

Introduction, "Forms of Experienced Environments: Questioning Relations Between Humans, Aesthetics, and Sciences"

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FORMS OF EXPERIENCED ENVIRONMENTS

Questioning relations between humans, aesthetics, sciences

Nathalie Blanc, Théa Manola, Patrick Desgeorges (ed.)

INTRODUCTION

Nathalie Blanc and Théa Manola[1]

This book explores "environmental forms" in terms of their relationships to socio-politico-ecological transformations currently in progress[2]. Nowadays, the environment is a central theme in political discourse, scientific works and ordinary lives. It is multi-dimensional: it is a living space, a socio-ecological system and a field of research and action. However, despite the presence and diversity of existing approaches, depending on the actors, scales and situations, the ways in which policies address environmental issues remain mainly focused on control, highlighting the techno-ecological, managerial and curative dimensions of public actions. Although public action tends to instrumentalise the environment, the humanities and social sciences have initiated significant reflections in this field, by proposing alternative ways of thinking about the environment in its multiple aspects and scales. As part of "another approach" to the environment that mirrors contemporary developments, this book tackles the concept of "environmental form".

This form-based approach has been largely neglected by academic literature dealing with environmental themes. The goal therefore, is to bring together authors who deal with the environment and/or environmental forms and to encourage them to develop cross-cutting analyses between these two approaches. We firmly believe that these analyses will open up a new perspective on the relationships between people, aesthetics and environments. It is also a question of dealing with the hybridization of vernacular and scientific approaches. These texts are drawn from different schools of research and highlight the huge potential of reading the environment through forms or, conversely, a reading of environmental forms.

Forms, forms and more forms

Let us start with a few historical pointers[3]. Although Aristotle and many other philosophers before him had tackled both natural and built forms from a philosophical perspective, Goethe still remains the most important philosopher of form. Goethean morphology (cf. "Metamorphosis of Plants", 1790) focuses on the way in which a plant is what it appears to be. This theory links the concept of phenomenal form (Gestalt) with formation (Bildung), formative force (Bildende kraft), drive (Trieb) and factors in the relations between the whole and the parts (Petitot, 2010). The crux of Goethean morphology is an internal principle and dynamic linking the whole and the parts in accordance with an

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[2] This book was conceived within the scope of the International Conference "Forms to experience the environment. Theory, experience, aesthetics and political criticism", organised by LADYSS (CNRS/Univ. Paris 1, 7, 8, 10) and CRAL (CNRS/EHESS), with the support of the CNRS, Labex CAP, EHESS and the French Ministry for Ecology, Sustainable Development and Energy on 1st and 2nd October 2015 in Paris.

[3] This paragraph is borrowed from the article "Environmental forms, from a theoretical perspective to concrete case studies in urban planning." (Blanc et Barbes, 2018)

unknown purpose. The problem is that the idea of a connection between the whole and the parts still had to be demonstrated and Goethe attempted to highlight internal principles that guide how plants form. The idea of spatio-temporal deployment of a basis of construction that obeys both external and internal forces gradually took hold thanks to his work. Goethean metamorphosis therefore combined the regular and the singular, the generic and the specific, the collective and the individual, unity and diversity. In particular, the metamorphosis helped to explain the laws of variation between forms based on context. Goethe indicates that aesthetic feeling arises from the functional correlations between the whole and the parts related to the contextual dimensions of the situation. Nature and aesthetics come together in a completed form to combine the rule and an absolute freedom. Goethe established a deep-rooted identity between the living being, the work of nature, and a work of art — a product of human nature, and therefore of nature itself. Moreover, he made form and its internal dynamics a force for organisation and an "intuitive concept" (whereas in physics for example, the concept is abstracted from the sensitive world). Form became nature's main subjective and objective principle of organisation, forcing us to describe what appears. Forms, their structures and the meanings attributed to them are intermediaries between something bio-physico-chemical and the subject they express.

