

Announcer: [00:00:03] This podcast is brought to you by the University of Aberdeen.

Lise Olsen (LO) - Hello and welcome to *From the Old Brewery*, a podcast highlighting the work of students and staff at the School of Language, Literature, Music and Visual Culture. My name is Lise Olsen. I'm an artist working with the Sonic Arts and a research student here at the School of Music. I am co-hosting today's episode with Ian Grosz. Hi, Ian.

Ian Grosz (IG): [00:00:46] Hi there. Yeah, I'm also a research student here at the school and working toward a PhD in creative writing. We're both joined today by fellow student Isabella Engberg. Isabella is undertaking a PhD programme in Comparative Literature. She studied for her undergraduate degree and M.A. honours in English and German here at Aberdeen, taking internships and an exchange year in Germany. Her academic interests are in the environmental humanities, 19th century culture, and the relationship between science and literature. She is, as we speak, currently on an archival stay with the University of Jena in Germany, working in the archive of the former private residence of Ernst Haeckel: Villa Medusa. Her project considers works by three scientific authors who have contributed greatly towards the development and understanding of ecology. These authors and their travel narratives include Alexander von Humboldt's *Personal Narrative of Travel to the Equatorial Regions of the New Continent*, Charles Darwin's *Voyage of the Beagle* and Ernst Haeckel's *A Visit to Ceylon*.

LO: [00:01:47] The project investigates how journey narratives written at different times and in different contexts have been utilised in understanding the relatedness of humans, organisms and the rest of the material world. It seeks to get a grip with the transnational networks of knowledge between these travelling naturalists. The tension between the exciting drama of encounter and the description of natural phenomena, as well as the distinct literary imagination necessary to conceive ecology. By doing so, the project argues that the three authors and their work effectively represent a material world that exists both within and outside of our human imagination. Isabella is joining us remotely from Germany. Hello, Isabella.

Isabella Engberg (IE): [00:02:42] Hello. My goodness, this is such a great presentation. I hardly need to speak about my project.

IG: [00:02:47] You shouldn't be so prolific!

LO: [00:02:51] Firstly, can I talk to you a little bit about your background, Isabella, where did you grow up and how you came to study at the University of Aberdeen?

IE: [00:03:00] Yeah, I was born in a small city in Denmark and was raised into a bilingual family, which I think had a big influence on how I considered political and cultural trends to what people were talking about. At school and in my free time, I always tended to compare cultures and attitudes to different topics. And at university I wanted to continue with subjects that I liked in high school, which was primarily languages, history, and literature. But I also really liked the natural sciences, especially natural geography. So, at the University of Aberdeen, they offered a five-year shared honours degree in English and German, which in its third year included an exchange here in Germany. So back then it seemed like a perfect

degree for me because when you study a language and its literature, you really also get to grips with its cultural and political history. And so I thought, yeah, the subjects were so very broad.

IG: [00:04:07] Yes, great, so, you had this exchange year in Germany that came out of your undergraduate degree, and I just wondered how those earlier experiences influenced your current research interests?

IE: [00:04:19] Aberdeen was partnering up with the University of Bonn for English Studies, so it was relatively easy to go on an Erasmus here there. Bonn is the former capital of West Germany and it lies at the Rhine River, so quite far away from where I am now. But when I was there, I mainly took courses in German literature and they were very specialised. So I got to pick some courses that really interested me and I sort of defaulted, you could say, into taking courses dealing with the long 19th century. And that's an interest which really only grew in the last years of my undergraduate studies, where I took courses in 19th century romanticism and also in the fields of literature and science, together with Professor Ralph O'Connor and in a German course with Dr. Tara Beaney, where I had the chance to work with ecocriticism and that was something I found especially new and exciting. This only got enhanced with my own interest in the outdoors and the current environmental debates – and all of these things sort of bundled together led me to what would become the topic of my doctoral research.

IG: [00:05:34] It's quite a broad foundation for that.

IE: [00:05:39] Absolutely.

LO: [00:05:40] So your topic focuses on the work of 19th century scientific travel writing and its influence on our modern conceptions of ecology. What fascinates you about the 19th century naturalists and their travels? And can you briefly tell us a little bit more about each one of them?

