# THINKING THE ECOLOGICAL PRESENT

by

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## **ABSTRACT**

Thinking about the present ecological situation necessarily implies a re-thinking of the thinking about nature. This paper will look at some of the recent critiques to this thinking (deep, dark and flat ecology) in an attempt to extract and formulate possibilities for action.

As will be developed, *deep* ecology subjectifies nature; *shallow* ecology objectifies nature; *dark* ecology rejects nature; while *flat* ecology intensifies it, treating it as a comprehensive ontology of nonhierarchical complex material systems, both human and non-human, defined by their process of production within an energetic environment. This generalized ecology turns ecology into a complex transdisciplinary project linking philosophy, sociology, anthropology, art, literature, politics, music, history, and the sciences. With disciplinary promiscuity we introduce more questions and unknowns that could possibly be answered. Yet with all its problems, it is this promiscuity that gives rise to potentiality; to the emergence of the possible and the possible emergence of a *new* way of operating on the environment.

## **ECOLOGICAL THINKING**



#### 1.1 The nature-culture dialectic

Thinking about the present ecological situation necessarily implies a re-thinking of the thinking about nature. As Timothy Morton explains in *Ecology Without Nature* one of the of the most dangerous ways modern society has damaged nature is by the very way we think about it; we think of it as an object "over there", with its hierarchy, purity, harmony and mystery - we think of it as a describable entity, external to the *self* that is the human being. "When you realize that everything is interconnected, you can't hold on to a concept of a single, solid, independent thing "over there" called Nature." Similarly for Bruno Latour, the nature-culture dialectic expresses a curious paradox about modernity: the more we mix nature and culture, the more we speak of purifying the two.

The very notion of culture is an artifact created by bracketing Nature off. Cultures – different or universal – do not exist, any more than Nature does. There are only natures-cultures, and these offer the only possible basis for comparison.<sup>4</sup>

The dividing line between nature and culture is difficult to draw. This much is well agreed upon, not just within the intellectual and scientific realms but also in popular culture. Why is it, then, that if we seemingly recognize the indistinguishability between nature and culture, when birds build nests we call it 'nature' and when humans put up a building suddenly it's 'culture'? Interestingly in 'pure thought' and discourse (if such a thing is possible) we are able to hold on to the nature-culture continuum and agree on the undeniable interconnectedness. Yet whenever we deal with the realm of action and visible transformation of matter, as with the above example, we immediately begin to classify and segregate the two. We think of nature as something that either does things to us ("natural disaster") or as something we do things to ("destroyed nature").

The disconnect between nature and culture is a conceptual fabrication that in the majority of cases leaves us resorting to unimaginative solutions which seek to find some sort of *balance* between the two.<sup>6</sup> This paper will look towards an abandonment of nature-culture related dualities and argue that a true ecological praxis -a practice which

includes action and thought- can only be achieved through deeper levels of abstraction and artifice that emerge from the inclusion of seemingly heterogeneous disciplines. Ecological thinking is not just about thinking and it is not just about environmental action. Ecological thinking has to do with the humanities, the arts, the sciences- it has to with factories, pastures, transportation, war.... "Ecology is profoundly about coexistence." It has to do with the way we *imagine* living together. It has to do with creativity and imagination. It has to do with design. 8

# 1.2 Deep and dark ecology

Criticism of this 'us' 'them' conception of nature—culture, comes from a predominant school of thought referred to as *deep ecology* which considers humankind as an integral part of its natural environment. Arne Naess, who originally developed the term<sup>9</sup>, distinguishes deep ecology from *shallow* ecology which he saw as being focused primarily on the health and affluence of people, as opposed to a supposedly 'deeper' ecology which views humanity as an inseparable part of nature.<sup>10</sup> Thus, in shallow ecology pollutants might be banned on the premise that they are harmful to humans, whereas in deep ecology the concern is whether they are harmful to nature.

For some, this is an ecology that assumes a kind of metaphysical naturalism whereby humans are seen as natural entities<sup>11</sup>. But one could also argue the opposite to be true. By invoking modernist notions of nature, deep ecology has retained the very conceptual binary they wish to dispel. Indeed, in his writings Naess shows a clear preference for natural values over cultural values, particularly western ones. He formulates his conception of *ecosophy*<sup>12</sup> and construction of *nature* outside the human sphere of *culture*. There is an inherent dualism in the way that his deep ecology asserts itself as the 'true' way of thinking about nature; culture and artifice get pushed aside as the motors of ecological damage. If shallow ecology objectifies nature, deep ecology subjectifies nature, thus it is no less dualistic.