More generally, the emergence of the analysis of forms also accompanies the idea of the autonomy of art and the importance of the senses. This evolution drew upon an aesthetic philosophy that had been partially thematised by Kant (*Critique of Judgment*, 1790). According to Kant, because the forms of nature are produced by causes that cannot be reduced to either a pure mechanism or a teleology of nature, we have to be able to see in forms, a discrete and non-generic means of appearance, a principle of understanding whereby the spirit manages to subsume the individual within the general. We therefore need to be able to think about the contingency of these forms. The key challenge consists in defining the possible conditions for phenomenality depicted in physical objects of natural mechanics. Even if Kant is deeply involved in an objectifying interpretation of nature, he makes a real attempt to build up from it a sensitive spatiality. For Baumgarten (1988, cited in Jimenez, 1997), also author of the founding text of Aesthetica[4], beauty is a perfection of autonomous sensitive knowledge relative to conceptual knowledge. This — spatially extended — manifest reality is formed and gives rise to pleasure or pain. The aesthetic nature of the object exists by its relation to the subject. In other words, the aesthetic nature of the object allows the subject to become acquainted with it. Beauty is the meaning or the signifying value that leads to an experience of the object. The perceived finality of the artistic or natural object through its structure or its organisation, allows the sensitive relation to the affected feeling. This structure and organisation, which appears as morphology in the absence of any possible conceptual knowledge, is converted into aesthetic knowledge. Feelings of pleasure are an expression of the pertinence of the form with regard to the subject. This is a reflective judgment. In fact, the form of the object is experienced twice: in its immediate perception as well as in the appropriateness experienced in terms of its appearance.

This short historic detour shows that the notion of form can be confused and blurred by the multiplicity of definitions. Dominique Raynaud (1999) in an article on forms writes: “There are no less than eleven different roots for Indo-European languages alone, three of them from Greek (eidos, skhema, morph) and three from Latin (forma, figura, species). The semantic analysis of these families reveals the diversity of approaches to the notion of form”. He concludes that a form is both the result of a manufacturing process and inseparable from a sensitive act, giving rise to both classificatory requirements and normative axiological judgments.

In this book, by “form” we mean any momentary (event) or lasting (entity) crystallisation of a proposal of meaning and/or organised life. The forms thus conceived take shape via several processes: creation, reception (perception and appreciation) and interpretation[5].

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[4] Baumgarten, 1988, cited in. Jimenez, Marc, 1997.

[5] See the call for papers for “Des formes pour vivre l’environnement : théorie, expérience, esthétique et critique politique.” Organisation : Nathalie Blanc, Agnès Levitte, Théa Manola, Jean-Marie Schaeffer and Anne Tüscher, Paris, 1-2

The questions regarding creation and reception have been studied at length in works on environmental aesthetics (Berleant, 1992; Blanc, 2008) and more broadly in the environmental humanities, however, they have often been opposed. Creation is often seen as activity, and reception as passivity. Indeed, the point of view of the "audience" is often directed in such a way: a passive element receives an (artistic, architectural, urban, technical…) production. When "forms" are perceived in this way, it is important to stress that the receptive process is also an active one, i.e., creative and re-creative. Indeed, any reception is also an interpretation, and any interpretation is a production, by the meaning it conveys. More fundamentally, a form is neither simply an object/event nor its creation or interpretation by a subject. Form is a system shaped by the contact between the three poles — producers, objects/events, and receivers/interpreters. This system includes a plurality of actors/producers and knowledge. Therefore, forms are not only the source or the outcome, but the crystallisation of a mediation and dialogue process between the different systems of interpretation of the lived environment, its agents and its actors. They represent collective, common and "negotiated" productions.

From "forms" to "environmental forms"

Rich in its notional multiplicity, it is possible to think of the notion of form applied to the natural and built environment. Examining environmental forms will involve exploring the multidimensional features of the notion of form understood as a basic concept for any reflection upon life[6]. Environmental forms therefore stand as forms relating to environmental issues and to the production of an ordinary environment and can take on multiple "appearances": community gardens, animals, contemporary "green" urban infrastructures, buildings, events, texts, etc. In every case, environmental forms are relational systems between external conformity and internal essence, between the principle of stability and a dynamic model, between structure and genesis, and between exogenic print and autopoiesis. This book examines the relationships between people and communities in and with the places in which they live, and thus exemplifies the diverse ways in which environmental forms forge identities and support and create memories both individually and collectively.

Whilst recognising the very broad scope of the notion of environmental forms, this book focuses notably on everyday environmental forms relating to scientific research and objective statements, political and collective action shown by material transformation for example, and to subjective meanings, as in statements one recognises as being part of oneself. Addressing environmental issues through forms highlights the links between so-called "objective" knowledge (i.e., produced by scientists) and "subjective" knowledge (i.e., referring to people's life experience). Our hypothesis is that environmental forms associate living narratives with scientific statements, and the description of planning projects with lived experiences of urban forms. The abstract nature of environmental issues, such as loss of biodiversity, climate change, etc., requires translating this issue into terms that allow us to imagine an ecological transformation; environmental forms (narratives, landscapes, watersheds, etc.), in their ability to account for sensitive developments and play a role in the public space.

In addition, analysis through environmental forms makes it possible to get beyond a few scientific aporias and paves the way for a methodological reconceptualisation of environmental approaches. What aporias are we talking about?

