed with an intellectual soul) can give form to a body, to a set of matter, and this human being, aware of this, finds himself justified in attributing forms to a nature that he sees as a set of matter to be “informed”. One perceives the idea of nature as a mass of inert matter, a shapeless heap of matter that without the intervention, the superior human intellect, cannot take form, does not even possess it. And that is why human intervention on it is always justified. Therefore, the human being, the only “natural” species endowed with intellect, can decide the destiny of all the others and must become master of all that *φύσις* that also hosts and has generated him. And Stagirita himself confirms it, over and over again.

⁸ Cf. Aristotle, *Politics*, trans. it. *Politics*, edited by Renato Laurenti, Bari, Laterza, 2019, Book I, p. 4.

⁹ *Ibid.*, p. 17.

¹⁰ For a careful and precise critique of the concept of “totalitarian humanism” I invite the reader to a broadly philosophical reading cf. Emmanuel Lévinas, *Totalité et infini: essai sur l’exteriorité*, (1971), trans. it., *Totalità e infinito: saggio sull’esteriorità*, edited by Silvano Petrosino, Milan, Editoriale Jaca Book, 1980. With particular reference to the essay *Metaphysics and Transcendence*, *ibid.*, p. 31-50.

¹¹ For further information, see Aristotle, *Nicomachean Ethics*, Italian translation, *Nicomachean Ethics*, Greek and Latin translation opposite, edited by Claudio Mazzarelli, Milan, Giunti Editore, 2022, p. 15.

¹² Cf. Aristotle, *De Anima*, *op. cit.*

“The soul dominates the body as the authority of the master dominates the slave¹³, the intelligence dominates the appetite as the authority of the king dominates the subjects [...]. Now the same relations exist between men and other animals: domestic animals are by nature better than wild animals, but it is still beneficial for all of them to be subject to man, because in this way they have their security”¹⁴.

For a good part of Western philosophy¹⁵, it is as if human were responsible, owner, almost the undisputed god of all nature, as well as of all the plant and animal species that live in it. It is obvious that such a thought can only lead man to have an image of himself as an “informer”, “informing agent” of a nature at his disposal, seen as a mass of things, objects not only to be appropriated, but moved, formed, and whose fate to be decided at will. It is this hylomorphic thinking that has led man to consider it not so wrong to uproot 400,000 square km of Amazon rainforest, and 4000 square km in 2023 alone¹⁶. Let us say it more clearly: the ilomorphism and the culture that has perpetuated it up to today have led us here, to where we are today; To all this we add law, ontology, war and ethics (valid only for humans), and everything is ready¹⁷. The drawing is finished: it is in front of us just waiting to be interpreted.

Whenever we read that in producing artifacts the artificer impresses forms conceived in his mind on the material world, there, in those lines, the hylomorphism is at work. What can be done to go beyond ilomorphism? Is it possible to unhinge such an imposing paradigm? Is there really a solution, a cure for this protagonism that man has soaked up for millennia to the detriment of nature that has welcomed and generated him? Surely, no one can have a science infused in their pocket, yet in a small way, each of us can think and then act differently. The purpose that academic studies could set from these bases can be to rethink production, the productive act; see it as a process of mutual growth with the materials offered by nature, and no longer as an “informational act” of an external human agent on an inert nature that belongs to it. This means that, in the educational field as well as in

¹³ For a dutiful critique of the concept of slavery and its justification by Aristotle, I refer to E. Berti, *Il pensiero politico di Aristotele*, Bari-Roma, Laterza, 1997.

¹⁴ Cf. Aristotle, *Politics*, *op. cit.*, p. 11.

¹⁵ Cf. P. Descola, *op. cit.*

¹⁶ For a detailed analysis, see Andrea Porciello, *Philosophy of the Environment: Ontology, Ethics and Law*, Rome, Carocci Editore, 2023. see also <https://www.wwf.it/pandanews/ambiente/emergenze/amazonia-deforestazione-record/>.