Paradoxically, the more we venerate nature as the place we need to appreciate and respect, the more we set up rules and principals that keep us separated from it. In an era where the technological and the cultural are an inseparable part of our being, deep ecology appears to be a puritanist and reactionary vision. Under this conception, nature is thought of as something pristine, pure, wild, and immediate; something that we can look at, sometimes touch, and almost always end up destroying. According to the author of Ecology Without Nature "deep ecology is ironically opposed to a truly profound ecological view."13 Timothy Morton contends that a really deep ecology would let go of the idea of nature because it marks the difference between 'us' and 'it'. He argues that the chief stumbling block to environmental thinking is the idea of nature itself, and sets out to expose that, paradoxically, in order to have a proper ecological view, one must relinquish the 'idea' of nature. 14 In other words, our way of thinking about it needs to be structurally realigned. Ecology without nature is a dark ecology that assumes the inexistence of nature as such. Dark ecology is a new ecological aesthetics that sees nature as an artificially constructed concept to avoid; "the ultimate obstacle to protecting nature is the very notion of nature we rely on."15

Interested in Morton's publication, Slavoj Zizek elaborates this view, pointing out that deep ecology is, in fact, a deeply conservative conception of nature, built primarily on a deep distrust of development and progress.

Crucial here is the interdependence of man and nature: by reducing man to just another natural object whose properties can be manipulated, what we lose is not (only) humanity but nature itself"<sup>16</sup>

While demanding radical change in the way we conduct ourselves daily, deep ecologists have a deep distrust of change, and sustain that radical change can trigger unintended catastrophic effects.<sup>17</sup> In an interesting twist, from Zizek's perspective, human waste has become so integrated into the functioning of the ecosystem that an imaginary, sudden, removal of all human waste could itself be an ecological catastrophe.<sup>18</sup>

Zizek points out that the Darwinian notion of nature is not one of a harmonious pattern of seasons, change, balance, reproduction. Rather, Nature is one big catastrophe

which is from time to time contained in a fragile balance, but then explodes again. Nature itself is not natural, rather, it has been *naturalized*.

So what is wrong here? What is wrong I think is the principal position, that there is something like "nature," which we humans, with our hubris, with our will to dominate, disturbed (...) The first premise of a truly radical ecology should be, "Nature doesn't exist." (...) So again what we need is ecology without nature, ecology that accepts this open, imbalanced, denaturalized, if you want, character of nature itself.<sup>19</sup>

# 1.3 Flat ecology

Nature is a concept; culture is a concept - both equally arbitrary in their delimiting definitions. Indeed they are often defined by the immutable traits extracted from their components; a forest is 'nature' because it is composed of natural elements; a city is 'culture' because it is composed of man-made elements. We have come to think of the elements that compose 'nature' and the elements that compose 'culture' as essences with fixed properties that explain their identity; properties that we can either sustain, by not interfering, or destroy, by affecting the identifying property.

Gilles Deleuze and Deleuze/Guattari<sup>20</sup> offer a different perspective on ecology, one that doesn't fall into the Cartesian dualism of nature versus culture which is still the predominant concern among mainstream eco-criticism. They conceive ecology as a comprehensive ontology of complex material systems defined not by their identifying properties, not by whether they have natural or artificial essences, but by their process of production- their morphogenesis. As we will see further on their conception is tied to the concept of the 'machinic world'.

There is no such thing as man or nature now, only a process that produces the one within the other and couples the machines together (...) the self and the non-self, outside and inside, no longer have any meaning whatsoever. <sup>21</sup>

In Deleuzian ontology a species is not defined by its essential properties but rather by the "morphogenetic process"<sup>22</sup> that gave rise to it. Deleuze has no use for essentialist techniques of putting species into categories and hierarchies defined by their supposedly immutable properties. Therefore, contrary to Aristotle's tri-leveled hierarchical classification of genera (i.e. animal), species (i.e. four-legged), and individual (i.e. herbivore), which is based on essentialist properties. Deleuzian ontology is in effect non-hierarchical; it is a horizontal –flat– ontology which provides an inherently dynamic account of ecology. Indeed we can refer to this ecology as 'flat ecology'.

... while an ontology based on relations between general types and particular instances is hierarchical, each level representing a different ontological category (organism, species, genera), an approach in terms of interacting parts and emergent wholes leads to a flat ontology, one made exclusively of unique, singular individuals, differing in spatio-temporal scale but not in ontological status. <sup>23</sup>

Unlike the essentailized notion of nature and culture, *flat ecology* is defined by the *capacity* of its entities (which include both the natural and the artificial) to enter into relation with one another. The capacity of an entity needs the interference of another entity in order to be activated; it implies the relational quality that all organisms have: capacity to affect and be affected. An ecology defined by the capacity of its entities implies the notion of coexistence, of *environment*. Thus, a bee may have property of being black and yellow and of having a 'sting' but the sting only becomes a capacity once it interacts with another body- another organism. This capacity is what makes up the ecological assemblage, in other words, the environment.

