

Jørgen BRUHN

## Intermedial Ecocriticism: The Anthropocene Ecological Crisis across Media and the Arts

**Abstract:** This article is an introduction to the edited issue of *Ekphrasis* that publishes selected and rewritten versions of papers presented at the international conference "Intermedial Ecocriticism: The Anthropocene Ecological Crisis across Media and the Arts" that took place in Cluj, Romania, in August 2019.

Taking as its starting point the by now well-established fact that the ecological crisis defines our current moment and threatens our planetary future, the article argues that environmental humanities is in need of a research agenda that is able to systematically study, compare and criticize many different ecomedia products from a wide range of media types. The article argues that major insights from intermedial studies ought to be combined with the basic ideas of contemporary ecocriticism, and the article briefly outlines an intermedial ecocritical research agenda.

Also, the article offers brief introductions to the 12 articles of this special issue, which covers a wide range of theoretical and methodological approaches to the intersections of intermedial studies and ecocriticism. The articles deal with a wide variety of different media types, from scientific articles and social media articulations and to blockbuster cinema, narrative literature, TV-series, Japanese manga documentary film.

**Keywords:** Intermediality, media studies, ecocriticism..

**Jørgen BRUHN**

Linnaeus University, Sweden  
jorgen.bruhn@lnu.se

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The ecological crisis that natural scientists have warned about for decades is no longer a minor issue discussed exclusively by hardcore activists or nerdy specialists. Nor is it a problem that democratic leaders can postpone, as they have for decades, until after the next election. No doubt conservative business interests and authoritarian leaders dream about a time before the "Greta effect" sparked mass global protests, but it is too late: the problems

of global warming and pollution, the threats to biodiversity, and other threats collected under the now-popular umbrella term of the Anthropocene are here to stay, the genie is out of the bottle. The humanities and social sciences have already played an important role in understanding the nature of the crisis and have also had a certain impact on public discourses and policies, but even if ecological questions have now found a prominent place on the global agenda, much further work remains to be done.

The symposium “Intermedial Ecocriticism: The Anthropocene Ecological Crisis across Media and the Arts” took place in the lovely city of Cluj, Romania, in August 2019. It was conceived as an attempt to formulate questions and answers relating to the pending ecological crisis from the point of view of the humanities. More specifically, the symposium wanted to try and combine insights from intermedial studies and ecocriticism with environmental humanities, a project which continues work on intermedial ecocriticism carried out by a research group at the Linnæus University Centre for Intermedial and Multimodal Studies (IMS) in Sweden. This special journal issue of *Ekphrasis* contains edited versions of selected papers that were given at that symposium.

To investigate the ecological crisis from a humanities point of view is, of course, not a new endeavour. The consequences and cultural representations of the ecological crisis have been analysed numerous times within the humanities and social sciences, but in our research at Linnæus University, echoed in the Call for Papers for the symposium and in the invitation of distinguished keynote speakers, we have attempted to formulate our own approach to the field. We begin by way of a very general question: How are the results of scientific environmental research communicated to the public? We find that even though this is not the sort of question that humanities scholars, and especially scholars working with aesthetic material, are particularly accustomed to ask, this general question nevertheless turns out to be a useful starting point.

Susanne Moser, a specialist in communication, has described the basic issues in both understanding *and* communicating global warming, which may here stand in for the ecological crisis in broader terms. The representational obstacles, further discussed below, include the “invisibility of causes, distant impacts, lack of immediacy and direct experience of the impacts, lack of gratification for taking mitigative actions” (Moser “Communicating Climate Change” 31). And despite the fact that these fields have “progressed considerably in recent years” (Moser “Reflections on Climate Change Communication Research” 346), most of the research adds to the frustrating difficulties of measuring any long-term effects of ecological communication on audiences (which is one of the problems directly addressed in Schneider-Mayerson *et al.*).

