

POPULAR

INQUIRY

The Journal of Kitsch, Camp and Mass Culture

Volume 1 / 2022

NATURE VERSUS CULTURE?

Wolfgang Welsch

Friedrich-Schiller-Universität Jena, Germany

NATURE VERSUS CULTURE?

Wolfgang Welsch

Abstract

Arnold Berleant has claimed that we get rid of the dualisms which haunted Western thinking for millennia. This paper tries to confirm his thesis by examining one of the most prominent dualisms: that of nature and culture. In antiquity, the opposition between nature and culture was not yet total, but limited and moderated. In modernity, however, nature and culture were believed to represent completely different spheres, corresponding to the Cartesian dualism of *res extensa* and *res cogitans*. Contemporarily, however, undeniable entanglements between nature and culture are being put on the agenda. The future is likely to be marked by the interweaving of nature and culture.

Keywords

Berleant, Nature, Culture, Environmental Aesthetics.

In his 2011 essay "Evolutionary Naturalism and the End of Dualism," Arnold Berleant convincingly argued that nowadays a philosophical standpoint is warranted according to which "human beings are fully integrated biological organisms that share a common history with every other form of life."¹ Practically, it follows from this a "modern analogue of the Stoic's injunction to live in accordance with nature."² Theoretically, this results in the call to leave behind the whole bunch of time-honored dualisms: "It is clear that a holistic, integrative understanding of the natural world that embraces the human presence is not compatible with the dualistic understanding that has dominated Western thinking since its origins two millennia ago."³ We have to question and to dissolve the whole body of dualistic thought patterns, which was based on the no longer tenable thesis of a constitutive unnaturalness of man.

In the following I want to contribute to this endeavor by addressing one of the most fundamental dualisms of Western thinking: that of nature and culture. First, I will present the main stages of dualistic thinking with regard to nature and culture in antiquity and modern times, and then turn to aesthetic revisions and to current transformations.

1. The Duality of Nature and Culture in Antiquity

In antiquity, the duality of nature and culture was nowhere total, but always limited and moderated.

The Sophists brought up the opposition between nature and culture by pointing out that the cultural world is, at least in some respects, self-legislated and cannot be measured throughout by nature (*physis*). What is considered just or how a crime is to be punished is not regulated by nature, but results from social positing (*nomos*) and can therefore vary from one society to another. Nature has certainly determined many things (that we grow from children to adults, that we feed ourselves, that we are in need of protection, etc.), but how this happens in detail is in the hands of humans. One

may still point to guidelines of nature (one should not hinder the natural growth, should not overindulge and should not let the protection degenerate into pampering, etc.), but even then, there is still a lot of room for social convention in detail. Nomos and physis do not stand in bare opposition, rather nomos has a legitimate place within the framework of physis.

Aristotle coined a famous and powerful reconciliation formula: "Art (techne) imitates nature (physis)."⁴ By this he means that human art proceeds in the production of things in exactly the same way as nature does, insofar as the same four kinds of causes that prevail in nature (the causes of matter, form, effect, and purpose) also govern human production. The structure of causes is homologous: "If, for example, a house were something that comes into being by nature, it would originate in exactly the same way as it does now through the activity of craftsmanship. Conversely, if natural entities came into being not only by natural means but also by human craftsmanship, they would originate in exactly the same way as they do now by nature."⁵

In addition to this homology of causes, there is a complementary relationship between nature and art: human skills support nature where nature is unable to complete its work by itself; for example, crop plants require human care, just think of the basic paradigm of culture, agriculture: wheat grains depend on the activity of farmers – nature alone does not produce wheat fields. Furthermore, human art complements nature where nature only settles the first steps of development, while subsequent development requires specific human measures; thus, humans need a midwife for birth, and afterwards, as children, the assistance of parents.⁶ In such cases the human art takes up the precepts of nature and resumes the naturally laid out ways. It completes what is initiated – but only initiated – by nature. Similarly, in the moral sphere, it is decisive that a good natural disposition is present, but it has to find its adequate development into a "second nature" through education and habituation.⁷

In short: Aristotle reduces the contrast between nature and culture. According to him, culture is a continuation of nature, which proceeds analogously to nature and completes the work of nature wherever nature itself is unable to reach its completion. Culture acts in the manner and the sense of nature.

Finally, the Stoics generally propagated conformity with nature as the measure of moral life (homologoumenos zen). Human nature is itself a part of cosmic nature, therefore there can be no real opposition between nature and culture. Nature is and remains – from the behavior of animals to the cosmic order – the shining example of human orientation.

In antiquity, therefore, the distinction between nature and culture has no real explosive power. Even where nature is not considered to rule everything, but where culture is adjudicated some independence, the measure of nature is not suspended. Culture fills a free space that nature has left open, and it does so not against nature, but in its sense.

2. The Modern Opposition of Nature and Culture

Only in modern times nature and culture decisively separate. This is apparent, for example, in Nicholas of Cusa, who, against Aristotle's attempt to see human productivity as an "imitation of nature"

and thus to bring it under the thumb of nature, points to the otherness of genuine human creations, which cannot be understood as imitation. Paradigmatically, Nicholas of Cusa uses the example of the spoon carver who rightly declares: "I do not imitate the shape of any natural thing. The forms of spoons, bowls and pots come into being only through human art. Therefore, my art consists more in achieving than in imitating creaturely forms, and in this it is more similar to the infinite [which means: the divine] art."⁸ Human culture and its production of artifacts go beyond the presets of nature. They constitute a creation *sui generis*.