What is *ecology*, then, if it can no longer be grounded in an essentialist and clear-cut separation of nature and culture, human and non-human? Based on Deluze's 'flat ontology' the notion of ecology used in this paper incorporates nature and culture, going beyond the particular entity that might form part of this or that assembly. 'Flat ecology' is an assemblage that incorporates both natural and artificial processes.

... man and nature are not like two opposite terms confronting each other – not even in the sense of bipolar opposites within a relationship of causation, ideation, or

expression (cause and effect, subject and object, etc); rather they are one and the same essential reality, the producer-product<sup>24</sup>

One must switch is to a realist<sup>25</sup> view of causes not as conjunctions but as actual connections in which one event produces another event; one entity is able to affect and be affected by another. Ecology, thus understood, implies transformation-implies something always in process of continual *becoming* and possibility.

As we have seen, Naess' deep ecology subjectifies nature; Morton's dark ecology rejects nature; while Deleuze's flat ecology intensifies nature, treating it as a comprehensive ontology of complex material systems defined not by their identifying properties, not by whether they have natural or artificial essences, but by their process of production- their morphogenesis. This 'flat' ecology turns ecology into a complex transdisciplinary project linking philosophy, sociology, anthropology, art, literature, politics, music, history, and the sciences. With disciplinary promiscuity<sup>26</sup> we introduce more questions and unknowns that could possibly be answered. Yet with all its problems, it is this promiscuity that gives rise to potentiality; to the emergence of the possible and the possible emergence of a new way of operating on the environment.

## **EXPRESSIVE ECOLOGY**



# 2.1 Ecology beyond essences

Deep ecology is an essentialist ecology. It believes in nature and culture as part of a great whole (the environment) with capital 'N' Nature as having certain immutable properties that if disturbed can cause great imbalance. In describing his notion of *dark ecology* Morton argues for an ecology beyond essences; beyond holistic holism. He claims that the very nature of this whole, as composed of parts, implies fragmentability; "a whole could have faulty components that might need to be cleansed or replaced."<sup>27</sup>

So in a non-essentialist ecology, what are the elements that compose the environment? It was Charles Darwin who broke the Aristotelian tradition by showing that far from being eternal archetypes, species were born at a particular historical time, given particular material conditions of evolution and became extinct in a similar historical way. Furthermore he showed that the difference between humans and nonhumans is quantitative not qualitative; in degree not in kind. The recent, and still controversial, theory of *individuation of species*<sup>28</sup> enhances this view by stating that species are above all individuals and not *kinds*. This breaks the hierarchical idea of species representing a higher ontological category than the individual organisms that compose them.

When ecology is classified and organized in hierarchies, it is done based on the properties of its constituting elements, on unchanging, fixed, characteristics such as four legged, scaled, etc. These are *relations of interiority* which from an essentialist point of view describe the 'essence' of the organism. As we have seen, in deep ecology, nature-culture is thought to be part of a holistic whole which is made of parts that relate through their individuating properties- through *relations of interiority*. On the other hand when we take into account the *capacity* of that organism to enter into relation with another organism we are dealing with *relations of exteriority*; that is, the ability to affect and be affected by other organisms. In *flat ecology* we are dealing with *relations of exteriority*.

Entities that organize under relations of exteriority produce an *emergent* whole<sup>29</sup> which is not a mere aggregation of parts; it is a whole that emerges from the dynamic interaction of its parts. An emergent whole is a Deleuzian assemblage, which is also characterized by relations of exteriority. Moreover, parts of the assemblage can be removed and plugged into a different assemblage without disturbing the assemblage itself. This is also what Deleuze refers to as the *body without organs (BwO)*.

It is no longer an organism that functions but a BwO that is constructed ... There is no longer a Self [moi] that feels, acts and recalls; there is a "glowing fog, a dark yellow mist" that has affects and experiences movements, speeds.<sup>30</sup>

This emergent whole (or assemblage, or body without organs) emphasis *expression* over signifiers and the conclusive field of language; it denies the subjective and the implied meaning of the experience of things. It has its own mode of organization, that cannot exist without affect (an affect that is in a continuous process of *becoming*) and whose principals are primarily derived from Spinoza's single substance.<sup>31</sup>

Ecology, or *flat ecology*, as put forth in the previous section of this paper, is such assemblage. Its parts are organisms characterized by relations of exteriority which implies a continual affecting and being affected. It has to do with the process of production and capacity of nature, not with its properties. In Deleuzian terms, *flat ecology* is an assemblage of multiplicities, of heterogeneous elements that are held together in a non-linear, non-hierarchical manner. Flat ecology is also what Morton calls "the mesh," <sup>32</sup> a web that holds heterogeneous elements together.

