

Conference
Doing Science: Texts, Patterns, Practices
20.11. - 21.11.2015

Venue

a.r.t.e.s. Graduate School for the Humanities Cologne
Aachener Strasse 217, 50931 Cologne
room 3.A06, 3rd floor

Contact

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Programme

Friday, 20th November

from 9:30

Registration

10:00

Welcome and Opening Remarks (Nina Engelhardt, Julia Hoydis)

10:15 – 11:45

Panel I: Inter-Actions

Oliver Hochadel (Barcelona)

Co-producing Human Origins: The Interaction of Paleofiction and
Paleoanthropology in Spain

Julia Boll (Constance)

Is Knowledge Performative? Science/Stage: an Experiment in
Performance Lectures

Coffee Break

12:00 – 13:30

Panel II: Nerds and Tricksters – Mediating Science

Kanta Dihal (Oxford)

‘Nerd-On-Nerd Violence’: Scientific Conflict in Astrophysics
Popularizations

Moritz Ingwersen (Cologne)

Trickster Science: Creativity and Subversion in Neal Stephenson and
Michel Serres

Lunch

14:30 – 16:00

Keynote Lecture

Norbert Schaffeld (Bremen)

“And they hate change”: The Narrative of Emergent Scientific Discourse and the Historical Science Novel

Coffee Break

16:15 – 17:45 Panel III: Ethics, Science, Fiction

Harald Pittel (Potsdam)

Dorian Gray and the Evolution of an Ethic of Science

Maxim Shadurski (Siedlce)

Huxley Does Science: National Degeneration and Eugenic Controls in *Brave New World*

19:15

Dinner at Restaurant *Buon Giorno*, Hohenzollernring 27

Saturday, 21st November

10:00 – 11:30

Panel IV: Human Experiments

Estrella Maestre (São Paulo)

Biomedical Practices from the Film *The Skin I live In* by Pedro Almodovar

Pia Heidemeier (Cologne)

Biotechnology and Fiction: Genetically Modified Food in Margaret Atwood's *Oryx and Crake*

Coffee Break

11:45 – 13:30

Panel V Historical (En)Visions of Science

Adi Efal (Cologne)

The Place of Figuration in the Cartesian Conception of Science

Laura Søvsvø Thomasen (Aarhus)

Picturing Plants – Visual and Textual Strategies in Alexander von Humboldt's *Essai sur la géographie des plantes* (1804) and Erasmus Darwin's *The Botanic Garden* (1791)

Ana Duarte Rodrigues (Lisbon)

Sustainable beauty for Algarvean gardens: A cross-boundaries Research Project between Art and Science

Final Discussion

Lunch

“Doing Science: Texts, Patterns, Practices” **Cologne 21-21 November 2015**

Julia Boll

Is Knowledge Performative? Science/Stage: an Experiment in Performance Lectures

In the summer term 2015, we carried out the experiment of holding lectures in dialogue between a literature/theatre scholar and a scientist, on a stage, with performers and dancers. This series of four lectures explored a range of individual approaches to the subject of the experimental from the perspective of the sciences and of the theatre. By giving the lectures in dialogic form, we not only introduced a theatre convention to the format, but we could actively debate the different ways in which the scientific approaches and those from a literature/theatre perspective overlap and intersect, creating the lectures as a live experiments, in the space of the stage as a laboratory. This paper will trace how, in addition to discussing the theoretical approaches to the subject, the lecture series also put these theories to the test by allowing actors and dancers to interfere with and even alter the lecture script. By testing out in practice how the theatre can be used to think through notions of the experimental, we were able to reassess our conception of scientific facts and scientific evidence, the notion of predictability, and who or what is actually part of the experiment. Ultimately, we inquired whether knowledge is performative, whether the formation of knowledge is performative, whether the dissemination of knowledge is performative, and how this could be used in future conceptions of knowledge formation.

Julia Boll holds a doctorate in drama from the University of Edinburgh. She was a director of the Scottish Universities’ International Summer School, taught literature and theatre at the University of Edinburgh, and also worked for the *Edinburgh Review*. In 2013, she joined the University of Konstanz, where she researches the representation of the bare life on stage. She has spoken and published on the theatrical representation of war and violence, on grief and pornography, theatre and transnationalism, questions of ethics in literature on science, neoliberalism in European playwriting, utopia at the theatre, and the *homo sacer* on stage. Since 2012, she is also a member of the multi-disciplinary research project *Fiction Meets Science* (Universities of Bremen and Oldenburg). Her monograph *The New War Plays: From Kane to Harris* was published by Palgrave Macmillan in 2013.

