NextNature. Sublime Natural and Technological Landscapes

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Abstract
The development of the representation of the landscape in Europe since the 14th century Renaissance can be understood as a mirror of the development of modern and postmodern Western culture as a whole. After sketching the development of landscape representation in modern and postmodern Europe, the article focuses on the theme of sublimity, which, at least since the era of Romanticism, has been inherent to the European experience and representation of the landscape, both in its successive natural and technological manifestation. Against this background, the paper also discusses some striking differences between the European and the Asian landscape.

Keywords: NextNature, Sublimity, Sublime landscapes, European landscape, Asian landscape, natural landscapes, technological landscapes

Natur ist eine Funktion der jeweiligen Kultur.
Oswald Spengler

(Bio)physical, experienced and represented landscapes

The English noun “landscape”, just like the equivalents in other European languages, such as the words “landschap” (Dutch), “Landschaft” (German), “paysage” (French) and “paisaje” (Spanish), nowadays has a triple connotation. In the first place the noun may refer to a (bio)physical reality, the surface of a planet or another celestial body. In the case of the planet Earth, the history of the landscape has a respectable history, which started approximately 4.54
billion years ago.

In the second place, the noun may refer to this (bio)physical reality as it is experienced by a (human) spectator. In this sense, “landscape” can be defined as “a portion of territory that can be viewed at one time from one place” and “that has a particular quality or appearance” for its spectator.¹ Understood in this sense, as experienced landscape, the landscape is probably as old as mankind. Like all other organisms, humans (Hominids), which appeared about 2,5 million years ago in the biophysical landscape, are characterized by a boundary (a semipermeable membrane between inner and outer reality), and as a result are able to interact with their environment (Umwelt). Homo sapiens, who appeared on stage about 200.000 to 100.000 ago and is the only species of the genus of hominids that has survived the struggle for life, not only interacts with its environment, but - as a self-conscious animal - is also aware of this environment, and for that reason is able to reflect on it.

At least, this is what we may infer from the surviving “landscapes” in the third sense of the word, referring to “pictures representing a view of natural inland sceneries.”² On the scale of human history, depictions of the environment have a respectable history, too. We already find rudimentary paintings of landscapes in prehistoric cave paintings and petroglyphs all over the world, dating back at least 40,000 years.

And in the Graeco-Roman literature, Homeric epic and pastoral, we also find many descriptions in which landscapes appear as “visually distinctive and interesting, attracting the eye, and engaging the senses and faculties.”³

Although, seen from a historical perspective, the referent of the “landscape” in the third sense - the represented landscape in paintings and drawings - is the youngest of the three, and (being an image of an image, at least from a Platonic perspective, ontologically the most derived ⁴) the etymology of the word shows a reverse order. The word “landscape”, first recorded in the English language in 1598⁵, was borrowed as a painters’ term from Dutch during the 16th century, when Dutch artists were pioneering the landscape genre, and started to use the word ‘landschap’ for pictures depicting sceneries on land.⁶ “Interestingly, 34 years pass

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¹ Both definitions quoted from the Merriam-Webster online dictionary: http://www.merriam-webster.com/dictionary/landscape.
² Ibid, Italics JdM.
⁶ The Dutch word “landschap” goes back to the early 13th century lantscap, meaning ‘region’ or ‘country. Here the biophysical connotation seem to precede the artistic meaning. Cf. Van Dale Groot woordenboek van de Nederlandse taal, lemma “landschap” T. Ten Boon, and D. Geeraerts, eds., Groot Woordenboek.
after the first recorded use of *landscape* in English before the word is used of a view or vista of natural scenery. This delay suggests that people were first introduced to landscapes in paintings and then saw landscapes in real life.\(^7\) And it took even more time before the word was also used to describe (bio)physical environment as landscape and to extend its use even to other celestial bodies, for example when we speak about the lunar landscape.\(^8\)

This etymology suggests that even the (bio)physical landscape is a cultural construction. As Kate Soper expresses it in her article “Nature Prospects”: “Even those who are most resistant to describing ‘nature’ as ‘culturally constructed’, will readily agree that ‘landscape’ is very much a matter of ‘culture.’ ‘Landscape,’ in fact, begins as a term of art, referring to paintings of inland scenery; and although it is now also used of almost any and every type of ‘real’ environmental prospect (including urban vistas), it still arguably retains a legacy (at least in its lay usage) of its origin as a term of art.”\(^9\)