Our general research question focuses on how, and indeed whether, scientific truth claims may be transferred to non-scientific media forms. It leads to a follow-up question which asks, to recycle a Latourian phrase, how scientific matters of fact can be turned into

matters of concern – be it inside or outside of the arts, literature, and film or in journalism, social media, or political rhetoric. Or as Alexa Weik von Mossner puts it in her contribution: “Affecting such changes has proven difficult for a variety of reasons – from the cultural to the political and the economic – but an important step on the way is to make the issue accessible and to communicate its urgency.” Questions related to this have been thoroughly discussed in well-established disciplines such as risk, health, science, and climate change communication studies (Chadwick; Cho *et al.*; Comfort and Park; Kastberg; Moser “Communicating Climate Change: History, Challenges, Process and Future Directions”). These fields are based on a tradition of communication studies that works well for the analysis of the history and impact of journalistic media and forms of mass media, but which has not particularly focused on artistic communication. Formal and aesthetic questions are generally of no interest within communication studies, nor have practitioners engaged in *comparisons* between aesthetic and non-aesthetic communication (for one of the few exceptions, see the description of environmental communication studies formulated in Schneider-Mayerson *et al.*).

However, these highly relevant research fields have established beyond doubt that simply feeding the public with more and more information is unproductive (the “information deficit hypothesis”). Furthermore, and as a consequence of this, it also seems clear that if the communication of scientific facts – in whatever form these are communicated to the public – is to have some kind of impact, the facts need to be personalised or given a concrete meaning that is relevant for the everyday life of citizens, for example by way of narrative elements (an idea that emerges in Comfort and Park). This idea – that facts, when communicated, need to be framed, formed, and put into meaningful contexts – is what Simon Estok, in his contribution to this volume, refers to as the question of spatial and ethical “proximity”. This is where fiction, across many different types of artistic media, has an advantage, as it is able, for instance, to embody the “slow violence” of climate change (Nixon). Recently, promising work in what has been referred to as Empirical Ecocriticism has been conducted in the form of reception studies on the effects of fiction literature on readers, but the results are still relatively limited, and in the studies conducted so far no attempt has been made to compare the responses of readers, or the long-term effect, across different types of media (Schneider-Mayerson). Hopefully we will learn much more as this research progresses.

New ideas need to be proposed and discussed, and new research paradigms should be developed. The different fields of science communication research need to be considered carefully, even by scholars trained in the arts and literature who are traditionally unfamiliar with or sceptical of questions of “communication” and knowledge transfer. Science communication, broadly defined, studies the crucial links between science and the public, and a novel, a visual art project or a poem can be such a link. Seen from this vantage point

– the ecological crisis in the form of scientific facts being communicated to audiences – the field of ecocriticism is in fact a venture comparable to science communication. Ecocritics, however, tend to work in “parallel but isolated tracks” (Schneider-Mayerson 2), and more initiated connections are rarely made (a remarkable attempt to approach the gap between ecocriticism and communication studies is Slovic *et al.*).

The rich and flourishing field of ecocriticism can be defined, broadly, as “the study of the relationship between the human and the non-human throughout human history which involves a critical analysis of the term ‘human’ itself” (Garrard 5). Central to contemporary ecocriticism is the concept of the Anthropocene, which, although it has emerged quite recently, has quickly become fundamental to the field (see for instance Clark; Zapf). The term originated as the designation for a geological period in environmental and earth system sciences, and its very eager appropriation by humanities scholars has been met with criticism: the physicist and meteorologist Yadvinder Malhi, for instance, claims that the term is an “eye-catching but ill-defined [description of] human-dominated modernity” (Malhi 79). The concept has been the subject of careful scrutiny and its definition, history, and political relevance have been debated, explained, and questioned (Demos; Lewis and Maslin; Malm; Moore). However, the concept of the Anthropocene is perhaps first and foremost a helpful correction to the sometimes exaggerated focus on global warming in current ecological debates, because the notion of the Anthropocene also includes a number of components and effects of an ecological crisis, including pollution and decreasing biodiversity, in addition to global warming (for descriptions of the broad natural scientific aspects, see Rockström *et al.*; Waters *et al.*). It is in this sense of the term that most of the participants in the symposium, and the writers for this special issue of *Ekphrasis*, employ the notion of the Anthropocene.

While ecocriticism originally focused on literary representations (valuable overviews of waves and trends in ecocriticism are found in Buell; Zapf), the very heterogeneous field of ecocriticism today includes analyses of many other aesthetic practices and media types. Types of non-literary media investigated by way of ecocritical perspectives (in the broad sense of the term) include fictional, experimental, and documentary films (Kaplan; Lubecker and Rugo; Narine; Weik von Mossner), the visual arts (Davis and Turpin; Demos; Mirzoeff), gaming (Chang), and musicology and sound studies (Allen and Dawe; Hart).