In Negotiations Deleuze opens the fourth chapter with a critique to contemporary philosophical thought; stating that there is a return to modernist notions of abstraction and origin, and away from any analysis that deals with movement and vectors.<sup>33</sup>

Rethinking ecology necessarily implies looking at it in a vectorial way, as something in constant process of becoming. Interestingly, in The Origin of Species, Darwin describes that there is no actual origin to any species, but rather that in natural selection "everything derives from something else."<sup>34</sup> Ecology should be defined less by the origin

of its components and more through their process of production: "there's no longer an origin as a starting point, but a sort of putting-into-orbit."<sup>35</sup>

Ecology thus understood, is the relational manifestation of nature-culture entities which operate in a continuum, and the environment is the physical manifestation of that ecology. But the environment isn't just our physical manifestation; our *Being* is expressed in our environment- in our territoriality. Our Being doesn't stop at the physical manifestation of our entity; it is extended in our environment: "an organism is defined both by its spatial architecture, as well as by the different materials (bone, muscle) which give that architecture its specific mechanical qualities." Thus a spider's Being, or in material term, DNA, is expressed in its web; a beaver's DNA doesn't stop at its whiskers, but rather is revealed in its damn. Thus our environment is an indistinguishable part of our Being/DNA, it is our ontology, but more importantly it is our *expressivity*.

# 2.2 Non-human expressivity

Grand Canyon

In addition to Morton's affirmation that one of the most dangerous things humans have done to nature is to 'think' of it in a particular way, one could affirm that to really rethink the nature-culture dialectic it is equally important to look at how humans think about humans; reflecting on Nietzsche's "Human All Too Human". Indeed, as humans, we think of ourselves as the special species of the planet, and as such we entitle ourselves to dispose of it as esteemed necessary. But the visible consequences of our industrial practices have woken us up to the fact that we are not the owners of the planet, and a revisiting of our 'humanness' becomes imperative.

As mentioned earlier, it was Darwin who first implied that differences in humans and nonhumans are differences of "degree and not in kind."<sup>38</sup> As we have seen the recent theory of *individuation of species* supports this notion. Not surprisingly it was also Darwin who first pointed at the idea of *non-human expressivity*.<sup>39</sup> From his research he deduced the possibility of nonhumans being capable of aesthetic contemplation and enjoying things for no particular reason, making it seem as if they possessed an "almost human

degree of taste." <sup>40</sup> In effect, it is hard to deny that birds have the same capacity for appreciation of the beautiful than we do; the visual displays of a male peacock or the auditory symphonies of a blackbird point to an incredibly complex and layered capacity for aesthetic enjoyment.

Art was not born with humans.<sup>41</sup> The bowerbird is but one example of the incredibly complex artistry in nature. These birds have extraordinarily intricate courtship and mating behavior, where males build elaborate bowers to attract females. The male then spends hours decorating the bower by collecting and placing a variety of brightly colored objects which may include hundreds of shells, leaves, flowers, feathers, stones, berries, and even discarded plastic items, coins, nails, rifle shells, or pieces of glass. The males spend hours arranging and re-arranging this collection. Interestingly, the duller the plumage of the male the more elaborate and decorated the nest he builds, to make up for his visual shortcomings. This is a clear example of external expressivity; "expressive qualities entertain internal relations with one another that constitute territorial motifs" The bird expresses itself through the building of its bower. The bird has become an artist.

There are numerous examples of the expressive qualities of nonhuman life forms. Deleuze's interested in the animal/natural world is indeed targeted at nonhuman expressivity, for its capacity to make us re-think our 'humanness'- our pride of being human. As elaborated by Manuel DeLanda in his lectures about Deleuze's philosophy, the Deleuzian materialist standpoint affirms that the animal /natural entities are also capable of incredibly complex and layered expressivity, beyond survival communication. A crystal, for instance "expresses itself" through the way it refracts light from its surface; it has a three-dimensional expressivity activated by its relations of exteriority with another entity (light). This expressivity is made possible by the capacity the entity has to be affected by another entity. In turn, the human capacity for being affected by this expressivity is a crucial precondition for the ability of 'acting environmentally'

Humans are part of this expressive ecology, and as DeLanda explains we must learn from the world itself to ensure that our pride of being "human all too human" doesn't numb us to other forms of expression other than language and meaning. Life

itself should not be limited to the human realm (and specifies that this is particularly important if you are an artist); instead we must embrace the phenomenal diversity of human experience which includes being affected by non-human expressivity. We have the capacity to affect the world (natural, artificial, inherited, endured...) with our 'humanness' but if we lose the capacity to be affected by it "to appreciate the awesomeness of the mountains" we will lose our expressive ecology on which the survival of the planet depends. Ecological thinking isn't just something that occurs in our minds, it is a practice. In Morton's words: "It's a practice and a process of becoming fully aware of how human beings are connected with other beings – animal, vegetable, mineral"<sup>144</sup>