Firstly, with environmental forms, we can conceive of a qualitative approach, contrary to techno-scientific ones, rooted more in problem-solving than in understanding phenomena. Secondly, the environmental forms approach combines social and natural dynamics and moves away from nature-culture separations. Moreover, with environmental forms, we can think in a global way about the

October 2015, http://calenda.org/304639.

[6] The notion "form of life" is central to understanding the ecology and morphogenesis of the ways in which biological life is organized, just as much as for human communities.

spatial horizontality of natural and/or built environments (Pinchemel, 1988) and their verticality — i.e., their bio-geophysical dimensions. Thirdly, given that to form is to make in a way that implies inventing a way to make, using the "environmental forms" expression could cover the overall production process as well as the necessary knowledge, skills and expertise. This concept leads to considering any actor (regardless of their position in the production of forms) as a producer of environmental forms, conferring a new political status both on the forms themselves and on their actors. Lastly, the forms reformulate aesthetic perspectives in light of contemporary environmental issues. Beyond "artialisation" (Roger, 1997; Nadaï, 2007), considered here as a cultural mask that filters the views of nature, environmental forms invite human beings to become aware of their status as collective beings. The aesthetics of nature are not about subjectivity or the projection of — generally academic — cultural frameworks, but the production of numerous relations that invite us to reconsider our lives as part of a World. Moreover, a formal approach could make it possible to highlight alternative ways of considering the environmental challenges of our time and "introduce the elements of a rebellion against contemporary approaches" (Blanc, 2016, 10). Environmental forms could then enable us to get beyond the reductive framework of governmental approaches to the environmental crisis that reduces the environment to a range of ecosystems, quantified and disembodied problems or services.

Consequently, although the term "form" is commonly used and scientifically discussed, from an environmental perspective, it widens the interdisciplinary debate and outweighs the aporia created by underestimating the potentialities of the Humanities and Social Sciences concerning environmental questions and contemporary living environments. Trying to get beyond this aporia implies re-imagining the processes and aims for environmental action in the 21st century. In particular, it encourages a view of environmental forms not simply as protected "artefacts" (parks and natural reserves, sacred trees, etc.), but as anthropocentric processes.

Inquiring environmental forms as aesthetic experiences

In that respect, different concepts reflect what could mean an aesthetic appreciation (Schaeffer, 2007; Bartelesi, 2011[7]), that makes it possible to reflect upon perceptions, judgments and experiences that govern the conduct of ordinary events in numerous situations. "The aesthetic experience plays an essential role in the creation, development and transformation of living spaces as recognising an object, place or space's aesthetic value can be paramount in managing it and encouraging its sustainability. It also facilitates appropriation of these spaces to produce a 'sustainable' environmental process" (Kuitche, 2014, 39). Environmental forms, which are the material and sensual base for an ensemble of social and natural signs, ensure in some ways the visibility of these transformations. The approach of environmental forms through aesthetic experience has been initiated in particular by John Dewey in *Art as Experience* (1934). The form, writes Dewey, has characteristics that make it an experience, especially the ability to recreate a qualitative unity between different elements of what is perceived in the environment. This new perceptual unit born out of the effort in understanding the environment is characteristic of a serial perception that makes sense, i.e., experience. Furthermore, according to John Dewey[8], forms are the condition for an aesthetic experience for all human beings. Indeed, the implementation of forms takes place in everyday life and is part of self-realisation and social relations. In this sense, aesthetic experiences and judgments of taste are essential in the

[7] "Jean-Marie Schaeffer developed the hypothesis whereby we need to think of aesthetic attention driven by cognitive economy as a complex and specific manifestation of — automatised and schematised — bottom-up cognitive processes as well as attention-driven top-down processes and of horizontal explorations in parallel, integrating many perceptual stimuli within a series of schematisations. The bottom-up processes drive the elementary perceptive life and automatically organise themselves from the sensorial stimuli that we come across most often. On this level of perception, we are faced with a perceptive categorisation of natural scenes whose function is to obtain a stable schematisation of the standard perceptual scenes that are ecologically important." (Bartalesi, 2011, 73-74)

[8] An exploration of the terminology of forms can be found in *Art as Experience,* in the chapters entitled "Substance and Form" and "The Natural History of Form".