Kanta Dihal

‘Nerd-On-Nerd Violence’: Scientific Conflict in Astrophysics Popularizations

How do scientists try to convince the lay audience via their popularizations that their specific interpretation of modern physics is correct? In a time of scientific conflict, it can happen that scientists publish popularizations that directly contradict each other in terms of their scientific content. This presentation will look at two such conflicts in astrophysics: the big bang versus the steady state theory in George Gamow’s book series *Mr Tompkins* (1939-1967) and Fred Hoyle’s lecture series *The Nature of the Universe* (1950), and the black hole information paradox in Stephen Hawking’s *A Brief History of Time* (1988) and Leonard Susskind’s *The Black Hole War* (2008). In order to convince a wide audience of their stance, it is necessary for both writers to first explain the basic principles of astrophysics to their audience, which leads to a delicate balance between rhetorical and instructive language.

This paper looks into the physicists’ motivations for and approaches to writing these books, paying particular attention to their views on the philosophy of science, their intended

audience and the manner in which they use metaphor rather than difficult mathematical content to convey their ideas. Rhetoric and philosophy here seem to be more important in convincing the reader than the actual scientific content of both books. Affective engagement with the reader is a central tenet of the works; self-praise and criticism of other scientists are present in equal measure, in spite of the alleged objectivity and impersonal nature of science. The presentation will investigate what the consequences can be if the alleged objectivity of science is undermined through popularizations that contradict and argue against each other.

Kanta Dihal is a first-year DPhil student at St Anne's College, University of Oxford. Her thesis, titled *Reader Engagement in the Presentation of Quantum Mechanics in Popularizations of Science and Science Fiction*, is supervised by Professor Sally Shuttleworth. Her research interests are science communication and popularization, science fiction and fantasy, affect theory, children's literature, rhetoric, and metaphor.

Adi Efal

The Place of Figuration in the Cartesian Conception of Science

My talk will address the roles of figures and figuration in the construction of scientific method in Descartes early and posthumously published *Regulae ad directionem ingenii* (c. 1628). At the 14th rule one finds Descartes noting that 'as for figures, we have already shown how ideas of all things can be formed by means of these alone.' Figures are therefore recommended by Descartes as an indispensable tool for approaching the putting-into-order of the method. The figure, in Descartes as elsewhere, holds an intimate relation with the *res extensa*, that is to say with extended reality and with corporeal things inhabiting It.

How can a figure, the articulation of a situation in a figural manner (as sets or magnitudes), assist in searching for the truth of a discussed situation or object? What kind of truth are figures capable of delivering? Is any figure necessarily reducible to quantitative relations? What is the relation of the figure on the one hand, to imagination, and on the other, to physical reality? And finally, what are the limits of figural knowledge?, is there a knowledge that is unfigurable? I will try to approach these numerous questions by referring mainly to the *Rules*, but also to Descartes' other writings and to some helpful references by Cartesian thinkers to the question of the methodic auxiliary of figuration.

Adi Efal completed her PhD at the University of Tel-Aviv in 2005. She conducted postdoctoral research at the Franz Rosenzweig Minerva Research Centre of the Hebrew University of Jerusalem, at the IFK International Research Center for Cultural Studies Vienna, at the Institute of Art History at the University of Cologne (funded by Thyssen-Stiftung), and at the Thomas-Institute at the University of Cologne (funded by Gerda Henkel-Stiftung). Since the year 2000 she has been teaching at the universities of Haifa, Tel-Aviv and Cologne, as well as at the academic college Beit Berl and the Bezalel Academy of Arts and Design.

Pia Heidemeier

Biotechnology and fiction: Genetically modified food in Margaret Atwood's *Oryx and Crake*

With the manifold efforts of defending and legitimating fictional literature as a profitable and relevant contribution to current matters, whether in science, politics or economics, the practice of reading and analyzing fiction is nowadays seen as more than mere entertainment and pleasant

pastime. Considered from a cognitive perspective, artistic and aesthetic expression has been liberated from the rather limiting attribute of leisure activity, which stands opposed to the serious and factual work of the hard sciences, and has come to be seen as a different but equally rewarding epistemological approach to the matters of our time. Taking this shift towards an interdisciplinary and mutually enriching engagement with current issues for granted, in my talk I will elaborate on the role of Margaret Atwood's *Oryx and Crake* in the ongoing negotiation of genetically modified food and I will argue that the depiction of the matter in her novel furthermore carries relevant implications for the conceptualizations of posthuman identities and ethics inherent in the story.