According to the Dutch philosopher Ton Lemaire “the landscape is a cultural phenomenon in a double or even triple sense”: “In the first place, on the level of perception, the landscape presupposes a typical human gaze, a human perspective on space. In the second place, as a painterly or photographic representation, it is a cultural construction based on the aforementioned form of perception. And finally - though not always - is such a landscape a representation of a cultivated landscape, that is, a landscape that is at least partly the product of human intervention.”\(^10\) As such, the represented landscape functions, in quite a complex way, as a mirror of human culture. It does not only tell us something about (the history of) the human perception, but also about (the development of) artistic codes of representation, and about the real changes in the (bio)physical landscape. One may doubt, however, if there is a simple one-way direction from the level of perception (the *experienced* landscape) to the codes of representation (the *represented* landscape), as Lemaire seems to suggest in the passage just quoted. Human perception is characterized by what Plessner calls a “meditated immediacy.”\(^11\) Like all cultural expressions, codes of representation are products of the human imagination, but in turn also shape and direct human perception. In accordance with what the etymology of

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\(^8\) More recently, the word also has got a more metaphorical use, for example when we speak about the political, economic or media landscape.


the word “landscape ” suggests, it was only after the emergence of modern landscape painting, that modern Europeans gradually learned to experience their environment in such a way that turned it into a landscape.

Without doubt the emergence of new codes of representation is connected with all kinds of other cultural developments. The already mentioned Kate Soper, who approaches the emergence of landscape in European culture from a Marxist point of view, points out the fact that those who were immersed in working in the landscape were incapable of responding to it aesthetically. Pleasure in landscape not only requires “a certain distance, a standing back, both social and spatial”, but it also “refers to a privileged prospect on nature, the viewpoint of the ‘outsider’ who enjoyed the leisure requisite to aesthetic contemplation” (ibid). True as this may be, a single interpretation of the emergence of the landscape seems to be too restricted, as it develops on the crossroads of multiple developments. One could think of the process of secularization, which lead to a projection of the attributes of a transcendent God, such as immensity and infinity, into immanent nature, and of the development of modern science and technology, which played an important role in the construction of the central perspective. The development of the representation of the landscape in Europe since the 14th century Renaissance can be understood as a mirror of the development of modern and postmodern Western culture as a whole.

In the next section, I will first give a rough sketch of the development of landscape representation in modern and postmodern Europe. Next, I will focus in somewhat more detail on a theme of sublimity, which, at least since the era of Romanticism, have been inherent to the European experience and representation of the landscape, both in its successive natural and technological manifestation.

Although I will mainly focus on the European landscape, in the passing I will also make some remarks on the differences between the European and the Asian landscape. Asia also has an impressive tradition in landscape painting which originates already in the 7th century, much earlier than in Europe, and, especially in china and Japan since the Song dynasty, it has played an even bigger role within the visual arts than it is the case in Europe. Contrasting these two traditions of landscape painting may advance mutual cultural understanding.

The European landscape from early modernity to the postmodern era

For my overview of the development of the European landscape, I will take the inspiring book Philosophy of the Landscape [Filosofie van het landschap] of the aforementioned Dutch philosopher Ton Lemaire as my starting point. In this book he argues that the perspectivist
representation of the landscape, as it emerged in the Italian and Flemish landscape in the late 14th and 15th century during the Renaissance, should be understood as a major transformation in European culture, in which the modern European individual simultaneously constituted himself and the space of the landscape.

In order to understand the fundamental transformation that characterizes the birth of the European landscape, we should realize that medieval man was still largely immersed in his environment. This finds a clear expression in paintings like *The Road to Calvary* of Simone Martine, painted around 1340.

There is hardly any distance between the human figures depicted and their surroundings, they are all situated on the same spatial plane. The human figures are not (yet) diametrically opposed to nature, but rather form an integral part of it. In this sense medieval paintings such as *The Road to Calvary* express what Oudemans and Lardinois in their book *Tragic Ambiguity. Anthropology, Philosophy and Sophocles’ Antigone* call an “interconnected cosmology.” It is not so much that in such an ‘interconnected cosmology’ no differentiations are being made between, for example, the inner and the outer world, the individual and the collective, the profane and sacral, nature and culture etc., but these do not lead to clear and distinct entities and categories. These differentiations are rather dispersed and constantly permeating each other.