¹⁷ Cf. Simondon G., *L'individuation à la lumière des notions de formes et d'information*, Jérôme Millon, Paris, 2005, trans. it., *L'individuation in the light of the notions of form and information*, edited by Jaques Garelli, Milan, Mimesis Edizioni, 2020. The philosopher Simondon carries out a real crusade, in this work, against ilomorphism and the evils it has entailed.

the philosophical one, the meaning of creator should be designated again: this figure could be presented from the beginning of the production process as a participant, one of many, within an ecosystem made up of active, living matter, nature that is not inert, but alive. In short, we should propose to go beyond the hylomorphic approach: to teach again how to find our space in nature¹⁸.

Co-production and morphogenesis: a different approach

*«Naturae rerum vis atque maiestas in omnibus momentis fide caret,
si quis modo partes eius ac non totam complectatur animo»¹⁹.*

What is our role in the productive act? When we produce something, what role do we play in relation to matter and the environment? From the very beginning, for any production, you can discover how recalcitrant the nature of each material is. Let's take wicker as a reference, an expensive and supportive example thanks to Tim Ingold²⁰. If we wanted to build a wicker basket, where should we start? From a mental scheme that prefigures a shape to be imprinted on the wicker? Yet, wicker is never inside a precise shape. Because? Because it is not only the material that never fits into a mental scheme, because other forces come into play during the act of production and they are all forces that contribute to production as much as the one we call the human creator contributes to it. Try to build a wicker basket outdoors: the wind will contribute to the production of the final shape, together with the type of wicker used, together with the hand that is using it and also together with the contingencies that arise gradually during the work. Here the problem arises: who is the real architect of the final form? The wind or the human being or the intrinsic recalcitrant characteristics of wicker? Everyone and no one in particular, we could answer.

Every form emerges through movement; every form is the result of growth, of an interaction between the dynamic properties of materials and of informing agents. The final form can never be the same as the one imagined by the creator in his mind, but it will always be different because the properties that the material assumes depending on the environmental (and therefore also climatic) context in

¹⁸ In this regard, a systematic study was carried out by Tim Ingold. Cf. Ingold T., *Correspondences*, Polity, London, 2020, trans. it., *Correspondences*, edited by Nicola Perullo, Milan, Raffaello Cortina Editore, 2021.

¹⁹ Pliny, *Naturalis historia*, (I century B.C.), quoted by L. De Mauri, *Proverbi e motti latini*, edited by Gabriele Nepi and Anglo Paredi, Milan, Hoepli, 1990, p. 391.

²⁰ Cf. Tim Ingold, *Making: Anthropology, Archeology, Art and Architecture*, London, Routledge, 2013.

which it is placed, are infinite, ineffable²¹. That production of form through that material is given with the material, with its resistance to our imposing hand, with its resilience or not to the wind that makes it oscillate: all this greatly reduces the role of the human creator in the production process. Materials are not dead matter, formless before the human “informing” hand, but they are what the human finds himself working with, “colleagues” with whom the creator joins forces towards the co-production of a form already potentially emerging or present in the ineffable formative possibilities of matter.

Instead of standing aside, imposing his preconceived forms on a world that is always ready and waiting to receive them (as the hylomorphic model dictates), the most the creator can do is to intervene with his forces in the material-productive processes already underway and give life to productions *together with* them: *the attribution of a form is an act of growth together with the material with which one works*, not the realization of a preconceived idea of the human mind.

It can be seen how, during the twentieth century, the concept of “information” was radically revolutionized by one of the greatest exponents of the philosophy of technology such as Gilbert Simondon. In Simondon’s work: *L’individuation à la lumière des notions de formes et d’information*, the philosopher eradicates the hylomorphic assumption criticized above, wants to overcome that rampant Anthropocene in the consideration of the natural world and lay the foundations for a new assumption of the individual: the human being as a network of relationships within nature, not an external agent that possesses and exploits it.