Pia Heidemeier is a PhD-student at the university of Cologne where she graduated in English studies, Italian/Romance studies and protestant Theology in October 2014. Since then she has been working as a teaching assistant in the English department. Her research interests include posthumanism, ethical theory and 20th and 21st century English fiction. Her dissertation focusses on the analysis of (post)human identities in 21st-century novels by Margaret Atwood and Cormac McCarthy, concentrating on the depiction of food production and consumption.

Oliver Hochadel

Co-producing human origins: The interaction of paleofiction and paleoanthropology in Spain

The prehistoric site of Atapuerca in northern Spain hits the international news regularly with its spectacular discoveries, including the oldest hominid fossils in Europe. In the last two decades the Spanish archaeologists and paleoanthropologists built an enormous industry of popularization around their research project. This paper will ask what kind of narratives they use in order to captivate their audience. How do they tell the story of how “we” became human beings?

The focus will be on the popular science books written in great number by the three co-directors of the Atapuerca project. Juan Luis Arsuaga is a keen admirer of Björn Kurtén and his novel *Dance of the Tiger* (first published 1978 in Swedish). The Finnish paleontologist also coined the term “paleofiction”. Arsuaga pushed for the translation of Kurtén's prehistoric novel into Spanish (published in 2001). In 2005 Arsuaga published his own stone-age novel *On the other side of the fog*. (Paleo-)Fiction has become a major tool for Arsuaga to reflect about “the prehistoric man that hides within us”.

The best-known writer of paleofiction in recent decades has been the US-novelist Jean Auel. Between 1980 and 2011 she published the six parts of her bestselling series “Earth's Children” (in total 4.300 pages, 45 million copies sold, translated in over 30 languages). Topics such as the co-existence of Neanderthals and modern humans and the role of women in prehistory, are at the core of the novels of Kurtén and Auel.

Auel visited Spain in 2001 and 2009 for her research and consulted with José María Bermúdez de Castro and Eudald Carbonell, the other two co-directors of Atapuerca. They hail her for her “scientific accuracy” and for the interest she raised for prehistory among millions of readers. Both Auel and the researchers of the Atapuerca site are intrigued about the question how compassion and other “social emotions” evolved, traits that make us “really” human.

Using the example of Atapuerca and the interaction of the three co-directors with Kurtén and Auel this paper will try to pin down the relationship between paleoanthropological research and paleofiction. In how far do the writers appropriate ongoing research in their novels? And the

other way round: does paleofiction and the images of our forbears it conveys impact on ongoing research?

Oliver Hochadel is a tenured historian of science at the Institució Milà i Fontanals in Barcelona (CSIC – Spanish National Research Council). His research focuses on the relationship between science and its publics, e.g. in the case of electricity in the German enlightenment, the history of the zoo in the nineteenth century, the history of human origins research and the urban history of science. He published articles in journals such as *Endeavour*, *Public Understanding of Science*, *Science in Context* and *Technology and Culture*. Book publications include: *Öffentliche Wissenschaft. Elektrizität in der deutschen Aufklärung*, 2003 and *El mito de Atapuerca. Orígenes, ciencia, divulgación*, 2013.

Moritz Ingwersen

Trickster Science: Creativity and Subversion in Neal Stephenson and Michel Serres

This presentation will open up a dialogue between the science fiction of Neal Stephenson and the science philosophy of Michel Serres. Anchored in the late twentieth century cultural reception of cybernetics and complexity theory, their engagement with the modern sciences, as I intend to argue, hinges on the concept of mediation. As quite likely two of the most prolific contemporary advocates of the bridge between literature and science, Serres and Stephenson take recourse in strikingly similar metaphors to illustrate the continuity between the scientific revolutions of the seventeenth century and the paradigms of what has been called ‘the cybernetic age’. While Stephenson’s fiction moves from hackers and skateboard messengers to engineers, cryptographers, and alchemists, Serres’s philosophy unfolds under the banner of Hermes and converges on the figure of the parasite. Their subject matter are the physical sciences and their semantics combine the registers of ancient mythology and what might currently be understood as media theory. What their characters have in common is their occupation of a liminal space; they are agents of mediation, transformation, and disruption. For Michel Serres, as his translators note, “modern science is [...] specifically concerned with the study of all aspects of the transmission and propagation of messages – information, noise, redundancy.”¹ Likewise, information theory becomes the lynchpin of what Stephenson describes as his interest in ‘the deep history of computing and its relationship to society.’² Focusing on his novels *The Diamond Age* (1996) and *Quicksilver* (2003), I will illustrate the ways in which Stephenson’s scientists function as trickster figures that, like Serres’ Hermes, simultaneously embody the principles of creativity and subversion.