However in the Intermedial Ecocriticism group at Linnæus University we see a major problem, and this is what we wanted to address and explore more deeply with the symposium, which is that no sustained attempts have been made to analyse and systematically discuss and compare the different types of media that deal with the ecological crisis. It is for this reason that we suggest that intermedial ecocriticism may be a productive and even necessary development in the field of ecocriticism in particular and the environmental humanities in general.

## Intermedial studies as part of media studies

Media studies is a very broad and heterogeneous theoretical and historical tradition characterised by the fundamental idea that all communication is necessarily material. Media studies investigates the material (in the broadest sense of this word) basis for communication. A foundational assumption behind contemporary media studies research is that human beings, animals, microbes, and artificial intelligences are all endowed, to varying degrees, with an ability to perform communicative acts, and that such communication necessarily entails media. Thus, media studies generally relates to what biosemiotician Jesper Hoffmeyer called a “natural history of meaning” (“betydningens naturhistorie”, in Hoffmeyer), or what John Durham Peters has called a “natural history of media” (see Eliassen *et al.*). Peters’ idea is beautifully captured in his definition of the necessary involvement of media (which he terms “crafts”) with what we consider or claim to be nature: “Humans and their crafts have entered into nature and have altered every system on earth and sea, and many in the sky, to the point that ‘nature’, understood as something untouched by humans, only exists on earth where humans have chosen to set it apart as ‘natural’” (Peters 1). Subjectivity, media, and nature are closely intertwined in this definition, placing the understanding of media at the centre of all endeavours in the humanities.

Based upon the theoretical edifice of Lars Elleström, and created in a collective spirit of cooperation and discussion at the Centre for Intermedial and Multimodal Studies at Linnæus University, a theoretical position is being developed which can be described as an intermedial theory of media, a branch both of media studies and of intermedial studies. Here, we understand “media” as including everything from cave paintings and human gestures to mobile phones, novels, and scientific articles. Individual “media products” – one particular cave painting, one particular human gesture, or, in Elleström’s article in this collection, the entire planet (as an immense media product!) – may be clustered together to form a particular “media type”.

A starting point for this version of intermedial studies is the unsurprising notion that communication necessarily involves material media types and that all media expressions are a priori mixed (Bruhn “Heteromediality”; Mitchell). It is tempting to jump to the conclusion that, since all media are mixed, there are no such things as media types (or genres, or other comparable categories), but that is not the case. On the contrary, all specific media products are, following their setup, part of a media type, qualified by use, institutional framing, and historical development.

But media types are not only defined by their constellation of media and modalities; they are also contextually and operationally defined. A second fundamental idea, therefore, involves a contextualised medium specificity, where despite the mixedness of media, all media products can be characterised with a “weak” or temporary medium specificity. Any

qualified media type offers temporary “affordances”, that is, limits and possibilities (Kress), that enable some things to be expressed and hinder the expression of other things.

Apart from having a descriptive analysis and contextualised definition of the basic aspects of media, a third key intermedial idea is to distinguish between media integration and media transformation. This distinction results from the essential idea of intermedial studies mentioned above, that all media are medially and modally mixed. That idea naturally leads to the question of *how* this mixedness of all media texts may be analytically approached. It is not particularly interesting to simply demonstrate that media products are mixed; rather, the mixedness needs to be described and thoroughly analysed (and this is done in several different ways in the essays collected in this issue of *Ekphrasis*). From an analytical, pragmatic point of view, the most useful approaches for understanding the media mix are media integration and media transformation. The transformation dimension in particular is important in intermedial ecocriticism, given that ecomedia products are, very broadly speaking, the result of a sometimes very elaborate and complex transformation of the form and content of scientifically produced knowledge. Media are, as Emma Tornborg points out in her article, “always involved in transmedial processes in a dynamic, reciprocal and complex network”.