Another document for the detachment of the human world from the context of nature is Pico della Mirandola's speech *De hominis dignitate* (Oration on the Dignity of Man) from 1486, where Pico explains that humans, unlike all other beings, are not determined by creation, but confront it freely and unattachedly. Humans have to define their position in the world themselves.

Finally, Descartes proclaimed a strict dualism of *res extensa* and *res cogitans*, which became decisive for the future radical opposition of nature and culture. Nature, on the one hand, should be characterized by extension alone and be a purely material entity – *res extensa*. On the other hand, man and the culture he produces were to be characterized by a completely different way of being: by rationality, thinking, spirit – *res cogitans*. The difference to older views could hardly be greater. In antiquity as well as in the Middle Ages, the world was understood as determined by spirit. Descartes, however, saw it as mere matter following purely mechanical principles. Nature thus became completely spiritless. The spirit, on the other hand (once the regent of the world and the innermost principle of nature) became a principle external to nature, and man thus, precisely as a spiritual being, became an alien to the natural world. While the human being is catapulted into the pure world of spirit, the animals, on the other hand, are even deprived of liveliness and are declared to be mere automata – a downright scandalous consequence of the Cartesian dichotomization.⁹

This also caused the view that nature is simply to be subjugated to culture, that it just represents a reservoir of raw materials and energy to be exploited. In this sense, Francis Bacon declared in 1620 that humans should "conquer nature,"¹⁰ and Descartes, in 1637, wanted to make us "masters and owners of nature."¹¹ At that time the primarily technological and commanding relation to nature was founded which reaches up to our days.

The ontological dichotomization of nature (matter) and culture (spirit) not only had practical consequences, but also led to an epistemic dichotomization. Nature became, strictly speaking, unknowable. For if our means of cognition *qua res cogitans* belong to an order which has not the least in common with nature *qua res extensa*, then these means of cognition are not capable of any correspondence with nature; we are instead left only to construct nature and to fabricate the world according to our own imagination. Spirit and nature no longer go together. The Kantian unknowability of the thing-in-itself will be a consequence of the Cartesian dualism.

Later, the opposition of nature and culture became virulent anew even within the sphere of culture, when Rousseau fundamentally criticized culture as an aberration and asserted nature as an ideal opposing this decay. Rousseau saw the culture of "arts and sciences" which determines modernity as disastrous: full of ostentatious splendor, it ruins people. It has only dubious measures: the Olympian measure of *citius-altius-fortius* or the decadent measure of refinement. Certainly, the arts and sciences flourish more and more. People make more and more inventions, acquire more and more knowledge, meanwhile already 35 bulky volumes are needed to represent the knowledge accumulated (the *Encyclopedia* of 1751–1780). But this progress makes people neither happier nor better. On the contrary, it leads to the decline of human existence, to the decay of morals, to the flourishing of vices. The progress of arts and sciences is a generator of decline. It leads people further and further away from happiness. It destroys them.

In contrast, recourse to a measure not taken from culture is necessary. For Rousseau, nature provides this measure. He knows, of course, that it is eminently difficult to reconstruct the original natural state, because in consequence of numerous cultural transformations we are probably no longer able to bring this state before our eyes undistorted.¹² Moreover, it may even be questionable whether a genuine state of nature has *de facto* ever existed. But the attempt to reconstruct this state – even fictitiously – is indispensable. We need it as a model.¹³

The situation is tricky. Nature is supposed to serve as a corrective to the luxuriant culture. But it cannot simply be detected; it can only be designed from within the horizon of culture. Therefore, this 'nature' is not pure nature, but a pole of longing of culture, it is – as a fictitious corrective of culture – widely culturally infected. The opposition of nature and culture, which ontologically should be a total one and which epistemically led to the disappearance of nature as such in favor of its man-made conception, produces culturally a game of hypothetical projections.

3. Attempts to Overcome Dualism

But with this the opposition of nature and culture is still far from being overcome. On the contrary: In the years to follow, one tried again and again to close or at least to bridge the gap between the material and the spiritual world, which had been torn open by Descartes. The overcoming of modern dualism is the permanent task of the time to come.¹⁴

Diderot has put the concept of a sensualistic monism on the scale. Everything in nature is connected by sentience: "From the flea to the sentient living molecule, the origin of everything, there is no point in nature that does not suffer and enjoy";¹⁵ sentience is "a general and essential property of matter."¹⁶ Thus, matter already possesses something that clearly distinguishes it from Descartes' purely dead matter and brings it closer to the sphere of the spirit. Demarcations are merely superficial. Man, too, is included in the great commonality, is not opposed to nature as a special being: "Every animal is more or less man, every mineral is more or less plant, every plant more or less animal. There is no sharp demarcation in nature."¹⁷ Diderot dismisses the modern thinking of separation.