13 “What distinguishes interconnected cultures from separative ones is not a lack of separation. In interconnected cultures, differentiation is just as important as in separative ones, but it is not a procedure of reduction and re-assembly; in interconnected cosmologies, differentiation does not lead to clear and distinct entities and categories. Their demarcations are not clear but cumulative: there are many interconnected modes of expressing the meaning of a cosmological difference, and these modes form a dense pattern of variable, contrasting, rich meanings. The distinction between the religious and the profane, for example, is expressed in codes which are transformations of each other, and which are all necessary to express its meaning. It is not possible to confine oneself to the spatial distinction between holy places and profane places-this spatial distinction is transformed into the distinction between, for example, the silence in profane nature and the noise which is made on holy ground. It is also transformed into interdictions applying to access to holy places, etc.

Moreover, in interconnected cosmologies differentiations are not distinct, but dispersed. By the process of transformation, a categorical difference can be transposed from one category to another. For example, the violation of social relations which occurs in incest (a confusion of the boundaries of family and marriage) may be considered an intrusion of untamed nature into culture. This implies that incest may have consequences not only for the fertility of women, but also for the fertility of the land. And by a further transformation, the gods may be involved too. The ailments or famine thought to be the consequences of incest are also considered divine punishments, and therefore regarded as the execution of divine justice. If blindness or madness are thought of as connected with incest, such punishments may
According to Lemaire, mediaeval man had to throw the ‘outer world’ out of himself, and had to learn to recognize its otherness in order to become aware of himself as an individual subject. In the central perspective the human figure is no longer immediately absorbed in the world-space, but rather places himself vis-a-vis the world. In *The Philosophy of the Landscape*, Lemaire expressed this as follows: ‘The perspectival representation of the world as landscape is an act of liberation and emancipation by the individual, or, more cogently expressed: it is via one and the same movement that the individual places himself as an autonomous subject and the world appears as an environmental space.’  

With respect to Rogier van der Weyden’s *Portrait of Maria Magdalene*, Lemaire adds: ‘That which was the achievement and inspiration of the Renaissance is here reduced to an elementary image: the awakening of the self-conscious person against the background of the world, the self-differentiation of the subject who separates himself from the world in order to be able to see it in overview and to control it. The subject has liberated himself by distancing itself from the world, it has become autonomous by making a secret dimension of himself visible and calculable.’ This attainment primarily an intellectual achievement: the new experience of reality is the result of a construction, in which artistic methods and scientific insights are closely intertwined. It is no coincidence - as, for example, Gombrich has pointed out - that many of the major artists of the Renaissance, such as Leonardo de Vinci, were also active scientists.

The result of this transformation is a radical differentiation between the human subject and the objectified world. The interconnected cosmology of the mediaeval period is replaced by an “separative cosmology”, in which all differentiations get an absolute character by a radical act of separation, in which everything becomes - to use the famous formula of Descartes, ‘clear and distinct.’ In this light we should understand Heidegger’s remark in *The Age of the World*...
Picture (1936) that the modern era is the first era in which a worldview could emerge. Only in modern times is the world understood as an image in front of a representing subject. In fact, the expression ‘modern worldview’ is a pleonasm, since in ancient times and the Middle Ages, the world was not understood at all as image: “The world picture does not change from an earlier medieval to a modern one; rather, that the world becomes picture at all is what distinguishes the essence of modernity [...] That the world becomes picture is one and the same process whereby, in the midst of beings, man becomes subject.”

Due to this act of liberation the landscape loses its sacred dimension and becomes a profane space, open for scientific exploration and technological control. The further development of the European landscape painting until early Romanticism shows now, after the initial exploration of the landscape, the profane landscape gradually becomes a place of human

an abstractive reduction, disregarding the diversity of the individual. Confusing aspects of entities are eliminated until a clear and distinct hard core has been distilled. Such a description does not speak of a ‘threatening thunderstorm,’ but of electric discharges which have been stripped of all connotations of fear or cosmic violence. Water has numerous associations: bathing, flooding, drinking, drowning. In a clear and distinct description it is stripped of these metaphorical garments until it is reduced to its molecular or atomic skeleton. [...] When we speak of the Cartesian cosmology of Europe, it is because Descartes was its clearest exponent. We are not suggesting that this cosmology originated with Descartes: the idea of a unified cosmos of a more or less mechanical nature emerged in the twelfth century [C.M. Radding, “Superstition to Science: The Medieval Ordeal”, American Historical Review, 84 (1979), 959], and Descartes was its product rather than its creator. Calling the Cartesian cosmology a cosmology of separative reduction and unification-in man’s relation with nature, his gods, his fellow-men, life and death, order and law, and insight- implies agreement with Douglas when she describes an important trend in European cosmology as based on a low level of interconnectedness between categories” Th.C.W. Oudemans, and A.P.M.H. Lardinois, Tragic Ambiguity. Anthropology, Philosophy and Sophocles’ Antigone, pp.32-33.