Simply put, the *media integration perspective* investigates how more than one medial aspect coexist in the same media product at the same time. Examples could be when images and written words coexist as parts of a scientific article, or when we listen to both the words and the associated music of a pop tune or an opera aria. On the other hand, the *media transformation perspective* investigates how medial content or form is transformed from one medium to another. For instance, when a scientific idea (say, oxygen) is represented as a drawing of atoms on a blackboard in a classroom, when a novel by J.K. Rowling is turned into a film, or when the idea of global warming (as expressed in a scientific article) is represented as the theme in a contemporary environmental documentary film.

The immense corpus of media transformation and transmediation was discussed in Linda Hutcheon’s *A Theory of Adaptation* and has recently been rethought, widened and refined from an intermedial point of view in Salmose and Elleström’s anthology *Transmediations*. The media transformation process is *transferring* certain aspects while also *transforming* everything into a new media product (and a different qualified medium, often but not always employing a different technical medium of display). Analysing media transformation basically means understanding the interplay between medium specificity and transmedial aspects (aspects which transcend media borders).

## Representing the ecological crisis

We now need to return to Moser's idea of the representational obstacles to understanding and communicating the ecological crisis, because behind the ideas of intermedial studies as this is understood at IMS lies a pragmatic notion of the representation of environmental issues. As demonstrated in virtually all of the contributions to this issue of *Ekphrasis*, this has been and remains a central concern in contemporary environmental humanities, even in Nicolai Skiveren's article, where the idea of representation is put under pressure: "To make the invisible specters of destruction sensible, we need to augment its presence through signs, visions, atmospheres, affects, and sensitivities. In short, we need representation." Rob Nixon is one of many important commentators on this question, and in line with Moser's concerns quoted above, stresses the "formidable representational obstacles" of describing global warming (2). He underlines that the ecological crisis results in "a violence that is neither spectacular nor instantaneous, but rather incremental and accretive, its calamitous repercussions playing out across a range of temporal scales" (2). In his essay here, Simon Estok cites Nixon's comment that slow violence has no stars; the crisis can only be turned into a Hollywood plot with some difficulty. This same argument also underlies Lars Elleström's discussion of *The Day after Tomorrow* as well as Doru Pop's critique of eco-cinema in the present collection.

As a result of these problems of representation, recent work in ecocriticism and neighbouring subjects has often been influenced by Timothy Morton's idea of the "hyperobject". This term has been, I believe, too influential in convincing ecocritics of the near-impossibility of understanding as well as representing climate change and other aspects of the ecological crisis (Bruhn "We're Doomed – Now What?"). I would suggest that we follow Nixon and many others – for instance the excellent writers in this issue of *Ekphrasis* – in acknowledging that while the environmental situation presents immense challenges, this does not have to mean that the ecological crisis turns out to be an unrepresentable "hyperobject".

Instead, a more pragmatic and to a certain extent optimistic understanding of the abilities of representation is possible. Such a position would reason that representation is a fundamental part of human communication and a process that uses media products to stand in for all sorts of phenomena across the more or less productive dividing lines between material and mental, real and fictitious dimensions. Representations cannot be identical to what they represent, and representation is not devoid of performative aspects. This means that any representation necessarily functions on a differentiating scale from higher to lower precision and effect depending not only on the media products but also on the context in which the media products are produced and perceived, and where they circulate and make their impact. Language, visual communication, and other forms of representation are often

very efficient but not impeccable tools for communication. Therefore, there are differences in how easy, or difficult, it is to represent the mobile phone lying on my table as I write these lines as compared to representing the effects of climate change or the victims of what has been called the sixth mass extinction (for a discussion of representation, not restrained to ecological questions, see Hall *et al.*): but it is quantitative differences, so to speak, not a qualitative difference. When such a pragmatic position concerning the possibilities and limitations of representation characterises effectively all of the contributions to this issue, it perhaps signifies that the most radical representation-sceptical positions are no longer dominant in the field. Time will tell.

### Intermedial ecocriticism

A major analytical advantage of the intermedial studies approach is that it enables comparison of form and content elements in different media types, including media types that are normally considered to be so far apart that they are seen to be incomparable: a scientific article and a novel, a documentary film and a poem, or an advertisement campaign and a classical symphony. To this end, several theoretical concepts that enable comparisons of different media types have been developed by researchers at IMS. (Some results of the group's work covering a range of different media types are Bruhn 2019; Salmose; Tornborg; see also the contributions of Elleström, Sternudd, and Tornborg in this issue). So far, however, intermedial studies has not been very engaged in ecocritical questions, which is why we wanted to instigate interest in intermedial ecocriticism through the symposium at which the papers in this volume were initially presented.