In the late 18th century, attempts to move beyond dualism become more and more numerous. In 1790, in his *Critique of Judgment*, Kant argues against the mechanistic conception of nature for an organic understanding of nature, according to which purposes are not first found in the human world, but already in nature, thus bringing the two spheres closer to each other. Schelling propagates an originality of nature and spirit.¹⁸ Schiller explains, in his *Kallias-Letters*, that freedom (supposedly a proprium of human culture) is already to be found in nature, that the beauty of nature is basically an appearance of freedom, and that nature, through its beautiful creations, virtually makes an appeal to us humans to finally become free as well.¹⁹ Goethe can only shake his head about a supposedly hard opposition of nature and spirit and shows how precise experience of nature can lead to the vision of ideas, which proves that the two sides are in continuity, not in opposition.²⁰ And Novalis makes the naturalness of man, already emphasized by Diderot, clear once again: "Do not animals, plants and stones, stars and skies also belong to mankind, and is mankind not a mere nerve node in which infinitely diverse threads intertwine? Can it be comprehended without nature –?"²¹ – These are attempts to overcome the modern dualism and to understand the human finally no longer as a special being alienated from the world, but as a natural being in the midst of other natural beings.

Yet these efforts were ultimately not successful. The natural sciences of the 19th century stood in the way. They pursued a rigidly mechanistic view of nature, which still moved in the wake of the Cartesian approach. A prime example was Emil du Bois-Reymond, the influential physiologist and several times rector of the Humboldt University in Berlin. While the idealist and romantic options urged seeing nature as alive and affine to spirit, du Bois-Reymond insisted on a strictly materialistic-mechanistic view of nature and rejected any tendency to attribute other (for instance vitalistic) forces to nature. Indicative of his opposition to the options of the Goethe period was his polemic in *Goethe and No End* of 1882.

The physics of the 20th century, on the other hand, brought before our eyes exactly what the Enlightenment thinkers, idealists and romantics had been looking for. It led the old mechanistic decrees ad absurdum. Microstates, as quantum physics showed, are not eo ipso determined (as mechanism had assumed), but only take on this or that value under the influence of measurement, and this is due to the fact that these states cannot be observed neutrally, but can only be determined by measurement, whereby every measurement inevitably represents an intervention, a physical exertion of influence. Thus, the experimenter is not neutral to the physical event, but is intertwined with it. Nature and culture are not separate, but interconnected. Moreover, the theories of self-organization and emergence explain how reflexivity emerged in a long process from initial phenomena of self-reference (as existed already in the formation of galaxies and atoms).²² – Culture and nature, so one could summarize the teaching of these newer theories of natural science, form a unity, and man, too, is integrated into the processes of nature.

4. Complexions of Nature and Culture

a. Aesthetics being a Prominent Precursors

While during the history of thought in general it has long been difficult to think nature and culture together, this was not the case in aesthetics. Aesthetics has long been a sphere that uncovered connections between nature and culture.

In ancient times, not only with respect to production (as with Aristotle), but especially aesthetically, the view was held that art is to imitate nature as perfectly as possible. The anecdotes about the painters Zeuxis and Parrhasios are eloquent testimonies to this. The representations of art should be as faithful as possible to the model of nature – so much so that, for example, if it is a matter of grapes, sparrows fly over and peck at them, or if it is an artifact like a painted curtain, even an art expert like Zeuxis thinks it is real and tries to push it aside.²³

While here nature and art were still considered different spheres, with art taking nature as its measure, the Renaissance asserted an original connection between nature and art. Leone Battista Alberti believed that nature had produced the very first representations – that art was originally a product of nature. Nature, Alberti claimed, occasionally creates pictorial representations (it paints, for example, "centaurs and bearded faces of kings on the fractures of pieces of marble"²⁴), and painting and sculpture then emerged from the observation of such natural phenomena.²⁵

If this is so, then there is of course from the ground up no opposition, but a continuity between nature and art. Art is originally a product of nature and thus does not stand in opposition to it, but is rooted in nature.²⁶

Alberti's assumption that art and aesthetics are emergent products of nature received a surprising confirmation in the 19th century by the evolutionary aesthetics founded by Darwin and continued by Haeckel.

According to Darwin, nature not only produces beautiful shapes, but also brings forth the aesthetic attitude, the aesthetic sense. The fact that aesthetics has already arisen in the animal kingdom and does not appear only in man is the capital topic of the second part of Darwin's *Descent of Man* published in 1871. There he develops the theory of sexual selection. Sexual selection goes beyond natural selection. Aesthetically attractive features of one sex evoke arousal in the other sex, which leads to an aesthetically determined choice of partner and mating.²⁷

Thus, according to Darwin, aesthetics is not first a cultural achievement (which as such could confront or oppose the natural), but is fundamentally a product of nature. And it does not only belong to nature, but is a way in which nature reproduces itself, shapes itself further and advances itself. The process of species propels itself forward by means of aesthetic refinements and choices. Aesthetics is an active and productive factor of reality, is an agent of further development of biological evolution. It was a great mistake to assume that the aesthetic sphere is opposed to reality. It is, on the contrary, from the very beginning a dimension of reality itself.

Haeckel, Darwin's propagator in the German-speaking world, was fascinated by the richness of natural beauty. Nature produces forms that qualify for models for art. Haeckel demonstrates this in his work *Art Forms of Nature* (1899–1904). The volume gained great influence on the arts of his time – for example, on Art Nouveau artists such as Obrist, Olbrich, Endell, Tiffany, and architect René Binet was inspired by Haeckel's pictorial panels for his famous entrance gate for the Paris World's Fair of 1900.²⁸ Art, Haeckel makes us understand, is already a strategy of nature itself; human art does not stand in opposition to nature, but originates from it and carries on the art forms of nature.