# 2.3 Ecology as abstract machine



Unlike the anthropomorphist conception of the world for whom the world depends on human interpretation, Deleuze conceives of the world as a complexifying creative place always in process of becoming- a place of possibility or *plane of immanence*. Deleuze conceived of a post-humanist future enriched by a multiplicity of non-human agencies. Under this conception nature itself is not natural but machinic, fincorporating both culture and nature as parts of a same continuum. The whole world, human and nonhuman, is envisioned as composed of an interlocking series of connected machines that produce materials that are fed into other machines. This immediately suggests a "machinic world", one interconnected by relations of production.

Crucial to the understanding of this machinic world, is the knowledge that humans are not the invertors of machines. Machines can be just as natural as they are artificial. For instance, a hurricane, in a very literal sense is a machine– it is a motor.<sup>48</sup> When a hurricane is created from the collision of particular atmospheric conditions, there is a precise yet non-linear, intensive self-organizing process that takes place, without which the hurricane cannot be produced. A hurricane is a self producing machine, yet it is part of the conservatively coded 'natural environment'. It took centuries for humans to discover the motor, something that has been self-assemblying spontaneously in nature for billions of years. As soon as any form of matter and energy begin to flow in a non-linear manner,

past a certain threshold of complexity, machines tend to spontaneously self-assemble.<sup>49</sup> This machinic self-assemblying *action* is happening all the time.

In this machinic environment, however, we are not dealing with the machine in the literal, physical sense (although it could also be) but in an abstract *diagrammatic*<sup>50</sup> conception. Ecology is an *abstract machine* that knows nothing of the distinctions between the natural or the artificial, it has to do with the interaction of dynamic flows. This ecological abstract machine is not just stratification producing organisms, but also destratification producing the plane of consistency,<sup>51</sup> of possibility. "One side of the machinic assemblage faces the strata, which doubtless make it a kind of organism (…) it also has a side facing the body without organs which is continually dismantling the organism."<sup>52</sup> Thus, ecology is an abstract machine, engaged simultaneously in two seemingly contraditory directions; unity and dispersion, stratification and destratification, production and destruction.

To elucidate the Deleuzian conception of ecology as abstract machine, it becomes insightful to turn to the concept of 'the uncanny' as first developed by Freud in his 1919 paper of the same name. Freud's paper "Unheimlich", literally meaning 'unhomely' but translated into English as "The Uncanny," deals with the notion of familiarity, putting forward the circumstances in which the familiar can become uncanny and frightening. In this paper Freud explores the psychodynamics of that which arouses dread and horror. Similarly ecology, as a nature-culture assemblage provokes an uncannyness that both comforts and alienates. Ecology organizes form and space in such a way as to produce unsettling and ambivalent sensations, oscillating between the familiar and the unfamiliar, the alien and the safe. Forests and cities can provoke the uncanny, because "repetition, with its play of familiarity and difference" makes simultaneous ambivalence possible. "The ecological thought thinks neither cuddliness nor wildness but uncanny familiarity"

Environmental problems will not go away once we forge a new vision for the environment.<sup>57</sup> But it is a start to admit that machinic processes happen all the time in nature, and natural processes of self-assembly happen all the time in the artificial world.<sup>58</sup> This is an uncanny ecology which includes the ecology of waste, development, leisure,

not to mention war, politics or terrorism; it is an ecology which implies the complex interplay of uncertain agents, both human and nonhuman. This ecology is by definition incompatible with fixed categories; incompatible with essences. It demands the incorporation of disparate disciplines. It demands us to look at the uncanny possibility of simultaneously 'becoming animal' and 'becoming machine'. It demands outrageous imagination and creativity. What we might learn from this ecology is a more flexible form of practice itself: a series of working concepts flexible enough to accommodate the wildly improbable demands for present and future 'ecological action'.

## **ACTING ECOLOGICALLY**

# 9

D Cmitheo

# 3.1 Practicing and acting

In his opening chapter to *Design Futuring* Tony Fry describes the act of practicing an occupation or profession as something that becomes an integral part of one's ontology. In order to master a practice one must become very adept at its daily repetitive actions, mastering these acts in such a way that one no longer thinks about the act itself. One simply 'does', spontaneously and mechanically, and in this *doing* the practice becomes an indispensible part of the being of the person who is acting –it becomes an ontology. Similarly, our actions on the environment have become part of our daily practice and we have become such experts at this practice that it is engrained in our very Being.