Moritz Ingwersen is pursuing a joint Ph.D. degree in collaboration between the Cultural Studies Department at Trent University (Canada) and the Institute of American Literature and Culture at the University of Cologne. His dissertation brings together the literary work of Neal Stephenson and the philosophy of Michel Serres with particular attention to metaphors of science and media. Since he graduated from the University of Cologne with a degree in Physics and English in 2012, his research has continued to engage the intersections between literature and science. His conference presentations and articles have involved, among others, the work of J.G. Ballard, Mark Z. Danielewski, H.P. Lovecraft, Erwin Schrödinger and Douglas Hofstadter. Currently he is also interested in China Miéville, thermodynamics, media philosophy and European posthumanism.

¹ Harari, Josue and David Bell. “Introduction: Journal à plusieu voies.” *Hermes: Literature, Science, Philosophy*. By Michel Serres. Baltimore and London: John Hopkins University Press, 1982. Xxiii.

² See Stephenson, Neal. “The Salon Interview.” *Some Remarks*. New York: Harper Collins, 2012. 239-240.

Estrella Maestre

Biomedical Practices from the Film *The Skin I live In* by Pedro Almodovar

Influences from Alfred Hitchcock, Luís Buñuel, David Cronenberg, and, more specifically, the film *Eyes Without a Face* by Georges Franju about a surgeon who tries to repair his daughter's ruined face by grafting on to it the faces of beautiful women, have been related to the Almodovarian movie *The Skin I live In*. This is so considering the deep reflection on the body presented on this play. For instance, it deserves mention the explicit gender discussion on body metamorphoses and transformation and consequent creation of a cyborg figure presented in this picture. However, without disregarding this interesting view on embodiment, I also focus in this presentation on the constitution and description of the *scientific persona* represented by the personage Rober, the plastic surgeon that develops an artificial skin created by bioengineering research on the body of Vicente, his experimental body victim, a prisoner in the hands of the unethically biomedical experimentation of Rober's professional ambitions.

Thus, I show the constitution of both the *biomedical research object* of Rober (Vicente) converted and transformed in a cyborg during a surgical experimentation with the incorporation on his body of an inorganic material acting as his new skin, and a *biomedical research subject* (Rober) who meantime is being constructed in this film as an emotionally detached, unfeelingly, and insensitively *scientific self*.

Estrella Maestre is PhD in Biology and Post-doc at the Faculty of Philosophy, Languages and Literature, and Human Sciences (FFLCH) of the University of São Paulo (Brazil). Her areas of interest are the interdisciplinary dialogue among Bioscience-Biomedicine-Biotechnology, Feminism, and Contemporary Philosophy to understand how medicalization and biological developments and devices are changing conceptions of human identity. Her work focuses specifically in the areas of Cultural Studies, Feminism, Epistemology, and Philosophy of Science and Technology.

Harald Pittel

Dorian Gray and the Evolution of an Ethic of Science

The Victorian Gothic has long been known for its attention to the perils of scientific experimenting. Starting with Shelley's *Frankenstein* (1818/31) and Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde* (1886), it is possible to construct an "evolution" of increasingly complex ethical reflection on science that reaches its peak in Wilde's *The Picture of Dorian Gray* (1890/91). While Shelley sees the ethical problems inherent to experimenting in the scientist's relation to the other, Stevenson's novella takes a decisive step from the personal other to the divided self. Such a modernist move towards the self-in-crisis is apt to reflect a heightened consciousness of the psychological implications of experimenting; however, the representational approach of internalization also runs the risk of de-politicizing ethical reflection on science.

The two apparently different strands (psychological and social) of bringing out the ethical dimension in science seem to be reconciled in *The Picture of Dorian Gray*, which can be read as a more complex condensation of the earlier approaches. *Dorian Gray*'s central motif, the divided self in a "magically inverted" mirror-stage relationship, anticipates later psychoanalytic theorizing which no longer allows for a facile distinction between self and social relationships: demonstrating that the self is social at its core, Wilde seems to be able to develop further the approach of interiorizing without neglecting the political implications.