Alberti had spoken only of the appearance of representations in nature. Darwin and Haeckel, however, recognize beauty production and beauty appreciation (art and aesthetics) as significant strategies already of nature and not only of the human-cultural world. The gap between nature and culture is bridged.

In the ductus of this rapprochement there occur also reversals: Not only does art derive from nature, but nature can also be modeled after art. The classic example of this is the English Garden. Its artificial design aims to make the garden arrangement appear as if it were nature. The garden artists, however, did not take the model of their 'nature' from nature, but from art. Landscape depictions of the 17th century, especially by Claude Lorrain, were the inspiration for the English gardens of the 18th century.²⁹ The culmination of this method was achieved when inside a temple situated in a garden hangs a painting showing precisely this garden – which was laid out according to the model of this painting. There the complexion of nature and culture is completed.

With amusing exaggeration, Oscar Wilde explained in the late 19th century the influence of contemporary painting on the perception of nature: "Nature [...] is an imitation of art. [...] Nature follows the landscape painter [...] Where, if not from the Impressionists, do we get those wonderful brown fogs that come creeping down our streets, blurring the gas lamps and changing the homes into monstrous shadows? [...] The extraordinary change that has taken place in the climate of London during the last ten years is entirely due to a particular school of Art."³⁰ Art shapes our perception, and subsequently the aesthetically sensitized eye discovers a wholly new nature.

This is true not only for the London fog, but also for the Central European mountains. Previously considered terrible and inaccessible, these mountains were nobilitated in the late 18th century by aesthetics (Kant) and shortly thereafter by art (C.D. Friedrich). Mountains became paradigmatic objects of the sublime. This brought the mountain world closer to the people, so that soon (in the 19th century) mountains were no longer depicted and regarded as sublime, but as beautiful and pleasing. In the 20th century this was followed by widespread mountain tourism, and today the once so noble and sublime mountain world is being fully trampled on by mass tourism. – Art can not only change the image of nature, but also have very real and sometimes unpleasant consequences for it.³¹ Let's look back now at some of the stages that, on the contrary, argued for a nature-art-connection starting from nature, not from art.

Romanticism understood the work of art as a product of the originally creative nature (of *natura naturans*), mediated through the artist as medium. Just as *natura naturans* produces all phenomena of visible nature (of *natura naturata*), it also produces all true works of art via artistic activity. In the works of art, the *natura naturans* expresses itself. If one looks at the works the proper way, one recognizes in them the productivity of *natura naturans*. This romantic conception was influential for a long time. It was still in use, for example, in Gustav Mahler: "But now think of such a great work, in which, in fact, the whole world is reflected – one is, so to speak, oneself only an instrument on which the universe plays."³² "I see more and more: one does not compose, one is composed."³³

Somewhat less pathetically, the kinship between art and nature could also be conceived in terms of parallelism. Here, one no longer speculated on a direct perpetration of nature, but rather acknowledged the cultural status of one's own activity and its distance from nature; yet nature, if no longer the subcutaneous perpetrator, was still supposed to be the guiding model for one's own artistic activity. In this sense, Paul Cézanne defined painting as "a harmony parallel to nature."³⁴ And Emil Nolde wished that his manner of painting should be exactly "as nature herself creates her forms."³⁵

In the 20th century it could even occur that one was not content with a parallelism, but renewed the old romantic hope that reality itself produces the work or at least collaborates in it. Max Ernst's frottages (*Histoire Naturelle*, 1925) are an example of this. The frottage process causes the surface structure of objects to manifest itself in the representation. So, the objects themselves are involved in their visualization. What is portrayed, as it were, portrays itself – with the help of an artistic process which allows the real to write itself down.³⁶ – The relationship between nature and art is here completely integrative, nature and art are inseparably interwoven.³⁷