Actions, whether we like to call them natural or artificial, happen all the time.<sup>59</sup> The difficulty lies in knowing that these actions are in fact being performed. If we no longer think about the 'act of acting' we are unable to know that these actions have consequences. We might only realize we are acting once we see the consequences,<sup>60</sup> so if these consequences are undesirable it might be too late to undo the action. According to Zizek, we believe we are omnipotent, and this very omnipotence doesn't allow us to predict the consequences of our actions.<sup>61</sup>

Thus there has to be an awareness of the action itself before it happens. The will to redirect an action necessarily entails a will to re-direction in the very *being* of the acting subject, in other words, the ontology. As we have seen, ecologists have for quite some time advocated that we must change the way we conduct our everyday lives in order to have an 'ecological' existence in the world as it is today. Yet only some are really aware that this change cannot just refer to mundane actions, like turning off the power when not in use. A change in human practices necessarily implies a change in human ontology. Deleuzian ontology helps redefine our position in the world within a flat non-hierarchical material system, where what matters are processes, in other words: *actions*.

Fry talks of the "strategic role of the designer as a redirective practitioner." He talks of how it is the design field and way of practicing that needs to change to accommodate the demands of the ecological present. While this is true, we would like to turn this idea around and, supported by Bruce Mau's slogan: "Massive change is not about the world of design but about design of the world," consider the fact that as inhabitants of the world we are all responsible for designing it: we are all designers. We are all beings-in-the-world that perform actions which have real, material, consequences in the world – even if those consequences (those 'designs')-are none other than the production of waste. Indeed, our waste is quite carefully designed, from its initial transportation all the way to its final packaging. Yet for most of us design is invisible until it fails<sup>64</sup>

Whenever we bring something into being we also destroy something – the omelette at the cost of the egg, the table at the cost of the tree, through to fossil fuel generated energy at the cost of the planet' atmosphere.  $^{65}$ 

Indeed, every making, creating, designing, implies a transformation, which while being productive also implies some sort of destruction. Any transformation implies the existence of a production-destruction binomial. However, if we extracted all meaning from destructive actions, all we would see is a mere re-arrangement of matter. Thus earthquakes or destruction caused by war would simply be a transformation of matter. From a neutral, non-human, perspective (from 'nature's' perspective) destruction or construction are simply a transformation of matter; "... it is man who destroys his cities through the agency of earthquakes or directly, who destroys his ships through the agency of cyclones or directly." Although in this passage Sartre illustrates an anthropomorphic view of destruction, it is an interesting point to think about when 'acting in the world'. Even though every creative act implies a destructive one, the only way not to be immobilized by at the thought of possible destruction is to have a looser grip on meaning.

Unfortunately, being a designer (a being-in-the-world) implies having no choice but to be an optimist. Given a 'design' problem, even the most difficult, all a designer can do is to presume the existence of a possible solution. Not because the designer cannot see the difficulties in attempting to solve the problem, but because there is no alternative.

To be designers acting in the world we must make proposals, and at this point, we only really have a future if we are able to design one.

# 3.2 Matter and transformation

O

A. Goldsworthy

Design is by definition a transformation of matter. If we are all designers (beings-in-the-world) operating in the environment that is our planet, we can expect the future to hold a lot more transformation of matter in the world. We must assume and admit this to be the case. So given this invariable, how do we 'act ecologically' in the world? To elucidate a possible answer to this question we must turn to a realist conception of the world. In a realist's world, material is morphogenic; it contains inherent capacities to generate form. Thus matter isn't a formless entity onto which we project form, instead it has capacities for self-organizing when affected by other entities. As designers-in-the-world we must operate on matter with knowledge of this capacity, yes, directing the 'design' but operating through form-finding techniques as opposed to form-imposing absolutes.

Frei Otto was the pioneer of form-finding techniques. He used properties of self-assembly in 'natural' elements such as soap film to study surface tension and in effect invent (although nature had invented it well before) tensile structures which now proliferate in our cities. We can find numerous examples of morphogenetic use of matter by turning the fine arts, and look at the work of figures such as Robert Smithson with his radically ecological 'flow works', or Andy Goldsworthy with his artificial assemblages of nature. They use the morphogenetic properties of materials and allow them to be affected by external nature-culture forces. In this work the natural and artificial are inexorably intertwined as a morphogenetic assemblage.

# 3.3 Intentional omissions

Admittedly, a large gap emerging in the arguments exposed in this paper has to do with the lack of direct attention to the realm of the political and religious in our contemporary thinking about ecology. Ecology is politics. And as Spinoza has shown, the question of God is inextricably linked to the question of nature. However, attempting to tackle them directly with any substance would imply getting into a series of dilemmas that are well beyond the intent of this paper.