Seen in this way, Wilde's novel would seem to unfold an analogy that can already be found as a germ in Stevenson's tale: Dorian's relation to the "moralizing" picture resembles that between a (socially detached) scientific entrepreneur and an (authoritative, yet manipulable) ethics commission, thus articulating a critical perspective for science that still seems valid today.

Harald Pittel M.A. studied English and German Literature, Philosophy, and History at RWTH Aachen University, Newcastle University and the University of Potsdam. He has been teaching English and Cultural Studies since 2011 and is currently teaching associate with the Chair for English Studies at Potsdam. His research interests include Fin-de-Siècle and (Post-) Modernist literature, literary and cultural theory. His PhD dissertation project on Oscar Wilde and the Political is in its finishing stages.

Ana Duarte Rodrigues

Sustainable Beauty for Algarvean Gardens: A Cross-boundaries Research Project Between Art and Science

The lack of sustainability and heritage identity of Algarvean gardens (which has preferred outer garden design), on one hand due to foreign influence of owners and tourists, on the other hand due to bad policies, is largely recognized by the academia and stakeholders. Nevertheless, none has been done so far. In this paper, I seek to give an overview of the research project that is carried on at the Faculty of Sciences of the University of Lisbon because it aims to be a new way of doing science using historical texts and traditional sources, followed by Lab tests (namely at the Water Lab and the nursery of the Department of Vegetal Biology) to find more sustainable solutions for Algarvean gardens.

This project seeks to find solutions at the intersection of historical books of agricultural and art of gardens and environmental sciences. The historical approach uses old knowledge found in various treatises such as Ibn Al-Awam (12th century), Crescenzi (14th century), Herrera (1513), G. Rios (1592), Agustí (1625), Ferrari (1646), Liger (1700) on irrigation systems, water management, garden design, garden elements, soils, fertilizers, horticultural techniques and Mediterranean species. The data gathered will then be tested in vegetal biology labs and in the field with the creation of Mediterranean gardens by landscape architects. The irrigation systems used in closed systems such as the "quintas" will be tested in the Water Lab of the University of Lisbon. We aim to get quantitative data for more sustainable solutions and divulge it to convince stakeholders that sustainability is interlaced with landscape heritage protection: to have Mediterranean gardens in the Mediterranean region.

Ana Duarte Rodrigues is a researcher fellow of the Secção Autónoma de História e Filosofia das Ciências of the Faculdade de Ciências of the University of Lisboa and an associated researcher of the Centro Interuniversitário de História das Ciências e da Tecnologia. She has received her BA (2002) in Art History, Master (2005) and PhD (2009) in Art History of Early Modern period from the FCSH/UNL. She is the editor of *Gardens and Landscapes of Portugal* journal and coordinates the *Collection of Gardens and Landscape Studies*. She published 17 books/catalogues/journals as author, coauthor and editor and published 40 articles or book chapters in specialized volumes. Her academic research focuses on Gardens and Landscape Studies and is especially interested in the circulation of knowledge, art and ideas and how they have contributed to the wellbeing of citizens in the past, and even more, what is the action we can take in that direction to promote the wellbeing of citizens in the present and in the future.

Norbert Schaffeld

“And they hate change”: The Narrative of Emergent Scientific Discourse and the Historical Science Novel

In the first part of my keynote, I will attempt to define and outline the contemporary science novel and its specific narrative composition as subject matter of a research design that might take the form of a discursive cycle matrix. Its four segments will be identified as follows: the authors and their scientific competence and cultural embeddedness, the scientist and his or her time as fictionalized entities, the (meta-)narrative mode of aesthetic mediation, and, finally, to give reader-response criticism its full due, the scientific knowledge, interests and receptivity of the potential target group.

Against this introductory backdrop, my paper will then offer a discursive analysis of three historical science novels, published over the last thirty-five years or so, i.e. John Banville’s *Kepler* (1981), Tracy Chevalier’s *Remarkable Creatures* (2009) and Clare Dudman’s *Wegener’s Jigsaw* (2003). I will address major questions deduced from the cycle matrix that cover the scientific commitment of the novelists, the fictional integration of an emergent scientific discourse, specific features of fictionalized biographies within the scope of historical writing, the narrative mode employed as well as its epistemic advantage for the readership in the context of current debates.