b. Present

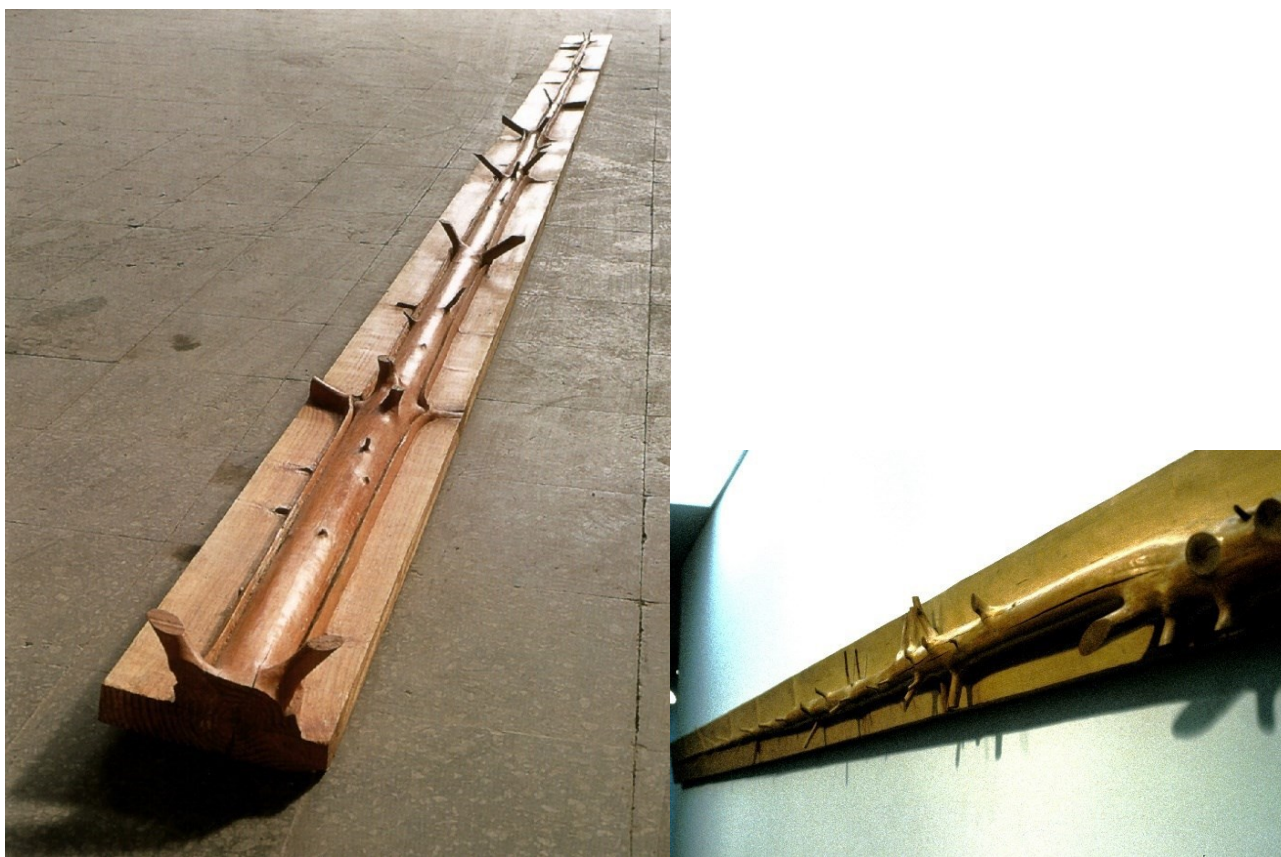
Finally, let us turn to the present. Contemporarily, the various complexities of nature and culture have become a major issue.

For example, it has become increasingly clear that the landscapes we love and enjoy are by no means simply natural landscapes, but culturally impregnated landscapes. When we walk along a country lane or a forest path, we pass through culture at least to the same extent as we pass through nature. Our ancestors have cleared these areas and have created fields and paths through them; and they have cultivated the primeval woods – the woodlands we encounter today are forests. Country lanes and forest paths are paths through cultivated land. But this is not how they are generally understood; they are taken as paths through nature. One ignores the *de facto* cultural imprint of nature and mistakenly regards it as pure nature. And it is precisely this domesticated, cultivated nature that appears to us as 'pleasant', 'lovely' or 'beautiful', while 'raw' nature is often perceived rather as repulsive. The landscapes we cherish are lands that have long been worked and altered by humans. When we enjoy the 'soft image' of a landscape, we relish the harmonious relationship between forestation and cultivated land, the pleasing proportions of agricultural land that 'hugs' the hills, we

savor the seemingly natural, but in reality, long since regulated course of a river that produces a harmony of landscape and settlement. When the health- and tourism-industries rave about the healing power and the high experiential value of nature, they are referring to a nature that is tamed, pleasant and cultivated – which is by no means pure nature, but to a large extent the work of man. The mistake, of course, is not to praise this kind of nature, but to pass it off as pure nature, that is, to fade out and deny the cultural factors inscribed in it.

The mistake is old. Karl Marx already pointed it out against Ludwig Feuerbach. He criticized Feuerbach's naive belief to live in a "nature preceding human history." Such a nature, Marx stated already 175 years ago (!), exists "nowhere."³⁸ The talk of a history- and culture-free nature is a piece of ideology. In truth, 'nature' is an amalgam of nature and culture. This should be clear to everyone today at the latest, in the age of the Anthropocene – where man has become the determining factor of the planet. It is necessary everywhere to recognize behind the appearance of romantic-idyllic nature the cultural-technical imprint of man.

For this kind of enlightenment, an example from the fine arts may be mentioned. In his younger years, the Italian artist Giuseppe Penone (born 1947) took a comparatively romantic position.



Giuseppe Penone, *Albero di 5 metri* (1969–1970), fir wood, 494 x 19.5 x 10 cm, Fondazione CRT Progetto Arte Moderna e Contemporanea, Turin, on permanent loan at Castello di Rivoli – Museo d'Arte Contemporanea.

It is exemplified by this work, where Penone has devotedly uncovered the inner life of a tree trunk. What we see here, is not a trunk with branches mounted on a wooden board, but what may appear to be a wooden board is a cut through the trunk; Penone has peeled out its inner structure, a previous state of the trunk. This is certainly a piece of fine-nerved nature worship.



Giuseppe Penone, Idee di pietra, 2012

Quite differently, almost the other way around, nature is thematized by Penone a good forty years later. At documenta 13 (2012), Penone erected a nine-meter-high tree (Idee di pietra). Strangely enough, this tree had only trunk and limbs, but no boughs and leaves. However, it carried – next oddity – a large stone in its crown.



Giuseppe Penone, *Idee di pietra*, 2012 (detail)

But the real surprise came when one got closer: one realized that this tree did not consist of wood at all, but was cast in bronze. What appears to us to be nature is in fact a technical product. Penone makes evident the artificiality of putative nature.