Traditionally, the work is considered a radical attempt to subvert the concept of the individual, but due to the extent of its novelties it could also be admitted as a starting point for a new consideration of the role of the human being in the morphogenetic act; especially since it is always a question of reconsidering the role of the human agent in the natural world. In fact, Simondon explains well:

“Being is never one, it is always more than one [...] and it is richer in coherence with itself, it exceeds its limits, it is metastable, expanding starting from itself; it is restrained, tense, superimposed on itself. But being is not reduced to what it is. It is thickened in itself, empowered. It exists as a being but also as energy”²².

²¹ Even in the world of architecture this thought around the ineffability and infinity of materials takes hold. In this regard, see. Zumthor P., *Atmosphären: Architektonische Umgebungen - Die Dinge, die uns umgeben*, Birkhauser, Basel, 2006, trans. it., *Atmosfera: Ambienti architettonici. Le cose che ci circondano*, Milan, Electa, 2007.

²² G. Simondon, *L’Individuation psychique et collective*, (1989), trans. it. *L’individuazione psichica e collettiva*, edited by P. Virno, Rome, DeriveApprodi, 2001, p. 219.

The human being is not or never is what he was, nor what he thinks he is. He is a constant process of individuation, a living processuality as is the nature that hosts him. How could a living process create something firm, fixed, immutable that previously lived in his mind in the form of an idea and that he now wants to statically fix in the material world? How can a being who is never really stable create something stable? The hylomorphic model is already in crisis and seems to be tottering towards the abyss.

The greatness of Simondon present here, that is, that of revolutionizing the concept of the individual, we can see, brings a trail of radical transformations everywhere. It succeeds in subverting, upsetting everything that the previous idea of the individual entailed: it eradicates the hylomorphic model, lays the foundations, it seems, for a new interpretation of the productive act, puts the human being in its place as one of the many species existing in nature. Among other things, by introducing the notion of *metastability*, it is now possible to clearly review what was said about, when we spoke of production with matter and the environment and not on matter and the environment²³.

By metastable, the philosopher means a system that is constantly evolving and susceptible to continuous transformation. This balance is not stable, but metastable, that is, characterized by internal potentialities that can be activated at any moment and capable of transforming the entire system²⁴. This system can perfectly match the natural world, with nature, so much so that nature, the environment, for Simondon is metastable, namely:

“[...] a charge of unexpressed potential, within which the subject lives²⁵.”

These potentials then all contribute during any process of formation of a form (information) and during any productive act, exactly as in the example of wicker. Production is therefore not a fixed act, as the hylomorphic model dictates, but it is an act of generating a form between co-producers present in the same environment. The production that can be glimpsed now is not a rigid fixation of mental schemes on the material world, but a procession, a processual act constantly in progress depending on the properties of materials, climate, environmental contingencies, and ultimately, also on the hand of the human being. Seeing production as a structuring process between co-producers belonging to the same environment as well as to the same nature, this seems to be what Simondon's philosophy can lead us to.

²³ See in this article, p. 5.

²⁴ Cfr. Simondon, *L'individuation à la lumière des notions de formes et d'information*, op. cit., p. 19.

²⁵ *Ibid.*, p. 60.

Let's not forget the role we have: this seems to be the Simononian warning on which the concept of "*pre-individual background*"²⁶ focuses.

"The pre-individual is individuation itself as a reality that hosts and precedes individuals and at the same time continues to exist as a reality full of potentials, *the milieu* to which the individual belongs"²⁷.

So, what does he seem to mean by this term *pre-individual*? A space, a natural space, a background, a nature that pre-exists man and that continues to exist even without him as nature or space full of unexpressed potential, of which the human being is one of the many powers; as a space charged with metastability. It is very interesting to note how Simondon himself knows the scope of his statements and relocates man to "his place" in the world of nature: one of the many species that participate in the creation of structures, productions, but not the only species that can and must be able to do everything. Total subversion of the hylomorphic assumption that not only saw the human agent as a fundamental and ultimate principle in the creation and production of any nature, but also as the alpha and omega of the globe.