implementation of public spaces and therefore refer to social and interpersonal communication[9] as well as to the projection and planning of our futures. “Empowerment of aesthetics is just that: the belief that our senses and our feelings should play a complementary role to the rational in determining how we want our world to be in the future” (Andersson, 2014, 49).
The role of aesthetics is even more important insofar as it is about living in a world with unprecedented transformations and numerous ethical environmental issues. Even if we don’t subscribe to the idea that the world is already in ruins (Tsing, 2017)[10], there is no doubt that deep transformations are in progress (and they could be disastrous) and they are hard to reconcile with a symbolic order and sharing between nature and culture. How can we consider the necessary resetting of relationships with the environment? We need to evoke re-negotiated ecologies, metamorphic orders, and dialogue with these transformed materialities that force us to consider the environment as an aesthetic construction that is still in progress. “[…] the environment represents everything that concerns pollution or waste, natural resources, living space, vegetal or animal species, i.e. components that are extremely disparate, material and immediately concrete, scientific, technical, cultural, moral, aesthetic, connected to the natural and human world, within very different perspectives and time frames” (Charles, 2000, 18). Furthermore, the question of forms refers to a conceptual vision of the environment that focuses on the sensitive and the intra-acting evolution of environmental forms, temporarily updated and perpetually renewed. This is why environmental forms are not apolitical assemblies of humans and non-humans (as in Actor-Network Theory, including its recent developments: Jacobs, 2011), but the material-discursive virtualities of political individuals and collectives, i.e. the result of a choice in terms of organisational forms: “object and subject emerge through and as part of the specific nature of material practices enacted” (Barad, 2007, 359). In this sense, environmental forms refer to knowledge and know-how, as well as to intentions and natural processes.

As such, a pragmatistic study[11] of environmental forms and transformations is at least a twofold process. On the one hand, it revolves around forms of experience. “Experience, in the pragmatistic sense, concerns both: the continuous transactions that individual and collective organisms maintain with their environments; the experimental nature of these transactions when they are carried out as part of a study; and the aesthetic component that appears when the elements in transactions are organised in a significant ensemble” (Cefaï and Terzi, 2012, 19). Environmental forms prepare for a shared appreciation of environmental transformations and living spaces and are considered as meaningful, bearing numerous signs that activate the overall configuration. For example, in order to recognise a person, a plant or a narrative, one needs to take in the ensemble of social and natural signs regarding this form and identify how it is constructed. Secondly, it is about studying the future of environmental forms as socio-political constructions and the forms of existence they offer.

The research lines opened up by an approach based on environmental forms are multiple. We would like to draw attention to two of them. Firstly, as we can no longer regard nature as being devoid of agency, we must focus on the interpretation of biological, chemical, physical, as well as social, economic and political signs of environmental forms. These spontaneous or artificial environmental forms refer to multiple meanings. Secondly, we wonder what happens beyond the physical limits of an environmental form, such as what an environmental form produces all around it — its halo or aura. For instance, the atmospheric form can include the affective, spiritual or symbolic aspects in

[9] Conferences held at the New School for Social Research in New York, Fall 1970 (Arendt, Hanna, *Juger. On Kant’s political philosophy.* Translated by Myriam Revault d’Allonnes, followed by two interpretative essays by Ronald Beiner and Myriam Revault d’Allonnes, (Paris: Seuil, 1991)). To analyse the conferences, we refer to both Arendt’s text and Myriam Revault d’Allonnes’ excellent interpretation.

[10] This assumes that human activities cannot generate something else than ruins; it is a vision of human activities as the origin of inescapable decay, more than metamorphoses or transformations.

[11] The theory of the inquiry is paramount for John Dewey, the most important scholar of the pragmatist philosophical movement. In *Theory of Inquiry,* he develops a theory in which human beings develop knowledge by creating hypotheses and tests in order to adapt to their ever-changing environment.

environmental issues. Those aspects are globally ignored, and despite the so-called emotional turn in social and human sciences, atmospheric approaches remain minor and excluded from the construction of public action and the production of environments. Furthermore, the study of environmental forms could aim to combine aesthetics and ecology to the point of being embedded in the sociopolitical fabric and predicting the possibilities of living in future worlds. Constructing worlds in this chaotic period from ecological and human decay requires a study of environmental forms as well as their production *inter alia*. For instance, we are confronted with toxic, post-apocalyptic landscapes, highlighted (and thereby set up) by many photographers or documentary makers. How does the relevance of such landscapes shape changes in our conceptions of and actions in our world? How can we question the production of these environmental forms and the knowledge that we have of them? Formative activity is a powerful collective tool allowing to work within the production of environments, and to encourage the re-organisation of relations between perception and the ability to act, where "doing and knowing are one" (Goodman, 1990, 20).

Towards a socio-environmental transformation by environmental forms

The definition of environmental forms and their essential input into the way we think and act in an environmental context naturally leads to a focus on the need for a socio-environmental transformation.