18 Martin Heidegger, Off the Beaten Track (Cambridge: Cambridge University Press, 2002), p.68. ‘The interweaving of these two processes - that the world becomes picture and man the subject - which is decisive for the essence of modernity illuminates the founding process of modern history, a process that, at first sight, seems almost nonsensical. The process, namely, whereby the more completely and comprehensively the world, as conquered, stands at man’s disposal, and the more objectively the object appears, all the more subjectively (i.e., peremptorily) does the subjectum rise up, and all the more inexorably, too, do observations and teachings about me world transform themselves into a doctrine of man, into an anthropology. No wonder that humanism first arises where the world becomes picture.” Ibid., p.70.

19 Referring to Descartes, Heidegger states: “This objectification of beings is accomplished in a setting-before, a representing [Vor-stellen], aimed at bringing each being before it in such a way I that the man who calculates can be sure - and that means certain - of the being. Science as research first arrives when, and only when, truth has transformed itself into the certainty of representation. It is in the metaphysics of Descartes that, for the first time, the being is defined as the objectness of representation, and truth as the certainty of representation.” Ibid, 66.
settlement. Especially the anecdotic Dutch landscape paintings from the 16th and 17th century reflect how the modern Europeans cultivated, and settled in, the (bio)physical landscape.\(^{20}\)

However, as the disenchantment and subjection of nature by modern technologies increased, the drawback of this development also came to the fore, a gradual isolation and alienation of the modern subject. According to Lemaire, in the Romantic landscape, as we find it in exemplary form in the work of Casper David Friedrich, not only shows the passionate desire of isolated modern man for a reunification and reconciliation with nature, but also his inability to realize this desire. After a short-lived last attempt to reconcile nature and culture in the impressionistic depiction of the public space of the 19th century suburb the isolation of the modern subject results in a fundamental alienation.

In the metaphysical and surrealist landscapes of 20th century avant-gardist like De Chirico and Tanguy, we have arrived “in a strange, ominous, and dehumanized world, in which the reconciliation of man and nature, that seemed to have been realized in the impressionistic landscape, has turned to its opposite.” \(^{21}\) And although Lemaire’s reconstruction - his book was first published in 1970 - ends with the avant-garde movements before the Second World War, we could easily continue the reconstruction of this process of alienation. We could think, for example, of the hideous forests of Kiefer or the dark landscapes of a contemporary Dutch artist like Alex van der Kraan, in which nature has been replaced completely with industrial complexes.

Already from this short sketch it becomes clear that for Lemaire, the development of the European landscape is a story of fundamental decline. For that reason, the central mood of Philosophy of the Landscape is one of nostalgia. This especially becomes evident in the chapter devoted to the difference between the Eastern and Western landscape. Whereas, according to Lemaire, in the Western landscape culture and technology increasingly dominate nature, in the Chinese landscapes since the Song Dynasty, the human element - the walker, traveler, fisherman or monk - is futile compared to the immensity of the natural environment.

However, because of the absence of the scientific perspectivism, the overall atmosphere of the Chinese landscape painting is one of harmony; the human figure does not stand opposite the landscape, but rather is part of it and feels himself at home in it. The classical Chinese

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\(^{20}\) “From the sixteenth century the United Provinces undertook the most extensive land reclamation project ever attempted in the history of the world. Between 1590 and 1604 more than 110,000 hectares, or 425 square miles, of land were reclaimed...The land area of the province of North Holland alone increased by 52.7 per cent during this period.” Ann Jensen. Adams, ‘Seventeenth-Century Dutch Landscape Painting’, in Landscape and Power, ed. by W.J.T. Mitchel (Chicago and London: Chicago University Press, 1994), pp.35-76.

\(^{21}\) Ton Lemaire, Filosofie van het landschap, pp.49-50.
landscape expresses an interconnected cosmology that in the European landscape since the Renaissance gradually has been destroyed. According to Lemaire, Eastern culture is still characterized by this harmonious relationship with nature, and as such stands in a radical opposition to Western culture until the present day. Here Lemaire seems to echo Kipling’s famous words “East is East and West is West, and never the twain shall meet.”