As mentioned above, a crucial motivation behind our desire to construct an intermedial ecocritical research paradigm is that, to date, surprisingly few scholars have tried to understand and compare the representation of the ecological crisis in widely different media products and media types. Probably the most ambitious attempt to develop such a comprehensive theory and method of "ecocriticism across media", and thus closest to the idea of intermedial ecocriticism that I am describing here, is *Ecomedia: Key Issues* (Rust *et al.*). *Ecomedia* offers a survey of contemporary media types dealing with ecological issues, and the authors work with a useful definition of ecomedia as "the intersections of media, society, and the environment" (1). However, the *Ecomedia* approach does not formulate general definitions of media or mediation that facilitate comparisons and discussions *across* the borders of different media types. Despite its many important insights, the project is trapped in rather vague definitions of the notion of media, and furthermore it employs a medium-specific approach to the field of ecomedia, which means that each individual chapter of the book investigates a single media type. Nonetheless, we acknowledge that our

intermedial ecocriticism is inspired by the *Ecomedia* project's attempt to combine media studies and ecological questions. (The interesting anthology edited by Barry and Welstead broadens the field of ecocriticism, but without a systematic comparative basis.)

Intermedial ecocriticism, despite the perhaps somewhat restraining definitions and discussions provided in this introductory article, is intended to be an open research paradigm; its three main components – the corpus (*ecomedia*) and the two theoretical frameworks that we employ in tandem (ecocriticism and intermediality) – allow for varied and distinct approaches and combinations. Equally, the idea of *ecomedia* itself, specified as either individual media products or more clustered media types, is a corpus very much up for discussion. And the fields of media studies and intermedial studies, as well as that of ecocriticism, are in themselves debated and non-finalised theoretical positions, allowing substantial leeway for those who want to enter, perhaps contribute to, or even change the fields.

Intermedial ecocriticism, then, is meant to launch a research agenda that:

- a. facilitates a broad, theoretically and methodologically solid approach to the very wide field of representations of the environmental crisis in many different media types;
- b. enables comparisons across different media types, with both form and content issues including but not limited to narrativity, scientific truth claims, toxicity, and the ephemeral nature of the threat (to mention merely some of the issues discussed in this issue of *Ekphrasis*);
- c. thereby makes it possible to reach a better understanding of the mediation of the ecological crisis in society, and, in the final instance, to better understand how to represent the crisis in communication in different media, and thus work against misunderstandings or plain, cynical disinformation.

The ideas inherent in intermedial ecocriticism, as well as all the articles included in this issue, also suggest – with all the risks and insecurities inherent in such postulates – that this branch of research may help us understand the kind of impact that can be expected from different media types, and so help predict what social action – individually or collectively – can result from each. Through this, intermedial ecocriticism – and work in some sense related to the position, such as the splendid articles in this issue of *Ekphrasis* – may offer significant contributions to our abilities not only to adapt to but also to act upon the threatening ecological crisis.

### The content of this issue

While many of the contributions to this issue engage with representations of global warming, Alexa Weik von Mossner focuses on another disastrous effect of the Anthropocene condition, namely what is often referred to as the sixth mass extinction. She continues her

cognitive studies of the functions of fiction in film and literature by offering a thorough reading of Louis Psihoyos's 2015 film *Racing Extinction*, in which she convincingly demonstrates the intermedial cinematic strategies while also thoughtfully questions some of the ideological ideas underlying or possibly even undermining the film.

Lars Elleström's work is and has been a crucial inspiration for the present project, and therefore it was a great pleasure to accommodate his work here. Applying semiotic intermedial concepts and tools in a systematic way to two influential examples of ecomedia – an article defining the Anthropocene and the blockbuster film *The Day after Tomorrow* – Elleström demonstrates the practical usefulness of intermedial concepts by focusing specifically on the topical themes of narrativity and truthfulness.