Here, a distinction between "ecological transition", a term that is often used to qualify public policies[12], and "socio-environmental transformation" is important. The former tends towards technological advances that are easily dominated by existing discourse and often favour existing patterns of privilege and power. The latter implies greater emphasis on experimental innovations and new ways of thinking and challenging existing socio-political structures. The question therefore is not just about reducing the impacts of the symptoms of particular patterns in the way things are done in society, but developing a political imagination of what can be done to address contemporary challenges. It is important to stress this distinction and to clarify the structural aspects of the time-perspective specific to a transformative approach as well as its political consequences. However, we still need to explain how the conceptual expression of environmental forms can be linked to the idea of environmental transformation. Moreover, we should try to define what a transformation directed at a sustainable society would mean, or a society that is ecologically, socially, economically and culturally aware of environmental relationality (Chan *et al.*, 2016).

The transformation describes the significant changes in socio-environments on different self-organisation and feedback scales that govern the state of systems (Chapin *et al.,* 2009; Chapin *et al.,* 2010). This basic definition relies on the idea that it is possible to transform societies and their environments and to act on a political level given that contemporary modes of organisation are not sustainable and are making life problematic for future generations (Chapin *et al.,* 2012, 3). We need to find ways to readjust the transformations in socio-environmental systems and political action. While human actions are being developed on every scale, with unexpected effects and consequences, making it difficult to adjust social narratives to environmental changes that are not perceived evenly, political action has stopped trying to be different, aligning itself with economies and economic

[12] The word "transition" is currently used in policy in an ambiguous way. It tends to describe the intervening period between two stages of a predetermined sequence of events promoting a view of change as an inevitable development with a perceived direction. As if the important decisions had been made and the only remaining policy task was to ensure their acceptance and implementation in order to sustain modern development patterns and adjust them to evolving ecological and climatic conditions. Therefore, the strong meaning of the term "transition", as referring to a time during which epoch-making irreversible decisions (each leading to a significantly different alternative future) can still be made, is somehow neutralised. Ecological transition discourses tend to elude the fact that things are changing in such a manner that successive generations are not interchangeable, that there will be no other comparable opportunity, that there is no turning back, and that control of the decision-making process that is exercised now at this critical time will shape the future - on a time-scale that dwarfs the current economic and political framework of our perception of the future.

rationalities that are nonetheless considered to be faltering. The incongruity of this order of reality is such that it seems relevant to question the motivations and effects of a neo-liberal approach that leads societies towards social and environmental collapse.

This book also aims to propose modes of knowledge, assessment and action that are different from those usually mobilised by public environmental action. These knowledge modes are based on a reconciliation of cultural and environmental approaches, while respecting the diversities contained within each of them. The idea is to consider both material and immaterial characterisation and consistence of environmental forms within an interdisciplinary approach that is politically focused on action. This contention questions the "environmental transformation" and focuses on the eco-cultural aspects of transformation to lead to a livable future through socially and culturally sensitive policies and practices.

Four parts/nine chapters: from concepts to action through knowledge and its production

The book addresses these questions in nine chapters, all of which tackle both concepts and practical applications in a range of places, contexts and forms, including the urban environment, landscapes, narratives and ecocriticism, "ordinary" places, etc. Although this book is a collection of separately authored papers, it is the product of a closely integrated series of debates within a network of researchers from many disciplinary backgrounds[13]. Therefore, taken as a whole, they show how the socio-cultural values that people attach to places are bound up with scientific issues and how they therefore stand at the centre of ecological transformation theories and practices. They illustrate the specific contribution that this formal renewal of environmental issues can make to the "environmental transformation".

The book is divided into four parts that open different perspectives concerning environmental forms: the first part focuses on notions that are often mentioned in research (and sometimes in action) to refer to environmental forms. The second part addresses environmental narratives as forms, highlighting the relations between forms and social, ecological, political and scientific issues. The third section discusses the potential contribution from certain environmental forms (e.g. spiritual, ritualistic and knowledge-based). Lastly, the fourth part presents production processes for environmental forms, both through artistic activities and the making of public policies.