The human being thus designated seems to be nothing but a healthy bearer of change, of transformation in a world that in any case, already on its own, on its own, changes continuously. His creations are not even totally his, because his are not the properties with which natural materials respond during the act of production and his are not the environmental contingencies that allow that matter-flow to take on a certain form. His are only the hands that assist the matter-flux to assume a certain form together with all the other agents or co-producers.

The creation of an object, whatever it may be, is a process of morphogenesis in which the form is constantly emerging rather than given in advance in the mind of the human agent alone. Having thus posed the question, matter is not a passive receptor of form, but its essence lies in its ability to take shape according to its possibilities (potentiality of the material) and according to the hand, as well as the environment, which is deforming it. In any context (remembering that *metastability* is the constant of every environment), that matter is a matter-flow that the human agent, together with all the co-producers who are part of that context, can only follow the multiple forms that it will take from time to time. Only by taking up this concept of matter-flow, can the human being resume his place within the natural system. In fact, two other philosophers who agreed with Simondon's thought and

²⁶ Cf. *Ibid.*, p. 19.

²⁷ *Ibid.*, p. 33.

supported him for the crusade against the hylomorphic model, such as Felix Guattari and Gilles Deleuze, wrote lines about the artisans and workers who “produced” forms.

“The artisans and workers do nothing but follow the material flow during production; they are therefore nomads, travelers whose task is to introduce themselves into the gears of the becoming of the world to bend them to a purpose that is not even fixed, but constantly evolving. Theirs is a production already in progress”²⁸.

These last two philosophers also seem to put the human agent back in its place in the natural world, a place that it had long since abandoned, on behalf of the hylomorphic model, to rise above that *pre-individual context* that is nature. One could also take their quotation as an invitation, an invitation to take back the space that belongs to us during the act of production, an invitation to go beyond the Anthropocene with which the production process is also imbued. The example of metallurgy of the two philosophers seems to be perfectly in agreement with the conception of both matter as matter-flow, and of production as a morphogenetic act between co-producers, and not as a hylomorphic one.

“In metallurgy, the blacksmith must periodically bring the iron back to the fire. The mutation of the material encroaches on the process of formation and no doubt continues even after it, since it is only after forging that the iron is finally hardened. In metallurgy, on the other hand, operations continue to straddle the thresholds, so that an energetic materiality goes beyond the prepared material and a qualitative deformation or transformation exceeds the form. [...]. Never have matter and form appeared more rigid than in metallurgy”²⁹.

With this example, what can we say that we have in front of us, if not a production, a productive act that looks more like a *dance* between human and non-human co-producers and intrinsic properties of materials? Somehow even gold flows and the blacksmith must follow it as far as it can reach. It is up to us to be co-producers together with the material and the environmental contingencies of the form that it will change; we just have to listen to what the matter-flow has to tell us and therefore we must follow the material, correspond with it have a morphogenetic and not a hylomorphic approach, this must now be clear. At its core, it is the desire

²⁸ Deleuze G., Guattari F., *Mille plateaux. Capitalisme et schizophrénie*, Minuit, Paris, 1980, trad. it., *Mille Piani: capitalismo e schizofrenia*, a cura di Paolo Vignola, Napoli, Orthotes Editrice, 2017, p. 599.

²⁹ *Ibid.*, p. 520-521.

of every craftsman and blacksmith to see what the material has to say, what it can do, to see life in its properties and to collaborate with them. Following Ingold's supreme teaching in this field, one must not only see the act as morphogenetic, but "one must read production longitudinally rather than transversely"³⁰. One can, with good reason, see the world escaping from this statement: the idea that the human being as a co-producing agent takes his place in nature can be read as one of the many species that contribute to giving shape to the world, and not the only one to have the right to it. One can glimpse in this sentence the rupture of the hylomorphic hierarchy previously imposed by the previous vision of the productive act. One can even come to the thought that in that "longitudinally" used by Ingold there is the desire to place oneself within a horizontal scheme of which to return to be part before human protagonism continues to take over.