The understanding of nature as the other to culture has become obsolete. At best, it might have been appropriate at the beginning of civilization after the last ice age and during the transition to agriculture and livestock farming (i.e., more than 10,000 years ago). In the meantime, however, nature has been shaped by culture to a large extent, and we are confronted with nature-culture interdependencies everywhere. We have long needed a different concept of nature – one for which nature is not an antipole but an accomplice of culture.

In the future, the cultural determination of nature will become even stronger. For by means of genetic engineering we are able to penetrate even into the core of nature, into the genetic program of living beings. Culture and technology begin to nest in the software of nature. This affects not only plants and animals, but also ourselves. Culture has always worked (through education) to shape human beings. But what is new today, is that for this purpose cultural programs no longer have to be set up, but that we are able to technically intervene in our elementary biological program.

One might object that such interventions by genetic engineering and human technology do not represent a fusion with nature, but are a threat to and a destruction of nature. Nothing seems more unnatural than such a destruction. But stop! Caution! Far from it! Destruction of nature is not unnatural at all. Just think of the fact that in the course of evolution more than 99% of the species that ever existed have become extinct again – and their destruction was not caused from outside (there is no outside of nature), but was caused by nature itself. The destruction of species belongs to the progress mode of nature.

Nature is just different than the idyllic understanding of nature believes. Nature is not simply nice, harmonious, romantic. It is infinitely diverse, and at the same time both wasteful and cruel. On the one hand, it produces the immense energy flows of black holes, or each flower produces incomparably more seeds than would be needed for the preservation of the species, and myriads of insects fly through the night. On the other hand, nature turns against itself: Stars are self-destruction machines in the long run (they mutate into red giants and white dwarfs before finally ending up as black dwarfs); or animals, in order to keep themselves alive, have to destroy other living beings; and volcanic eruptions and avalanches are as merciless as tsunamis are. Nature is eminently productive and highly destructive as well. Only in the short term does it operate in a way that preserves the system; in the long term, however, it is in the process of change, reshaping, destroying old formations and creating new ones.

Nature is so diverse and contradictory that it should be forbidden to use the singular "nature." Nature includes the gigantic energy flows of black holes, the fine-tuning of quadrillions of solar systems, the oxygen production of plants, the magnetic field orientation of migratory birds and and and – and also the development of human culture. Nature has allowed itself the luxury or the caprice to bring forth the human being and with it a being which takes a cultural path and finally pursues technological goals. Just as nature has brought forth a praying mantis with postcoital desires for consumption, so also the human changing the earth not just in the Anthropocene.

If one tentatively adopts this larger perspective of evolution, then an unusual thought arises: Perhaps what appears in the narrow human view as destruction of nature is, from the perspective of nature, one of its many ways to reshape itself. By means of technology-driving man, who emerged from nature and is still a part of nature, nature undertakes a daring experiment. The outcome is open. But it can, whatever it may be like, certainly not be called "unnatural."

*

I have pointed out – against the old dualistic thinking – some forms of interpenetration of nature and culture. They all support Arnold Berleant's thesis that we ought to get beyond the old dualisms. Increasingly are we grasping both the naturalness of man and the symbiotic character of nature and culture.

I conclude with a final note. In the face of the climate crisis and other disastrous effects of the Anthropocene, many call today for reconnection, for reconciliation, for a new communion with nature. That's a bit skewed. For who speaks in this way still relies on the old dualism and does not get rid of its burden, but perpetuates it. Because to say that our tasks are about connection, reconciliation and the

like, rests on the view that an opposition exists and must be overcome. In this respect, the old dualism between nature and culture continues to underlie the pleas for unification. It can be argued that we have distanced ourselves mentally and in our behavior from nature at least since modern times, although we are ontologically fundamentally natural beings. We have regarded nature only as a raw material resource to be exploited, have been ruthless towards it, have thought only of ourselves. Certainly, against this technological attitude a mindset of respect and solidarity is required. But this will not be achieved by propagating unification and fusion in a quasi new-romantic way, as it is widespread in the eco-alternative milieus. This is all very well meant, but little well thought out. It only envisages the contrary alternative to dualism, but does not think what is important today: a complexion of nature and culture. That such complexion instead of dualism is appropriate, is also evidenced by the fact that our future relationship with nature will have to be in league with new technologies. The time when mere complaining and wishing seemed to help is long gone. What we need instead are smart technologies that continue to enable us to live a life that does not simply consist of renunciation, but combines prosperity with carbon neutrality. – As Wagner said. "The wound is only closed by the spear that struck it."³⁹ Accordingly, we will only be able to treat our destruction of nature by means of a different, smart, intelligent technology. This can be seen as a final example of the fact that the future will be marked by the interweaving of nature and culture.

¹ Arnold Berleant, "Evolutionärer Naturalismus und das Ende des Dualismus," in: *Natur und Geist. Über ihre evolutionäre Verhältnisbestimmung*, eds. Christian Tewes and Klaus Vieweg (Berlin: Akademie, 2011), 21–30, page 23.

² Ibid.

³ Ibid, 26.

⁴ Aristotle, *Physics*, II 8, 199 a 15–17; similarly, Aristotle, *Fragments*, B 14.

⁵ Aristotle, *Physics*, 199 a 12–15.

⁶ Aristotle, *Fragments*, B 13.

⁷ Cf. Aristotle, *Nicomachean Ethics*, II 1, 1103 a 17–19. On the concept of "second nature" see also John McDowell: *Mind and World* [1994] (Cambridge, Mass.: Harvard University Press, 1996), 84–86.