Written from the perspective of a practicing designer, the hope of this paper is not to cover a panoptic view of ecological thinking (indeed, this is a hopeless hope), but to show that a panoptic view is necessary in order to think the ecological present. Taking into account the morphogenesis of matter seems to be a viable conceptual framework to 'act' in the world- in the environment, acting by not imposing a form to the world but by working with its inherent possibility of self-assembly. By acting in the world we are all designers. Inspired by Deleuzian ontology, the aim of this paper is to put forth some preconditions that lay the ground for possible new ways of thinking and *practicing* in the ecological present.

## **NOTES**

<sup>&</sup>lt;sup>1</sup> Hanjo Berressem, "Structural Couplings: Radical Constructivism and a Deleuzian Ecologics" in *Deleuze/Guattari and Ecology*, p.67

<sup>&</sup>lt;sup>2</sup> Borrowed expression from Simon Critchley

<sup>&</sup>lt;sup>3</sup> Timothy Morton, "Ecology without Nature" http://ecologywithoutnature.blogspot.com

<sup>&</sup>lt;sup>4</sup> Bruno Latour, We Have Never Been Modern, p.104

<sup>&</sup>lt;sup>5</sup> Italian classic children's song "Per fare un tavolo ci vuole un fiore", a popular song that goes through a series of verses illustrating the interconnectedness of natural nature and cultural artifice; to make a table you need wood; to make the wood you need a tree; to make the tree you need the fruit; to make the fruit you need a flower (...). For a full version of the classic song, with english translation, please refer to: "Agency and consciousness in discourse: self-other dynamics as a complex system" by Paul J. Thibault, p. 324

<sup>&</sup>lt;sup>6</sup> James Proctor. Environment After Nature: Time for a New Vision, p.295

<sup>&</sup>lt;sup>7</sup> Timothy Morton, The Ecological Thought, p.4

<sup>&</sup>lt;sup>8</sup> This idea will be developed further in the paper, but it is not referring solely to the discipline of Design, rather to an understanding that by our mere functioning in the world we are all designers of the worls.

<sup>&</sup>lt;sup>9</sup> Together with George Sessions, Naess put forth eight principals from which the 'deep ecology platform/movement' (DEP) emerged. The points were published in "Deep Ecology; Living as if Nature Mattered" by Sessions and Gibbs.

<sup>&</sup>lt;sup>10</sup> Eccy De Jonge. Spinoza And Deep Ecology: Challenging Traditional Approaches To Environmentalism. p1

<sup>&</sup>lt;sup>11</sup> Alistair Welchman, "Deleuze and Deep Ecology" in An [Un]Likely Alliance, p.116

<sup>&</sup>lt;sup>12</sup> Naess defined ecosophy in the following way: "By an ecosophy I mean a philosophy of ecological harmony or equilibrium. A philosophy as a kind of sofia (or) wisdom, is openly normative, it contains both norms, rules, postulates, value priority announcements and hypotheses concerning the state of affairs in our universe. Wisdom is policy wisdom, prescription, not only scientific description and prediction. The details of an ecosophy will show many variations due to significant differences concerning not only the 'facts' of pollution, resources, population, etc. but also value priorities.

<sup>&</sup>lt;sup>13</sup> Timothy Morton, Ecology Without Nature,p.

<sup>&</sup>lt;sup>14</sup> Morton argues that nature is an arbitrary rhetorical concept whose modern origins can be traced to Romantics writing during the Industrial Revolution.

<sup>&</sup>lt;sup>15</sup> Zizek, "Unbehagen In Der Natur" in In Defense of Lost Causes, p.445

<sup>&</sup>lt;sup>16</sup> Slavoj Zizek, "Unbehagen In Der Natur" in In Defense of Lost Causes, p. 435

<sup>&</sup>lt;sup>17</sup> Ibid., p. 440

<sup>&</sup>lt;sup>18</sup> Slavoj Zizek, Lecture on "Ecology without Nature" Athens 2007

<sup>&</sup>lt;sup>19</sup> http://harvardpress.typepad.com/hup\_publicity/2007/11/zizek-on-ecolog.html

<sup>&</sup>lt;sup>20</sup> Although Guattari was an indispensible collaborator of Deleuze, I will often just refer to Deleuze

<sup>&</sup>lt;sup>21</sup> Gilles Deleuze and Felix Guattari, Anti-Oedipus p.3

<sup>&</sup>lt;sup>22</sup> Manuel DeLanda, Intensive Science & Virtual Philosophy, p. 10

<sup>&</sup>lt;sup>23</sup> Ibid., p.47

<sup>&</sup>lt;sup>24</sup> Gilles Deleuze and Felix Guattari, Anti-Oedipus, p.4-5