More specifically, the first part questions form(s) as an aesthetic experience and attempts to clarify concepts necessary for understanding "form-driven" transformation of the environment. **Rainer Kazig**, cultural geographer, presents an empirical approach to everyday aesthetics and applies it to the urban environment. It conceptualises aesthetics as a specific kind of attention that can generally accompany any form of everyday activity but is limited in time and thus occurs only in episodes. By tackling these episodes in empirical research projects, this approach can contribute to a better understanding of how aestheticisation becomes a part of everyday life, and to which forms of the environment it is related. Building on a minimal concept of aesthetic attention, three dimensions of aesthetic reception (i.e., the categories of aesthetic objects, cognition and the emotions) are differentiated that underpin aesthetic attention. This differentiation enables the diversity of aesthetic episodes to be recorded systematically. The character of this chapter is threefold: conceptual, methodological and empirical. After focusing on the conceptual background of the approach, the paper illustrates how aesthetic episodes can be researched empirically. Based on exploratory research conducted in Cologne and Munich, it comes up with three different types of aesthetic relations to the urban environment: passing aesthetic attention whilst walking through the city; aesthetic correspondence and feeling at home in the city; and aesthetic correspondence as a resource for activities in the city. Passing episodes relate to a diversity of extraordinary forms of the urban environment without gaining any deeper signification for the people who experience them. By way of contrast, the two kinds of aesthetic correspondence

[13] The aforementioned conference is one of those spaces.

are systematically integrated into the everyday life of urban dwellers. They ultimately relate to specific forms of urban atmospheres. On a related theme, **Olivier Labussière**, also a geographer, considers the notion of urban ambiance and attempts to characterise its generative dimension separately from the growing social demand for conditioned atmospheres (supermarkets, subways, etc.). Continuing the work of Gilles Deleuze, this paper revises the idea of perception as a knowledge activity and focuses on it as an aesthetic experience. This is a process that utilises the notions of measure and rhythm. Ordinary perception would consist of a process of adjusting our knowledge to our lived environment — where the *measure* is major and the *rhythm* is minor — or a classic process of recognition. Perception is also a fruitful field for aesthetic experiences, lived in daily situations in which the *rhythm* would become major and the *measure* minor. The chapter builds on these notions (i.e., measure and rhythm) to discuss the idea of ambiance as an introductory experience to our ordinary environment. Exploring another concept that we can easily associate with environmental forms — landscape — the chapter by **Hervé Regnauld, Manhaz Shah and Patricia Limido** aims to describe the specific role that scientific knowledge may have in an aesthetic assessment. This paper rounds out the classical idea of "artialisation" with a new and similar one that could be named "scientalisation". This scientalisation is already at work when a coast is classified as a geopark. It is suggested that this mode of assessment may be extended to any coastline so as to consider both natural and anthropogenic forces which control its evolution. Insofar as sciences and arts do affect our perception of landscape, we may consider that the theoretical renewal of our conception of environment, understood as a global process of permanent change, should involve an analogous renewal of the artistic modes of landscape representation.

The second part considers narratives as an environmental form and questions their birth in relation to scientific, political and ecological contexts. In this regard, **Karen L.F. Houle**, philosopher, describes an experiment in *living well* that involved the deep integration of science and poetry during a Writer-in-Residency program in the autumn of 2015 in Cambridge, Ontario, Canada. It articulates the guiding principles behind and the lived details of the experimental and adaptive modes that emerged over the course of the residency, including the recycling of scientific articles written from data extracted from the same site as poetry. The larger claim is that the process and its outcome were ethical in the sense developed by Aldo Leopold and Spinoza. It concludes by drawing on the experience to develop a new and better definition of "ecopoetry". In the same vein, the chapter by **Emilie Hache**, also a philosopher, deals directly with the political dimension of the narrative form of ecofeminist writing. Ecofeminism first emerged as an anti-nuclear movement during the 1980s, as a reaction against the Cold War between the planet's two major superpowers at that time. What is less well known and just as much a part of this movement is the multiple forms of texts that accompanied these rallies: hybrid and experimental texts straddling a number of disciplines and mixing theory, poetry, therapy, fiction and politics, etc. As these women invented new forms of politics involving the body, the imagination, aesthetics, emotions and even magic, they focused on the form given to their views, aiming not merely to have their say about the world but to transform it. The author wishes to concentrate here on these forms, their power to change and not merely to say but to do, together with what they actually exhort us to do.

The third part of the book deals with the spiritual, ritualistic and knowledge potential of environmental forms. The chapter by **Etienne Gresillon and Bertrand Sajaloli** deals with relations between the sacred and landscapes. The natural landscape forms a link between the concrete world and the beyond, between the faithful individual and the divinity. The issue of this chapter is not so much the way in which religion or spirituality grasps the environment, but how believers use environmental forms to access the divine. The sources and experiences of the sacred are determined by or even subjected to specific ecologies and typologies in ways that are simultaneously social, psychological, cultural, geographic and historical. In this way, we observe the spiritual potentiality of many environmental forms and the capacity of mediation. In a very different way, the chapter by **Daniel Niles** explores the significance of local forms of knowledge of the natural world, especially their role in cultural coherence and persistence over time, and their related significance for the intellectual challenges of the