⁸ Nicholas of Cusa, *Idiota de mente – The Layman on the Mind* [written in 1450, published in 1488], in: id., *Philosophisch-theologische Werke*, vol. 2 (Hamburg: Meiner, 2002), page 15 [II, 62].

⁹ Descartes saw an advantage of his view in that it would relieve people of the suspicion of "committing a crime by eating or killing animals" (René Descartes, Letter to Henry More, February 5, 1649, in: id., *Œuvres*, eds. Charles Adam and Paul Tannery, Paris: Cerf, 1897–1913; new edition Paris: Vrin, 1964–1967, vol. 5, 267–279, here pages 278 f.).

¹⁰ Francis Bacon, *Neues Organ der Wissenschaften* [1620] (Darmstadt: Wissenschaftliche Buchgesellschaft, 1974), page 25.

¹¹ Descartes, *Discours de la Méthode – Von der Methode des richtigen Vernunftgebrauchs und der wissenschaftlichen Forschung* [1637] (Hamburg: Meiner, 1960), page 101.

¹² "And how does man come to see himself as nature has made him, through all the changes that the course of time and of things had to bring about concerning his original constitution? And how is he able to separate what he possesses from his own origin and what circumstances and his progresses have added or altered to his first condition?" (Jean-Jacques Rousseau, *Über den Ursprung und die Grundlagen der Ungleichheit unter den Menschen* [*On the Origin and the Foundations of Inequality Among Men*] [1755], in: id., *Schriften zur Kulturkritik*, Hamburg: Meiner, 1971, 61–269, page 63).

¹³ [...] it is no easy undertaking to disentangle what is original and what is artificial in the present nature of man, as well as to recognize correctly a condition that no longer exists, perhaps never has existed, and probably never will exist, but about which one nevertheless needs right concepts in order to judge the present condition correctly" (ibid., 67).

¹⁴ An important early figure was Spinoza, who declared the two substances of Descartes to be modes of the one and only substance.

¹⁵ Denis Diderot, "D'Alembert's Traum" ["D'Alembert's Dream"] [written in 1769, first printing 1830], in: id., *Erzählungen und Gespräche* (Leipzig: Dieterich, 1953), 436–501, page 455.

¹⁶ Id., "Gespräch zwischen d'Alembert und Diderot" ["Conversation between d'Alembert and Diderot"] [written in 1769, first printing 1830], in: *Erzählungen und Gespräche*, op.cit., 417–435, page 417.

¹⁷ Diderot, "D'Alembert's Dream," op. cit., page 454.

¹⁸ According to Schelling, natural philosophy has to demonstrate that nature is spirit in unconscious form (cf. Friedrich Wilhelm Joseph Schelling, *Darlegung des wahren Verhältnisses der Naturphilosophie zu der verbesserten Fichteschen Lehre*, Tübingen: Cotta, 1806).

¹⁹ "Every beautiful being of nature" is "a happy citizen who calls out to me: Be free as I am" (Friedrich Schiller, "Kallias oder Über die Schönheit. Briefe an Gottfried Körner" [written in 1793, first printing 1847], in: id., *Sämtliche Werke*, vol. 5, eds. Gerhard Fricke and Herbert G. Göpfert, Munich: Hanser, 1980, 394–433, page 425). Cf. for more details: Wolfgang Welsch, "'Schönheit ist Freiheit in der Erscheinung' – Schillers Ästhetik als Herausforderung der modernen Denkweise" ["'Beauty is Freedom in Appearance' – Schiller's Aesthetics as a Challenge to Modern Thought"], in: id., *Ästhetische Welterfahrung – Zeitgenössische Kunst zwischen Natur und Kultur* (Munich: Fink, 2016), 49–62.

²⁰ Cf. Goethe's remark to Schiller (Jena 1794): "that can be very dear to me, that I have ideas without knowing it, while I even see them with my eyes" (Johann Wolfgang von Goethe, "Glückliches Ereignis" [1817], in: id., *Werke. Hamburger Ausgabe in 14 Bänden*, vol. 10, Munich: Beck, 1976, 538–542, page 541).

²¹ Novalis, "Randbemerkungen zu Friedrich Schlegels 'Ideen'" [1799], in: id., *Schriften*, eds. Paul Kluckhohn and Richard Samuel, vol. 3: *Das philosophische Werk II* (Stuttgart: Kohlhammer, 1983), 488–493, page 490. Similarly, already Herder noted in an early draft from his Königsberg-Riga period: "In which world was I before I came here / What will I be / Connection of creatures; great spirits / Perhaps the plants feel as we do / I have been an animal" (*Herder's Sämtliche Werke*, ed. Bernhard Suphan, vol. 14 (Berlin: Weidmann, 1913), page 665 [editor's afterword]).

²² Cf. in more detail: Wolfgang Welsch, *Homo mundanus – Jenseits der anthropischen Denkform der Moderne* (Weilerswist: Velbrück Wissenschaft, 2012, 2nd edition 2015), 876–886.

²³ "Zeuxis is painting grapes, sparrows fly over and peck at the grapes. Parrhasios asks Zeuxis to accompany him to his studio, where it will be shown that he, too, is capable of such things. In Parrhasios' workshop, Zeuxis asks him to move the curtain that covers the painting. But the curtain is painted. Zeuxis acknowledges the superiority of Parrhasios: 'I have deceived the sparrows, but you have deceived me'" (Kris and Kurz, *Die Legende vom Künstler: Ein geschichtlicher Versuch* [1934] (Frankfurt/Main: Suhrkamp, 1980), 90 [source: Pliny, *Natural History* [written about 77 AD], XXXV, 65]).