A new ontological and morphogenetic paradigm: *Green Schools*

*"The Green School stands on steep slopes, so that the architecture, rather than appearing separate from the context, is part of it."*³¹

What we need, at this point, seems to be a new "ontology" within which to place ourselves. In fact, from the Greek *ὄν* (*to be*) and *-λογία* (*study, discourse*) this word designates the study of being; the study of what characterizes being as being and which studies what its irreducible properties are. What better than "life" can irreducibly characterize being? And what is nature if not life? What is nature if not life as well as the set of lives that it hosts? So, shouldn't we extend this "being-life" to the nature that welcomes us, as Naess advises us³²? This seems to be the task of a new ontology, that of extending the property of being to what we have so far mistreated and reduced to mere objectification. Towards a new anti-anthropocentric ontology: this is the warning of the present. We do not need to extend traditional ethics to the environment in order to recognize natural matter its infinite properties, and we do not even need traditional ethics extended to the environment in order to recognize nature's right to live independently of us human beings, as Bartolomei

³⁰ Tim Ingold, *op. cit.*, p. 63.

³¹ Caroline James, *The Green School: Deep in the Balinese jungle, a bamboo school complex becomes the place to train new generations of sustainability leaders*, (2010), in <https://www.domusweb.it/it/architettura/2010/12/13/la-green-school.html>.

³² A. Naess, *Økologi, samfunn og livsstil*, (1971), trans. it. *Ecosofia*, edited by A. Airoidi, G. Salio, Como, Red Edizioni, 1994.

thinks³³. It seems that we really need a new ontology within which to place our human being, without forgetting that this “humanity” is also part of a great being that contains all multiple lives: nature.

It would not be correct, at this point, not to mention the first to try to relocate the human being in an ontological dimension reduced to his expectations, namely Darwin.

“Let us remember that almost every species, even in its own area, would increase greatly in number, if it were not for the other species with which it competes. Almost all of them either prey or are prey to others. Every organic being is directly related to other living beings in the most obvious way, since it can be seen that the density of a species in any region does not depend on physical conditions that change imperceptibly over time, but to a large extent thanks to the presence of other species from which they subsist or from which they are eliminated or with which they come into competition”³⁴.

Right here, in the front line, the supporting pillar of evolutionism seems to deny both the presumed divine origin of mankind and its arrogant anthropocentrism. Human beings, like other natural species, are just one of many life forms that compete with each other for better adaptation to the environment. It would seem that, although in embryonic form, Darwin presents the idea of nature as an immense ecosystem, life but a set of lives, a set of reciprocal relationships, the key idea of the most advanced ecologism, given that:

“[...] by ecology is meant the entire science of the relations of the organism with the environment, including, in a broader sense, all the conditions of existence that it provides”³⁵.

Why, then, should we think that man has a presumed right of ownership, almost divine, over all nature and of all nature? Why think that being is a mere property of the human being, of man? Why think that works are only the creations of a human being and that only man creates from the top of his mental schemes, with which

³³ Cf. Bartolomei, *Environmental Ethics as a New Frontier of Contemporary Ethical Thought*, edited by P. Donatelli, Florence, Le Lettere, 2012.

³⁴ C. Darwin, *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*, (1859). *On the origin of species by natural selection, or conservation of perfected breeds for the struggle for existence*, edited by A. Barion, Sesto San Giovanni, Edizioni popolari, 2004.

³⁵ E. Haeckel, *Natürliche Schöpfungsgeschichte*, (1868), trans. it. *History of Natural Creation*, Sesto San Giovanni, Mimesis, 2024, p. 286-287.

he imprints forms on an inert matter? Why not downsize the role of the human being? Why not rethink production, the hylomorphic production paradigm?