Even in the romantic era, in which the European landscape seems to be closest to its Chinese counterpart, they are radically different. As Lemaire explains: “The romantic walker and the Chinese walker appear to traverse the same nature, but on closer inspection one notices how different they are! The Western romantic essentially is a tormented being, tortured both by the hypertrophy of his own ego, as by the ultimate strangeness of the nature he seeks for. In other words: his search for establishing contact with nature is the very expression of the tragic character of their incompatibility. [...] The romantic longs for a unification with nature, but because of the impossibility of this undertaking, he is driven to despair. This impossibility is the result of the road Western culture has taken - disenchantment, and the reduction of nature to a mechanism and the creation of a nature reserve for his comfort - and which probably for always has distanced itself from the ‘tao’ of the Chinese” (Lemaire 1970, 81).

There are several reasons to question Lemaire’s radical opposition of the Eastern and Western landscape and his idealization of the oriental landscape. In the first place, this radical opposition itself seems to be a construction which is strongly colored by the ‘separative cosmology’ of the Western culture which formed Lemaire’s worldview. Ever since Edward Said’s Orientalism, the imagination of the East as the ‘radical Other’ (both in its rejecting as idealizing modes) have been criticized as an ideological construction (Said 1978). In reality, Western and Eastern cultures never have been homogeneous, self-contained and unchangeable wholes, but heterogeneous clusters of variable elements, that massively have been exchanged for thousands of years, at least since the time of the silk routes (De Mul 2011). In the age of rapid modernization and postmodernization, characterized by an excessive circulation and exchange of people, ideas, habits and goods, a simple opposition of East and West is more problematic than ever. If we look at the monumental industrial landscapes of the Chinese Zhengzhou based painter Yu Huijian we immediately grasp that scientific exploration and technological control of the (bio)physical landscape no longer is an exclusively European vice.

As Oudemans and Lardinois emphasize in their book Tragic Ambiguity:

Although separative cosmology is the predominant scheme of differentiation in European culture, it is by no means its exclusive pattern. European culture is not a monolith: although their indications are often sparse and overshadowed by Cartesian ideology, in European art,
religion, politics, even philosophy, reminiscences of non-Cartesian cosmologies may be unearthed. Nor is there one single interconnected cosmology: of course such cosmologies differ widely among themselves, and we shall only discuss such aspects of cultures as can be opposed to Cartesian points of view. Cosmologies change perpetually in movements of generation and destruction, but interconnected cosmologies are not primitive phenomena which are discarded by rational evolution: they flourish in modern societies like Japan.

On the other hand, Cartesian cosmology is not a unique European phenomenon, depending upon scientific evolution or upon urban development. Quite a few non-European societies, for example in Melanesia and in New Guinea, share certain fundamental tenets of Cartesian cosmology (Oudemans and Lardinois 1987, 41).

In the next section, I will illustrate the hidden interconnected dimension of the European cosmology by focusing on a phenomenon in which this interconnectedness comes most explicit to the fore, namely in the experience of the sublime, which, at least from the era of Romanticism on, has accompanied the natural and technological landscapes in the West.

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22 An important question in this respect is whether the separative cosmology is more than an ideology that marks interconnected practice. In his anthropological description and analysis of scientific and technological practices, Latour, for example, has repeatedly argued that the distinction between active human subjects and passive non-human objects turns out quite problematic. Opposing the separative ideology, Latour speaks indiscriminately about (human and non-human) actants. More in general he has argued that, despite the separative ideology, Europeans “never have been modern.” Bruno Latour, We Have Never Been Modern (Cambridge, Mass.: Harvard University Press, 1993).

23 In spite of this argumentation, Oudemans and Lardinois themselves are not free of separatist inclinations, as the key thesis of their book Tragic Ambiguity. Anthropology, Philosophy and Sophocles’ Antigone is that we (modern Westerners) no longer have access to the experience of the tragic, as it is expressed in Greek tragedy, because our separative cosmology is completely opposed to the interconnective cosmology that characterized ancient Greek culture. The tragic constitutes “a gap in our cosmology, which neither has the power to pass tragedy on nor to eliminate it.” Th.C.W. Oudemans, and A.P.M. H. Lardinois, Tragic Ambiguity. Anthropology, Philosophy and Sophocles’ Antigone, p.353. See for a critique of this (in my opinion inconsistent and unfruitful) separatist tendency: Jos de Mul, Destiny Domesticated. The Rebirth of the Tragic Out of the Spirit of Technology. Albany: State University of New York Press, 2014, pp.66-70. The Romantic notion of the sublime, which I will discuss in the following section, revives the ambiguity towards deion (awesome) phenomena, which we find expressed again and again in Greek tragedy (cf. Matt Ffytche, “Night of the Unexpected: A Critique of the ‘Uncanny’ and Its Apotheosis within Cultural and Social Theory”, New Formations (2012), p.70). Probably the fascination of the romanticists for the sublime is connected with their rediscovery of Greek tragedy. Authors like Hölderlin and Schlegel were active as translators of Greek tragedy, and since Romanticism tragedy occupies a central place in German philosophy. Dennis J. Schmidt, On Germans & Other Greeks: Tragedy and Ethical Life, Studies in Continental Thought (Bloomington: Indiana University Press, 2001).
Sublime natural and technological landscapes