²⁴ Leone Battista Alberti, *Della Pictura libri tre*, in: *Leone Battista Alberti's Kleinere Kunsttheoretische Schriften* (Vienna: Braumüller, 1877), 45–163, page 96. King Pyrrhus had even possessed a gemstone "on which, painted by nature, one could see all nine Muses, distinguished according to their attributes" (*ibid.*).

²⁵ "The arts of those who aim at artificially reproducing and imitating the bodies created by nature have, in my opinion, had their origin in the following. One saw on a tree stump, a clod of earth or another lifeless body of this kind some lineaments which, after a slight change, represented something that very much resembled the outer form of a real natural thing. – By noticing such things and considering them with great care, one began to try whether one could not add or take away here and there and thus obtain what still seemed to be missing in order to have a complete likeness before one. So then, improving and perfecting lines and surfaces, as far as the object itself demanded it, one achieved what was desired; and this truly not without pleasure" (Leone Battista Alberti, *De Statua* [written around 1435 or after 1450], in: *Leone Battista Alberti's Kleinere Kunsttheoretische Schriften*, op.cit., 165–205, page 168).

²⁶ Cf. on this view also Dürer's famous saying "For truly art is in nature, whoever can tear it out has it" (Albrecht Dürer, *Vier Bücher von menschlicher Proportion*, 1528). Michelangelo's dictum that the figures are already present in the stone and that the sculptor only has to remove the shell mass to free the figures slumbering in the stone points in a similar direction (cf. Michelangelo Buonarroti, *Rime*, Milan: Rizzoli, 1954), page 77 [LXXXIII]).

²⁷ Cf. in more detail: Wolfgang Welsch, "Perspektiven einer evolutionären Ästhetik," in: id., *Ästhetische Welterfahrung – Zeitgenössische Kunst zwischen Natur und Kultur*, loc. cit., 63–84.

²⁸ Haeckel himself had predicted such an influence: "The modern fine arts and the modern, powerfully flourishing arts and crafts will find in these true 'art forms' of nature a rich abundance of new and beautiful motifs" (Haeckel, *Kunstformen der Natur*, Leipzig: Bibliographisches Institut, 1904, preface).

²⁹ These gardens are "the classic example of the power pictures have had, not only as sources of landscape design but also as a force that shaped our conception of a composed and ideal nature" (Gina Crandell, *Nature Pictorialized: 'The View' in Landscape History* (Baltimore: The Johns Hopkins University Press, 1993), page 9).

³⁰ Oscar Wilde, *The Decay of Lying. An Observation* [1891] (Richmond: Alma Books 2016), pages 74 f.

³¹ Cf. in general on the relationship between art and reality: Wolfgang Welsch, "Kunst und Wirklichkeit: Opposition oder Konfusion?", in: id., *Ästhetische Welterfahrung – Zeitgenössische Kunst zwischen Natur und Kultur*, loc. cit., 85–103.

³² Letter from Gustav Mahler to Anna von Mildenburg, June or July 1896, in: *Gustav Mahler – Briefe* (Vienna: Zsolnay, 1982), pages 164 f.

³³ *Gustav Mahler in the memoirs of Natalie Bauer-Lechner*, ed. Gustav Killian (Hamburg: Verlag der Musikalienhandlung Karl Dieter Wagner, 1984), page 161.

³⁴ "Art is a harmony parallel to nature. The whole endeavor of the painter must be silence. He must silence in himself all voices of prejudice, must forget, forget, let silence enter, be a perfect echo. Then on his sensitive panel the whole landscape will inscribe itself" (*Conversations avec Cézanne*, ed. P. M. Doran, Paris: Macula, 1978, page 109).

³⁵ "I always wanted in painting that the colors, through me as a painter, on the canvas worked out so consequentially, as nature itself creates its formations, as ore and crystallizations form, as moss and algae grow, as under the rays of the sun the flower must unfold and bloom" (Emil Nolde, *Jahre der Kämpfe*, Berlin, 1934; quoted after: Walter Hess, *Dokumente zum Verständnis der modernen Malerei*, Reinbek bei Hamburg: Rowohlt, 1956, page 45).

³⁶ Cf. Wolfgang Welsch, "Frottage" – *Philosophische Untersuchungen zu Geschichte, phänomenaler Verfassung und Sinn eines anschaulichen Typus* (Bamberg, 1974).

³⁷ In other cultural spheres the dualism of nature and culture is anyway far less distinct than in Europe. An opposition of this kind is alien to Asian cultures; and in indigenous cultures of Africa, Amazonia, New Guinea, or Siberia, a cosmology of com-monality prevails (cf. Philippe Descola, *Jenseits von Natur und Kultur* [2005] (Frankfurt/Main: Suhrkamp, 2011)).

³⁸ Karl Marx, "Die Deutsche Ideologie" ["The German Ideology"] [1845/46], in: id., *Die Frühschriften*, ed. Siegfried Lands-hut (Stuttgart: Kröner, 1964), 339–485, page 353.

³⁹ Richard Wagner, *Parsifal* [1882], 3rd act.