It is precisely to all these questions that the enormous work of the Green Schools in Bali seems to answer. In them, and thanks to them, the ecological ego of the human being is born in children and young people, in students in some way almost spontaneously. Education to interact with the natural environment through a natural place where one learns awakens the ecological *ego* of the individual³⁶, the one that belongs to all of us, but which with the hylomorphic culture has too often been forgotten, rising to the masters of that environment that hosts us. These schools awaken a different ontology in which the human being is connected to the great being that hosts everyone, that is, always nature.

As is well known, in 2007 Cynthia Hardy and John Hardy founded, together with capable architects and educators, the so-called “Green School”³⁷. Meanwhile, what was the intent? Following the research and literature on experiential learning, experimented and studied by Rudolf Steiner³⁸, the “Green Schools” immediately stopped the thought that study, teaching should be carried out within the four walls deaf and closed to nature, a classic Western model. Knowing the Aristotelian peripatetic method extensively, this truly green educational model demonstrates how a constant interaction between the place of learning and the natural place is the basis of a different ontological paradigm, the one we have discussed above; is the basis for a different placement of the human being in relation to nature and production with it and not on it. This educational model is based on a different ontology, what we have talked about so far and what it seems that the generations to come and we with them really need.

This example of green schools, apparently so far from what was previously discussed, is actually extremely close. Because? Because, if you want to have even the intention or the idea of changing any approach to production, to production with and not on the environment, you must always start with education. The education of the human being, of otherness, to an integrated approach with nature, in nature and for it, which also means for ourselves, parts of a gigantic ecosystem of which we can never be masters. Contrary to what the hylomorphic paradigm teaches.

³⁶ For example, look at what Andrea Porciello, *op. cit.*, p. 11-23, says about it.

³⁷ Per un ulteriore approfondimento sulla nascita storica delle green school *cfr.* Cynthia Uline, Lisa Kensler, *A Practical Guide to Leading Green Schools: Partnering with Nature to Create Vibrant, Flourishing, Sustainable Schools*, London, Routledge, 2021.

³⁸ Rudolf Steiner, *Erziehungskunst. Seminarbesprechungen und Lehrplanvorträge*, (1919), cited and studied by Robyn Brown, *The Vital Processes. Seven steps on the way to learning*, Milan, Daelli Editore, 2020.

One of the many disciplines taught in these green schools is the so-called “bamboo carving”³⁹. Students are taught how to carve bamboo not as if it were a tool from which to make money, not as if it were a shapeless material to which to attribute, from the height of human culture, a form that did not previously exist in the potential of matter. The precept of the morphogenetic approach is taught! Listening to the material, the possibilities it has to offer and together with it carving a shape that corresponds to the place and the properties of that matter-flow⁴⁰. This is the warning, so much so that the discipline of “bamboo carving” is included in the broader disciplinary area called “environmental sustainability of the community”⁴¹. It is as if the ontological basis in which these students operate was overturned to the point of seeing in the material they work not a mere object that nature gives them because they are human beings endowed with superior intelligence (classic Western vision), but an extension of nature itself. They seem to be able to see in it the extension (one of many) of the enormous being of nature; an appendage that shapes itself and that also shapes them, a companion with whom you work and from whom you learn its properties. Not surprisingly, a phrase that educators often repeat to their students during that discipline is: “Listen to the bamboo!”⁴².

Eco-sustainability, morphogenetic approach, eco-entrepreneurship are not ways of being or doing, but in Green Schools they are parts of the individual, of what could also be defined as a new individual: an eco-human.