As I have explained in the previous section, separative cosmologies are characterized by a radical separation of the unclear from the clear, and of the indistinct from the distinct. However, the notion of the sublime, which became one of the key notions in the romantic reflection on nature and art, strongly resists the separative tendency in European cosmology, because of its strongly ambiguous and ambivalent character. It is a notion, in which nature and culture, the profane and the sacred, man and world, finitude and infinity fuse into a hybrid experience.24

Although the word ‘sublime’ first appears in English in the fourteenth century, the notion goes back a long way, as we find it already described in a Greek essay entitled Περὶ ὕψους (peri upsous), written in the first century and - probably incorrectly - ascribed to Longinus. Using a number of quotes from classical literature, the author discusses fortunate and less fortunate examples of the artistic evocation of the sublime. For one, the sublime must address grand and important subjects and be associated with powerful emotions. It is remarkable, that the notion of the sublime already in the case of (pseudo) Longinus is narrowly connected with the landscape. For Longinus, the sublime landscape touches upon the divine. Here we still are close to the interconnected worldview that characterized the early stages of the Graeco-Roman culture. According to Longinus, nature “has implanted in our souls an unconquerable passion for all that is great and for all that is more divine than ourselves.” 25

It was however, not before the French and English translation of Longinus essay in the seventeenth (1674) and eighteenth (1739) century that the notion of the sublime started its victory march through European cultural history. In the period between the Baroque and Romanticism, the sublime became one of the key concepts in aesthetics, ethics and even ontology and as such reintroduced themes form the ancient interconnected cosmology in the heart of modern culture.

Three characteristics of the modern sublime come to the fore. First, also in its modern

24 Probably this comes the most prominent to the fore in Schelling’s romantic aesthetics, in which the sublime and beauty are merged and defined as “the infinite expressed in the finite” F.W.J. Schelling, Sämmtliche Werke in 14 Bdn. ed. by K.F.A. Schelling (Stuttgart/Augsburg: 1856-1861), Vol. III, p.620. This definition is an indication of Schelling’s interconnective approach, ridiculed by Hegel as ”a night in which all cows look black.”

use, the word “sublime” predominantly refers to natural phenomena with a divine ring, such as stormy seas, starry night skies, and mountain landscapes (for many young men from wealthy families, crossing the Alps on their way to Italy and/or Greece was part of the grand tour through Europe that completed their education). If we look at the late 18th and 19th century literary descriptions and visual representations of the landscape, it is tempting to regard the romantic landscape not so much, as Lemaire does, as an expression of the radical separation of man and world, but rather as a reintroduction of an interconnected cosmology in an age of disenchantment, in which nature gradually became a sheer object of scientific exploration and technical control. As Soper explains: ‘The appreciation and theorization of the natural sublime in the late 18th century may be regarded in the first instance as a response to Enlightenment de-deification: God in a sense gets saved by finding his attributes (immensity, infinity) in the vastness of the cosmic space of nature.’

26 In addition, we see that in spite of the growing technological control of nature, the notion of the sublime emphasizes the omnipotence of nature, endowing nature with an almightiness previously subscribed to God. We see these two aspects reflected in the distinction Kant makes between mathematical and dynamic sublimity. The first is evoked by the immeasurable and colossal, pertaining to the idea of infinitude, surpassing all human imagination and understanding. One could think of the overwhelming experience of starry sky.

The dynamic sublimity, on the other hand, confronts us with superior forces of nature, such as volcanic eruptions, earthquakes, tsunami’s and thunderstorms. The latter experience of the sublime strikes us with our vulnerability.