The predominantly Western perspective is productively complemented by Daniela Kato's discussion of an experimental manga book, Mizuki Shigeru's *Hōjōki*, which deals with Japanese issues of both general ecological destruction and more specifically anxieties that followed the 2011 nuclear disaster in Japan. Arguing against the tendency of ecocriticism to focus too strongly on content, her analysis of the manga offers both intermedial and ecocritical perspectives but also contextualises and historicises the media product.

Taking as his starting point some of the basic ideas of intermedial ecocriticism, while also criticising them, Nicolai Skiveren discusses what he calls the “atmosphere of radiation” in the praised HBO mini-series *Chernobyl* and in Svetlana Alexievich's *Voices of Chernobyl*. Addressing and comparing the two media products along the dimensions of “spectrality”, “trans-corporeality” and “de-humanisation”, Skiveren points to crucial differences as well as several important similarities between the two media products and suggests a finetuned analytical apparatus for dealing with the difficult representation of toxicity.

One of the key psychological consequences related to the ecological crisis, known in Swedish as *klimatångest*, best translated into the English climate anxiety, is investigated in Hans T Sternudd's contribution. Combining methodological insights of discourse theory and intermedial studies, and relating it to core questions of the field of Climate Change Communication, Sternudd analyses and compares four Swedish YouTube videos dealing with this subject. His analyses succeed in focusing on the possibilities as well as the problems in these videos made by young producers: the tendency to try and solve the largest possible problems by way of individualized, small solutions.

Emma Tornborg faces the crucial question of how to understand the transport of scientific material into an aesthetic form. In this particular case she is dealing with poetry, one of the aesthetic forms that are conventionally considered to be quite distanced from the hard sciences. Her text offers a thoughtful consideration of the affordances of poetry, and its ability to accommodate supposedly non-poetic material, and she exemplifies her general reflections primarily through a reading of a complex poetry book by Åsa Maria Kraft.

Like Tornborg, Adela Muntean engages with the question of science and the arts, but from the perspective of the technological possibilities of spheric representations of Planet Earth. Muntean offers a broad presentation of the complex interrelatedness of artistic sensibility, scientific exploration, and technological developments, and the essay traces one of the histories of how humans have rendered humankind and the universe via high tech media transformation.

Whereas several of the contributions discuss narrative and/or verbally transmitted material, Sophie Kromholz discusses what for lack of a better term must be called visual art. Kromholz argues for the productivity of an aesthetics of the “ephemeral”, analysing visual art with ecological content that incorporates the ephemeral nature into not only form but also thematics. She thus points to the often discussed idea that the ecological crisis, which is itself ephemeral to a certain extent, needs aesthetic mediation to be sensible, in both senses of the term: perceptible by the senses, and offering sensible input to cognition.

Christine Ramsay bases her essay in philosophical considerations concerning human and animal-related ecological grief. She supports the theoretical reflections with her own artistic work that beautifully and thoughtfully renders the North American robin in painting: investing her thoughts with actual, artistic work, she asks – like Simon Estok – what might make us act to resolve (aspects of) the ecological crisis.

Simon Estok continues his explorations of his ecophobia hypothesis, engaging with one of the fundamental questions posed in environmental humanities: Why does the public not act upon the dramatic information offered to it in news media and the arts? Estok applies a limited number of categories to approach an answer to the questions, thereby offering a highly critical understanding of many of the ecomedia products that are meant to make us act but do not succeed in doing so.

Similarly, in a critical and thought-provoking article informed by but also distancing itself from Marxist thinking, Doru Pop discusses or rather criticises several of the basic ideas of both ecocriticism and environmental humanities, and takes a specific, hard look at the ideas underlying so-called eco-cinema. Pop asks the question of whether cinema, which here probably stands in for all aesthetic media types, is the right tool to raise awareness of the ecological crisis. His answer is no.

Working from an intermedial, comparative point of departure, Liviu Lutas pursues the broad ecocritical theme of humankind versus nature in a novel, a short story, a live action feature film, and an animation film. Working with econarratological tools on both the microlevels of literary enunciation and the more thematic comparisons between the media products, Lutas demonstrates that what perhaps feels like a contemporary Anthropocene dichotomy between humankind and nature clearly has its forerunners, and that further historical and stylistic investigations are necessary.

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