Another subject of study of the Green School that needs to be mentioned for the following discussion is “eco art”, that is an artistic form, both pictorial and sculptural and architectural, in which the materials and pigments of nature are used for nature. There is no color that can harm the environment, but a color that boys and girls use with their surroundings and thanks to it. Somehow, they seem to become alchemists and not just artists – their role is to create natural pigmentation with nature. It is not only the pigmentations that mix, but the gestures of the students together with them, the use of water as a reagent: you never have one color the same as another. There are no pre-packaged colors, classic hylomorphic model, but alchemical creations with nature. This mixing of theirs is intertwined like the gazes of lovers, mediation and transduction (a term that brings us back to Simondon⁴³); they create a form (color) that follows the possibilities given by those pigmentations, by that environment. Nothing is out of place, nothing really seems to follow the classic Western dichotomous model: nature or artifice. Everything is

³⁹ *Ibid.*, p. 179.

⁴⁰ For further information on the didactic-disciplinary subjects taught, see the school’s own website: <https://www.greenschool.org/bali/programme/specialist-subjects/>.

⁴¹ *Ibidem*.

⁴² Cynthia Uline, Lisa Kensler, *op. cit.*, p. 189.

⁴³ *Cfr.* G. Simondon, *op. cit.*, p. 14.

nature, one could say, but everything is also human. It would almost seem to be placed in an animistic environment in which everything seems to have something human and everything that has humanity seems to have something natural: in short, there is a total mixture between human-matter-environment. Everything is in perfect connection.

Another fascinating discipline, which seems to report all the objectives that ecologists and natural philosophers have and follow, is the one called: “art of parrying in public”.

Although it is a term usually used to designate classic oratory, the students of the Green Schools present to the public (an audience made up of their colleagues, teachers and educators) their ideas, their projects, sometimes even quite interesting models on articulated subjects such as bioarchitecture and biomimicry⁴⁴ to then make it the center of their activity. This discipline is part of the GreenStone project and allows, especially educators, to be able to evaluate and see the skills acquired by their students. In fact, the project is structured as if it were a TED talk in which the subjects stage their ideas, their life and career projects, trying to argue to the public the reason for the importance of the environment as well as the different approaches, especially towards production, for an *eco-sustainable*⁴⁵ future. In fact, they act on the scene as if they were real established green leaders who try to explain the reasons for the need to change some Western paradigms related to production and the place that man must occupy in the environment, in nature. They seem to explain to the public a possible new ontological model; They seem to tell us everything we are trying to go to and explain.

We can still see the entrance to the Green Schools, but also their learning spaces. Everything, or almost everything, is created through bamboo wood so much so that the school does not even look like the usual human artifice. A study recently noted that such a learning space can be defined as “ADHD friendly”⁴⁶. This is also

⁴⁴ On these two topics, a guy has designed interesting ideas that have then been published on the net, and are found together with other projects so called “green”. On the basis of the example cited above, v. Sevan-Fidel Reznicek, *Wildlife preservation and biophilic architecture*, GreenstoneProject, 2023, in <https://www.youtube.com/watch?v=51BffkgsUAE&list=PLLo3UtBdmnUnUr1AYfJd5VvJzrCEVnK0u&index=3>.

⁴⁵ As for the term *eco-sustainable*, it can be said with good reason that it is a word that is far too delayed. In reality, it is not even a word that now has any positive meaning since it has been widely used by the so-called “green economy” which, as Porciello tells us, have very little about “green”. One could use, as a substitute for it: *eco-humanity* or *ontology of nature*, both used by Porciello. Cf. Andrea Porciello, *op. cit.*, p. 13-14.

⁴⁶ Cf. Marian Hazzard and Ed Hazzard with Sheryl Erickson, *The Green School Effect: An Exploration of the Influence of Place, Space and Environment on Teaching and Learning at Green School, Bali, Indonesia*, Inziativa Power of place, Midhurst, Really Regenerative Centre, 2011.

very interesting, because it seems to tell us that studying in a natural environment that is not devoid of noise, but rather noisy, resounding, not only eliminates the now meaningless equation silence in the classroom = learning and stimulates a different *ontological approach* to nature, but also stimulates, paradoxically, the concentration of students with greater problems of attention and discipline. In short, learning with and in nature is a sort of medicine for learning as well.

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