Second, the modern sublime is strongly contrasted to beauty. Beautiful things give us a pleasant feeling. They feed our hope that we are living in a harmonious and purposeful world. A sunrise in a beautiful landscape, for instance, gives us the impression that life is not that bad, after all. The sublime, on the other hand, is connected with experiences that upset our hopes for harmony, due to their unbounded, excessive, or chaotic character. For that reason Kant states that the sublime, in the strict sense of the word, cannot be contained in any sensuous form, but rather concerns ideas of reason, which, although no adequate presentation of them is possible, may be excited and called into the mind by that very inadequacy itself which does admit of sensuous presentation. Thus the broad ocean agitated by storms cannot be called sublime. Its aspect is horrible, and one must have stored one’s mind in advance with a rich stock of ideas, if such an intuition is to raise it to the pitch of a feeling which is itself sublime-sublime because the mind has been incited to abandon sensibility and employ itself upon ideas involving higher

26 Kate Soper, ‘Nature Prospects’, p.133.
finality.\(^{27}\)

Here we see an interesting echo of interconnected cosmology, as here the sublimity of the landscape actually is rooted in the powers of human reason. Whereas sublime nature once reflected the omnipresence and omnipotence of God, it now directs us to the sublimity of the human mind, residing in an organ - the brain - of which the number of neurons, as neuroscientists tirelessly explain, exceeds the number of stars in the Milky Way.\(^{28}\)

Third, although this experience of the sublimity of the human mind may be a pleasant experience, the experience of the sublime at the same time remains tied to the experience of immensity and overwhelming power of nature. This experience of the immeasurable and potentially destructive forces of nature evokes unpleasant feelings as well. Here the experience of the sublime shows its most ambiguous and ambivalent Janus-face. The sublime evokes both awe and fear; attraction and repulsion melt into one ambiguous experience. It is for that reason that the sublime has been defined as a “delightful terror”\(^{29}\) and as an experience which induces “negative lust.”\(^{30}\)

As long as we contemplate nature from a safe distance (for example, by watching a painting of a stormy sea in a museum), this ambiguous and ambivalent experience remains relatively innocent. However, Schiller takes one more step on the ladder towards the uncanny by conceptualizing the sublime beyond the safe cocoon of aesthetic experience. He distinguishes between a reflexive experience of the sublime (be it mathematical or dynamic) and a practical encounter with the sublime. In his view, we can only experience the sublime when we actually collapse in a glorious battle against the superior powers of nature or military violence: “Groß kann man sich im Glück, erhaben nur im Unglück zeigen” (One may be great in times of good fortune, but one only can be sublime in times of misfortune).\(^{31}\)

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28 “The frisson induced by the sublime was emblematic in this sense of a new-found confidence in human moral autonomy and capacity to contemplate the terrors of nature without quailing: attitudes which find their philosophical confirmation in Kant’s analytic of the sublime as reliant on a transcendence over nature rooted in the distinctively human power of reason. (By a process of mistaken subreption, according to Kant, we impute the sublime to nature when in reality it is nature that directs us to the sublimity of the human mind, and specifically to the superiority of its powers of reason over those of the faculty of sensibility.)” Kate Soper, ‘Nature Prospects’, pp.133-134.


By this transformation, Schiller - shocked by the mechanized guillotine terror of the Jacobins following the French Revolution and the inspired by the rediscovery of Greek tragedy, with its emphasis on the deinon (awesome) character of man\textsuperscript{32} - paved the way to the modern experience of the technological sublime. Through the nineteenth and twentieth centuries, the main site for the ambiguous experience of sublimity gradually shifts from nature to technology. This transformation is closely connected with the ongoing secularization and disenchantment of nature as a result of the spectacular growth of the natural sciences and technology. Nature increasingly becomes the object of technical control, and technology itself gradually becomes the locus of the sublime.

David Nye has documented this development in detail in his book \textit{American Technological Sublime} (1994). During the twentieth century America the experience of the natural sublime was gradually complemented and even surpassed by the technological sublime: the sublimity of the factory, the skyscraper, the metropolis, auto-mobility, aviation and space travel.

Talking about the electrical sublime he claims that “the electrified landscape’s meaning lays precisely in the fact that it seemed to go beyond any known codification, becoming unutterable and ungraspable in its extent and complexity. [...] The city as a whole seemed a jumble of layers, angles, and impossible proportions; it had become a vibrating, indeterminate text that tantalized the eyes and yielded to no definitive reading.”\textsuperscript{33}

But of all the twentieth-century technologies the computer - the universal machine - is perhaps the most sublime technology. In a world in which the computer has become the dominant technology, everything becomes a relational database, a collection of elements - be it atoms, genes, or texts - that can be combined and recombined in a virtually unlimited number of ways. Even the landscape does not escape virtualization. We see this, on the one hand, in so-called \textit{augmented reality}, in which digital layers of information are projected of images on the real world. Watching the environment though the camera of one’s smartphone (and soon through the google glasses) we not only see the environment proper, but also overlays with geographical, touristic, commercial or other information about this environment.