While Banville’s historical novel *Kepler* establishes a close affinity between mathematics, astronomy and narrative form when it retells the life of its eponymous hero Johannes Kepler (1571-1630), Chevalier’s *Remarkable Creatures* makes full use of alternating first-person narratives to highlight the unlikely friendship of the historical fossil hunters Mary Anning (1799-1847) and Elizabeth Philpot (1780-1857). Set in a time when paleontology was about to become a scientific discipline that gradually questioned established religious beliefs, this neo-Victorian novel also invests its plot with present-day issues of women’s underrepresentation in the natural sciences. The third example, Clare Dudman’s imagined autofiction *Wegener’s Jigsaw*, uses an autodiegetic narrator and a device that I refer to as mentor-mentee constellation to facilitate a narrative transmission which guarantees that Alfred Wegener (1880-1930) and his continental drift theory will find favour with the readership when he falls victim to an oppressing scientific discourse.

Prof. Dr. Norbert Schaffeld holds the chair of English Literature at the University of Bremen. He is one of the directors of the international research group *Fiction Meets Science*, whose project is largely funded by the VolkswagenStiftung. He is also a member of the *British Society for Literature and Science* and has worked on the campus novel, bicultural knowledge systems and epistemic decolonisation, the math play, diverse aspects of the historical science novel, and representations of the female scientist in fiction, drama, and film.

Maxim Shadurski

Huxley Does Science: National Degeneration and Eugenic Controls in *Brave New World*

In 1930s Europe, eugenic science presented a controversial overlapping of national discourse with the utopian imagination. Whereas constructions of nationality frequently involved notions of race hygiene and social hierarchy, utopian visions focused on deliberations about the physical betterment of humanity at large. Aldous Huxley’s *Brave New World* (1932) heightens a convergence of these two discursive practices in creating a future society divided into castes that range from mass-produced semi-morons to highest-calibre geniuses. This social model is devised to ensure stability and industrial efficiency. If read as a conventional dystopia, Huxley’s

novel takes a robustly critical line on the use of eugenics, be it for a national cause or a utopian endeavour. However, a contextual reading of the novel, alongside Huxley's other writings of the same period, reveals a symptomatic anxiety about the changing patterns of the social order, and the ostensible degenerative drift among the 'social problem groups'. This paper argues that *Brave New World* imagines eugenic science as a counter-measure to the recession of the traditional image of England, which may only be rectified by the application of stringent eugenic controls.

Dr Maxim Shadurski is Associate Professor of English Literature at Siedlce University (Poland). He earned his PhD from the University of Edinburgh. His publications include *Literary Utopias from More to Huxley: The Issues of Genre of Poetics and Semiosphere*, *Finding an Island* and over 40 articles and essays about utopia, nationalism, and landscape. Dr Shadurski is editor of the *H. G. Wells Society Newsletter*. He has served as editorial advisor for the volume on Wells in the *Children's Literature Review* series. Presently, he is working on two monographs: about nationalism in utopia, and about utopia as a world model.

Laura Søvsvø Thomasen

Picturing Plants – Visual and Textual Strategies in Alexander von Humboldt's *Essai sur la géographie des plantes* (1804) and Erasmus Darwin's *The Botanic Garden* (1791)

In recent years, the fields of *literature and science* and of *visual culture of science* have both addressed the importance of different visual and literary elements and their roles in establishing meaning and communication in science. In this paper, I explore how the visual and textual elements functioned as ways of establishing a narrative of Nature in Erasmus Darwin's *The Botanic Garden* (1791) and in Alexander von Humboldt's *Essai sur la géographie des plantes* (1804). These two scientists used both textual and visual element to construct their argumentation and explore a narrative about the nature of plants and plant geography, yet they did so in distinct ways: Firstly, both dealt not only in text and image with previously established ways of defining the plant life and geography but also drew on previous visual and literary traditions in order to frame their argumentation. Secondly, they employed literary and visual elements in order to construct their vision of the nature of plants through elaborate metaphors, casting plants as literary characters and by creating new expressions that bridge the divide between text, image and science. In my paper, I furthermore discuss the prospects of integrated readings between the literary and visual elements of science as an analytical approach.

Laura Søvsvø Thomasen is a postdoctoral fellow at the Department of Communication and Culture, Aarhus University (Denmark). Her research centres on the relationship between science and literature, especially in the early modern period and nineteenth century. Other research interests include visual culture of science, science on film, the history of microscopy and early modern drama. Since 2014, Thomasen has been involved in the project "Posthuman Aesthetics" researching on early concepts of the posthuman in popular science and literature in the late nineteenth century and early twentieth century.