IE: [00:05:59] Yes. I suppose my fascination really started because naturalists and their travels seemed to be important references for many authors that I read during my undergrad years. So for example, Jules Verne's and H.G. Wells' works are known as, you could say, precursors to science fiction, and the scientific travels by especially Humboldt and Darwin keep creeping up in their literature again and again. So, for example, in Jules Verne's novel *In Search of the Castaways*, Humboldt's Climb of Pico del Teido on Tenerife is referenced while the main characters visit the island. And they call this old Prussian naturalist and adventurer a "pure genius". So, the authors just keep creeping up. And so for my own project, I chose to investigate Humboldt and two other naturalist travellers. And all of their travel narratives were famous in their own right, you could say. But what's more important, their scientific contributions are known to have contributed to the development of the ecological sciences, as I said in the beginning.

So, I first chose Alexander von Humboldt's *Personal Narrative*, which was written between 1814 to 1829, because Humboldt initiated what today is called biogeography, at least in the English-speaking part of the world. And that's the idea of vegetation growing in certain

environments, depending on climate, soil and other physical factors. And you could say it is an early consideration of the sort of interconnectedness of natural phenomenon. And so Charles Darwin's theory of evolution through natural selection is only really sort of hinted at in his second edition of *The Voyage of the Beagle* from 1845, but it was immensely important to understand the familial interconnection between all living beings — that we are essentially all a big family. Mm hmm. And lastly, we have the German naturalist who coined the word ecology in 1866, and that's Ernst Haeckel. And he coined this term to systematise the natural forces that are initiating evolution. And his journey to Ceylon in 1881 to 1882 has to be seen in this light of wishing to provide more evidence for the theory of descent (or the theory of evolution).

IG: [00:08:48] Okay, so there's a huge shift I suppose, or explosion, in general public imagination and understanding of the natural world at that time. And obviously they're really central to that. I just wondered how you felt — this might not be possible — but how you felt that their own...the naturalists own personal attitudes and, you know, intellectual, scientific and perhaps even personal beliefs, might have been affected by the general attitudes of the time...you know, the religious beliefs of the societies that they came from at the time. Do you think that affected how they approach their own travels, their own journeys?

IE: [00:09:33] Yeah, this is a difficult question that I am still figuring out in my thesis. So being friends or colleagues with many famous German romanticists, such as Johann Wolfgang von Goethe and Friedrich Schelling, Alexander von Humboldt journeyed abroad with this, you could say, rather transcendental philosophical stance: that nature had a type of wholeness to it. So we find this philosophical stance creep up everywhere in his journey, and of course, in his general idea of biogeography. And on another spectrum, Darwin was a Christian before he went abroad and he was heavily influenced by natural theologians such as William Paley, who basically looked for evidence of God's creation in Nature. But at the same time, Darwin was also fascinated by their romantic sentiments. He also read Humboldt's travel narrative, and he was extremely eager to see tropical nature himself. And what's interesting about Darwin's journey is that his relationship to both religion and literature changed dramatically, especially with the realisation of evolution through natural selection — something his encounters and observation on his journey provided the evidence for.

IG: [00:10:57] So his whole, sort of, world view, in a way, was modified or shifted during the course of his travels.

IE: [00:11:05] During his travels, and certainly also after his travels when he had time to reflect about what he had seen. So, I think you could say that their philosophical and religious, sort of, preconceptions, did shape the personal attitudes to the nature they encountered, and which was then indeed depicted in their travel narratives. But that also the, at times, really quite harsh realities of the journeys and the nature that they observed there, also had an influence of how the travel narratives then later was edited and came to look in their published form. So, in general, I find it extremely interesting to see how these scientific observations and actual feelings felt on the journey, have the power to change their earliest preconceptions of the environment.

LO: [00:12:00] So, you say a distinct literature of the imagination is necessary to conceive ecology. I wonder if you could expand a little bit on what you mean by that?