Even more virtual are completely virtual worlds like \textit{Second Life} and \textit{World of Warcraft}, in which nowadays millions of people spend an often impressive amount of their leisure or work time. Although the rendering of these worlds require the physicality of computers, servers, cables, wifi routers etc., they are virtual in the sense that they are not real, analogue

\textsuperscript{32} See note 21.

(bio)physical landscapes, but digital simulations of real or fictive landscapes. At first such landscapes appear to be the (tentatively) last stage in the history of the represented landscape. However, the difference is that these representations function as real environments in the sense that they enable their ‘inhabitants’ to interact with the objects in these worlds and with each other. Although these virtual worlds are not real in fact, they are real in effect.\textsuperscript{34} Actually, in these computer-generated landscapes the distinction between the three distinguished senses of landscape (respectively (bio)physical, the experienced and the represented landscape) becomes more or less blurred and fuzzy, as in this inhabitable “Starry Night” Second Life environment, modeled after Vincent van Gogh’s famous painting.

What distinguished these virtual landscapes from natural ones is, not in the last place, that they are completely man-made. In this sense, these landscapes appear to be the final step in the process of domestication of the landscape that emerged in the Renaissance. In these created or purchased landscapes the dream to become autonomous and to have complete control the landscape seems to have become true. Though still a bit unwieldy, comparable to the first steps made on the way to the central perspective of the Renaissance painting, man now seems to have acquired the attributes of the deceased God himself. Not only he becomes the omnipotent and omniscient creator of these worlds, but teletransporting himself between the virtual locations, he even comes close to omnipresence.\textsuperscript{35}

However, as with the natural sublime, the technological sublime turns out to be a quite ambiguous and ambivalent phenomenon. Though man is the creator of the technological sublime, the technological world easily gets out of control. This is already the case in the attempts to control traditional nature by technological means. Nuclear disasters like those in Chernobyl and Fukushima have confronted us with the fact that complete technological control of nature is an illusion. But in the virtual landscapes of cyberspace, too, unintended interferences, computer viruses, hackers, digital criminals, and cyberwar undermine our control.

And there is one more reason for the loss of control. Whereas the loss of control in 20th century technologies was mainly the result of unforeseen and unforeseeable side effects of our technological actions, in the age of biotechnologies, technology has become alive and develop their own agenda. In the 21st century technologies become a NextNature:

Climate change, population explosion, genetic manipulation, digital networks, plastics islands floating in the oceans. Untouched old nature is almost nowhere to be found. ‘We

\textsuperscript{35} Jos de Mul, \textit{Romantic Desire in (Post) Modern Art and Philosophy}, pp.231-244.
were here’, is written all over. We are living in a time of rainbow tulips, palm-shaped islands, hurricane control and engineered microbes.[...] However, the age of biotechnology is an age in which the ‘made’ and the ‘born’ are fusing. [...] With our attempts to cultivate nature, humankind causes the rising of a next nature, which is wild and unpredictable as ever. Wild systems, genetic surprises, autonomous machinery and splendidly beautiful black flowers. Nature changes along with us.36

Here the pendulum is swinging back: whereas the sublime transformed from a natural to a technological category in the twentieth century, in the twenty-first century we are experiencing the technological sublime as a natural phenomenon again.37 This may also apply for virtual landscapes, which literary may come alive, when they become the scene of genetic algorithms, artificial life forms and hybrids. These landscapes may become sublime biotechnological hybrids of natural and artificial life forms.

And like God in pre-modern times, and Nature in modernity, the biotechnological sublime is Janus-faced: it reflects both our deepest hope for secular salvation (varying from the production of fuel and food, and the cure of diseases, to the trans-humanist dreams of immortality), and our fear for its uncontrollable, destructive power, which may result in all kinds of biotechnological disasters, for example, in the covering of our whole planet by a green goo.

And we, dwellers in these landscapes, will change along with NextNature. Like the archaic Homo Sapiens in Neolithic times and Renaissance man in the 14th and 15th century, we will start to explore these sublime landscapes in the blind hope that we will able to domesticate them and create ourselves a home. And again, it will be a sublime experience.

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37 “While old nature, in the sense of trees, plants, animals, atoms, or climate, is increasingly controlled and governed by man - it is turned into a cultural category -, our technological environment becomes so complex and uncontrollable, that we start to relate to it as a nature of its own” Ibid. Cf. Koert van Mensvoort, and Hendrik-Jan Grievink, eds., Next Nature. Nature Changes Along with Us (Barcelona/ New York: Actar, 2012).