Anthropocene. It examines the activity of a master charcoal-maker and forest-manager in Wakayama Prefecture, Japan, who works within a landscape recognized by the United Nations' Food and Agriculture Organization (FAO) as a Globally Important Agricultural Heritage System (GIAHS) — a place of special cultural and agroecological value. Drawing on theories of the evolution of knowledge and material culture studies, charcoal is seen as representative of a knowledge system regarding particular understandings of the agencies of nature. Focusing on the various stages in the production and use of charcoal sheds light on the structure of this knowledge, especially on the important areas in which the qualities of one field of activity are transferred to, or become essential to, another field. These "overlaps" link what otherwise appear to be disparate fields of activity into mutually constitutive elements of a whole. Such overlaps can indicate the key understandings that motivate actors, and so inform a broader understanding of long-term cultural-ecological persistence.

The fourth part of the book questions existing practices in art or environmental politics. Aesthetics as a mode of sensitive knowledge could be an important political factor in assessing how our living spaces are shaped and governed. By insisting on the notion of form, one can choose to politicise it, in particular by questioning the rules of their production. As part of this perspective, both chapters in the last part of the book propose a critical approach to the production of environmental forms. The chapter by **Suzanne Paquet**, historian and sociologist of art, highlights the contributions of environmental forms produced by certain art practices through furtive artwork (or micro-interventions) performed at a few sites around Montreal (Canada). The artwork highlights the poverty of our urban living environments: lack of art in everyday life, places of no interest and practically uninhabitable for some people, lack of fitting sociability and freedom of movement; criticism of the blind and rampant consumption which seems to have replaced social relationships emanates from these works. Through an examination of the work of artists in urban public space and the way in which their works are disseminated, it is suggested that these artistic actions, in addition to influencing relationships among urban dwellers and changing their connection with their living environment, may also, thanks to images circulating on the web, create small utopias that can unite communities of fans who, in turn, become activists. The actions of the artists, which although they are very local are extended through their images and the actions of the fans/online community who disseminate them, give rise to a kind of *reactivity* in the urban and cyber environment and encourage the creation of ordinary environmental forms. The final chapter by **Nathalie Blanc, Thomas Lamarche, Mathias Lefebvre, Etienne Gresillon and Patrick Degeorges**, discusses the habits and values of environmental public action. The authors analyse the "ecosystem services" approach and make some suggestions to go further by defining "cultural ecosystem services". Based on critical discourses of "ecosystem services", the purpose of the chapter is to propose — essentially public and deliberative — assessment approaches that factor in cultural issues. Within this perspective, environmental forms can contribute to new forms of territorial assessments and participate in a more qualitative environmental policy.

Because of the multiplicity of approaches presented, the book appeals not only to specialists in two major fields of research — environmental humanities and aesthetic sciences — but it also targets academic readers who are interested in environmental aesthetics, ecodesign, ecocriticism, culture, heritage, memory, identity and current debates about the place of aesthetics and culture in sustainability. The questions raised in the book may be of interest to researchers of various disciplines in both the social sciences and the humanities (such as geography, sociology, philosophy, anthropology, political sciences, as well as cultural studies, art, architecture, urban studies, etc.). This work also provides an introduction to culturally based approaches to "environmental transformation" for people working in the physical sciences who want a more holistic perspective. The book is also directed at professionals who implement or participate in local policies related to urban and landscape planning, social cohesion and cultural diversity.

References

Andersson, Stig L., ed. *Empowerment of Aesthetics: catalogue for the Danish Pavilion at the 14th International Architecture Exhibition. La Biennale di Venezia 2014* (1. ed). Skive: Wunderbuch, 2014.

Arendt, Hannah. *Juger. Sur la philosophie politique de Kant*. Translanted by Myriam Revault d'Allonnes. Paris: Seuil, 1991.

Balaud, Léna, and Antoine Chopot. "Nous ne sommes pas seuls. Les alliances sylvestres et la division politique.*"* (2018). Seminary *Les divisions politiques*: http://ladivisionpolitique.toile-libre.org/nous-ne-sommes-pas-seuls-rencontres-greffer-de-louvert/

Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham: Duke University Press, 2007.

Bartalesi, Lorenzo. "Histoire naturelle de l'esthétique. Remarques philosophiques pour une esthétique naturaliste.*"* PhD diss., University of Provence-Aix-Marseille 1, 2011.

Jimenez, Marc. *Qu'est-ce que l'esthétique?* Paris: Folio Essais, 1997.