<sup>&</sup>lt;sup>25</sup> Manuel DeLanda; Deleuzian mind-independent world

<sup>&</sup>lt;sup>26</sup> Borrowed expression from Simon Critchley

<sup>&</sup>lt;sup>27</sup> Interview to T.Morton; http://philosophyinatimeoferror.wordpress.com/2010/05/10/tim-morton-the-interview

<sup>&</sup>lt;sup>28</sup> Manuel DeLanda, Intensive Science & Virtual Philosophy, p.46

<sup>&</sup>lt;sup>29</sup> http://www.dif-ferance.org/Delanda-Protevi.pdf, p.6

<sup>&</sup>lt;sup>30</sup> Gilles Deleuze and Felix Guattari. A Thousand Plateaus, p162

<sup>&</sup>lt;sup>31</sup> "Body Without Organs" in The Deleuze Dictionary, p.34

<sup>&</sup>lt;sup>32</sup> Timothy Morton, The Ecological Thought, p.28-29

<sup>33</sup> Gilles Deleuze, Negotiations. p.119

<sup>&</sup>lt;sup>34</sup> Timothy Morton s Lecture "The Mesh" www.youtube.com/watch?v=R-mWCPa9y3c

<sup>&</sup>lt;sup>35</sup> Gilles Deleuze, Negotiations, p.119

<sup>&</sup>lt;sup>36</sup> Manuel DeLanda, Intensive Science & Virtual Philosophy, p.46

<sup>&</sup>lt;sup>37</sup> This analogy is borrowed from Timothy Morton who uses it in his lecture "Beautiful Soul Syndrome"

- <sup>38</sup> Charles Darwin, The Descent of Man. P151
- <sup>39</sup> Term borrowed from DeLanda's lecture "The Philosophy of Gilles Deleuze" at the European Graduate University (EGS) www.egs.edu/faculty/manuel-delanda/videos/
- <sup>40</sup> Charles Darwin, The Descent of Man. P149
- <sup>41</sup> Manuel DeLanda, lecture "The Philosophy of Gilles Deleuze" at EGS
- <sup>42</sup> Gilles Deleuze and Felix Guattari, A Thousand Plateus. p.317
- <sup>43</sup> Manuel DeLanda, lecture "The Philosophy of Gilles Deleuze" at EGS
- <sup>44</sup> Timothy Morton. *The Ecological Thought*, p.7
- <sup>45</sup> Gilles Deleuze and Felix Guattari, A Thousand Plateus. p.281
- <sup>46</sup> Ibid., p.141
- <sup>47</sup> Torkild Thanem. "Deleuzian Interrogations: A Conversation with Manuel DeLanda, John Protevi and Torkild Thanem", p.25
- <sup>48</sup> Manuel DeLanda, lecture "The Philosophy of Gilles Deleuze" at EGS
- <sup>49</sup> Ref to deLanda
- <sup>50</sup>Gilles Deleuze and Felix Guattari, Thousand Plateus. P141
- <sup>51</sup> John Protevi. "The Organism as the Judgment of God: Aristotle, Kant and Deleuze on Nature" p. 30-41
- <sup>52</sup> Gilles Deleuze and Felix Guattari, A Thousand Plateus. p.4
- <sup>53</sup> The English term is not an exact equivalent of the German one; 'unheimlich' is translated throughout this paper by the English 'uncanny', which translates literally as 'unhomely'. According to the Oxford English Dictionary, there is a similar ambiguity attached to the English 'canny', which may mean not only 'cosy' but also 'endowed with occult or magical powers'
- <sup>54</sup> Sigmund Freud, "The Uncanny" in The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XVII, p.219
- <sup>55</sup> Timothy Morton, The Ecological Thought, p.52
- <sup>56</sup> Ibid., p.75
- <sup>57</sup> James Proctor,p. 294 http://thebreakthrough.org/blog/EnvisioningNSRProctorEssay.pdf
- <sup>58</sup> An example of this is the self-synchronization of beat-keapers.
- <sup>59</sup> Reference to Jacob's intervention in the last class of "Thinking the Present"
- <sup>60</sup> As we have witnessed in recent days with the oil spill in the gulf of Mexico
- <sup>61</sup> Slavoj Zizek, Lecture on "Ecology without Nature" Athens 2007
- <sup>62</sup> Fry, Tony. Design Futuring. P.107
- <sup>63</sup> Bruce Mau. *Massive Change*, back cover.
- <sup>64</sup> Ibid., p.1
- 65 Fry, Tony. Design Futuring. P.4
- <sup>66</sup> Jean-Paul Sartre. Being and Nothingness, p.40
- <sup>67</sup> John Protevi, The Organism as the Judgment of God: Aristotle, Kant and Deleuze on Nature. (that is, on biology, theology and politics In Mary Bryden, ed., Deleuze and Religion. NY: Routledge, 2001. p.30-41.

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