Berleant, Arnold. *The aesthetics of environment.* Philadelphia: Temple University Press, 1992.

Blanc, Nathalie, and Fréderic Barbes. "Environmental forms, from a theoretical perspective to concrete. Case studies in urban planning." *Ruukku,* no. 9 (2018): https://www.researchcatalogue.net/view/371052/371053

Blanc, Nathalie. "Ethique et esthétique de l'environnement" *EspacesTemps.net* (2008): https://www.espacestemps.net/articles/Ethique-et-esthetique-de-environnement/

Blanc, Nathalie, and Barbara Benish. *Form, Art and Environnement: Engaging in Sustainability*. New York: Routledge, 2016.

Cefaï, Daniel, and Cédric Terzi. *L'expérience des problèmes publics. Perspectives pragmatistes*. Paris: EHESS, 2012.

Charles, Lionel. "A la recherche d'une théorie de l'environnement.*"* In *L'environnement en perspective. Contextes et représentations de l'environnement*, 10-25. Paris: L'Harmattan, 2000.

Citton, Yves. *Gestes d'humanités. Anthropologie sauvage de nos expériences esthétiques.* Paris: Armand Colin, 2012.

Dewey, John. *Art as experience*. New York: Perigee Books, [first ed. 1934] 1980.

Goethe, Johann Wolfgang von. *Metamorphosis of Plants*. Cambridge: MIT Press, [first ed. 1790] 2009.

Goodman, Nelson. *Langages de l'art.* Translated by Jacques Morizot and Jacqueline Chambon. Nîmes: Fayard/Pluriel, 1990.

Jacobs, Jane M. "Urban geographies I: Still thinking cities relationally." *Progress in Human Geography 36*, (2011): 412–422.

Kant, Emmanuel. *Critique de la faculté de juger.* Translated by Alain Renaut. Paris: Garnier-Flammarion, [first ed. 1787] 2000.

Kuitche, Hermann. "Esthétique environnementale : du déplacement au dépassement." *Nouvelle revue d'esthétique* 13, no. 1 (2014): 35-44.

Kai M. A. Chan, Patricia Balvanera, Karina Benessaiah, Mollie Chapman, Sandra Díaz, Erik Gómez-Baggethun, Rachelle Gould *et al*. *Opinion: why protect nature? Rethinking values and the environment*. Proceedings of the National Academy of Sciences 113, no. 6 (2016): 1462-1465.

Nadaï, Alain. "Degré zéro. Portée et limites de la théorie de l'artialisation dans la perspective d'une politique du paysage." *Cahiers de géographie du Québec* 51, no. 144 (décembre 2007): 333-343.

Pinchemel, Philippe and Geneviève Pinchemel. *La face de la terre. Éléments de géographie*. Paris: Armand Colin, 1988.

Raynaud, Dominique. "Forme urbaine. Une notion exemplaire du point de vue de l'épistémologie des sciences sociales." In *Langages singuliers et partagés de l'urbain. Actes du Colloque Louest, CNRS UMR 7544*, edited by Philippe Boudon, 93 -120. Paris: L'Harmattan, 1999.

Roger, Alain. *Court traité du paysage*. Paris: Gallimard, 1997.

Schaeffer, Jean-Marie. *La fin de l'exception humaine*. Paris: Gallimard, 2007.

Stuart, F. Chapin III, Gary P. Kofinas, Carl Folke, Stephen R. Carpenter, Per Olsson, Nick Abel, Reinette Biggs *et al*. "Resilience-Based Stewardship: Strategies for Navigating Sustainable Pathways in a Changing World." In *Principles of Ecosystem Stewardship - Resilience-Based Natural Resource Management in a Changing World*, edited by F. S. Chapin III, G. P. Kofinas, and C. Folke, 319–337. Amsterdam: Springer, 2009.

Stuart, F. Chapin III, Stephen R. Carpenter, Gary P. Kofinas, Carl Folke, Nick Abel, William C. Clark, Per Olsson *et al*. "Ecosystem stewardship: sustainability strategies for a rapidly changing planet." *Trends in Ecology and Evolution* 25, no. 4 (2010): 241–249.

Stuart, F. Chapin III, Alan F. Mark, Robin A. Mitchell, and Katharine J. M. Dickinson. "Design principles for social-ecological transformation toward sustainability: lessons from New Zealand sense of place." *Ecosphere* 3, no. 5 (2012): 40.

Tsing, Anna Lowenhaupt. *Le champignon de la fin du monde. Sur la possibilité de vivre dans les ruines du capitalisme*. Translated by Philippe Pignarre. Paris: La Découverte, 2017.

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