IE: [00:12:14] Certainly. Yeah, I think I'll provide an example. So, the problem with ecology as a concept, I think, is that it basically proposes these invisible links between elements in our surroundings, and that's incredibly difficult to visualise. So, if you imagine that you have to paint a tree that you've seen while you travel, yourself: how do you at once show that it provides food and shelter for some organisms that are living in it, that it can give necessary shade and building materials for humans living a little bit further away from it, but also that this tree prevents soil erosion and binds carbon dioxide from the air. You can't paint that. There would have to be provided an explanation for it. And that is where literature really comes in. Literature can, of course, describe pictures in a sort of static sense, just as pictures can also tell stories. And stories, I think, take their starting point in describing changes to a condition, whether it's a physical or mental condition or whether it's a place, person, or another organism it's describing. So, if you want to talk about the changes that the felling of trees can have for, say, the worms living underneath their roots, we do need a distinctly literary imagination.

IG: [00:13:43] Yeah. And I suppose a story just...it has more impact in people's imagination, you know, in the audience that you're communicating with than, sort of, dry facts. It's story that sticks in the mind.

IE: [00:13:53] Yeah, absolutely. Drama drives our, you know, interest.

IG: [00:14:00] I want to go back to something you mentioned about the editing process – how the narratives were changed when they had time to come back and think about them. And I wonder if you could talk a bit more about the role of editing. Have you been able to...to see that: to pick that up in your studies, and how that process might have evolved over time for them?

IE: [00:14:26] Yeah. I mean, one of the examples you could talk about would be Darwin. So Darwin wrote multiple editions of his travel narrative, where you can basically trace how he changes his scenes to try and sort of accommodate for these new ideas about evolution. So, for example, between his 1839 edition and to the 1845 edition, he makes this discovery of evolution and actually writes down his first manuscript of the *Origin of Species*. And then all of a sudden you see some words and phrases that are used to describe some of the scenes from the *Voyage of the Beagle*, how they change from the first [edition]. That's just really fascinating.

IG: [00:15:18] You mean like the first-hand accounts? So, he's given a first-hand account and then...and then in later editions, you see that that's been adapted slightly?

IE: [00:15:27] Yeah, absolutely.

IG: [00:15:28] That's fascinating.

IE: [00:15:30] Hmm.

LO: [00:15:31] So can you tell us about your archival...the archival residency at Heckle's former home?

IE: [00:15:38] Ernst Haeckel.

LO: [00:15:39] Haeckel. [laughing]

IG: [00:15:40] You'll be getting heckled, now....

LO: [00:15:45] About his work and his travels in particular. And what kind of materials are you working on in this archive?

IE: [00:15:53] Yeah. So at the at the moment, I have an office in the Ernst Haeckel house, which, as a scientific institution, officially belongs under the Faculty of Life Sciences at the University of Jena here in Thuringia, in the eastern parts of Germany. But the people working in the house, they do research into the history and philosophy of science. But seeing as it's Haeckel's own former villa, it's also an archive and a museum of Haeckel's life and works. So, you have to imagine that this is a big Italian villa inspired house with these wonderful jellyfish painted on the ceilings. That's the Medusa decorations. These decorations are by the hand of Haeckel himself, who was also a nature painter.

So, I'm here for four months to investigate the circumstances of his journey to Ceylon a bit further. So as opposed to Humboldt and Darwin, much of Haeckel's personal correspondences, early manuscripts and notebooks have yet to be published and digitalised. And this is especially true for his excursion to the British governed Ceylon, which is today's Sri Lanka. It was undertaken in the early 1880s, and that was during that sort of high point of British imperialism and also shortly before Imperial Germany would attempt going into the so-called "scramble for Africa". So this period of neo-imperialism, of course, shaped Haeckel's ideas and the narrative to some extent.

So, as a German and hence a stranger to both Britain and its island in the Indian Ocean, he observed and evaluated both the British colonists and the local population. But I still think the main interest and what's most present in the text was really describing how he got familiar with the flora and fauna of the island, and especially the coastal marine creatures, such as the jellyfish, which was his research specialism and the reason he travelled to Ceylon. So, I hope that looking at such things as his personal journal, the watercolour paintings and the scientific work that followed after his journey, can provide some sort of clarity on the historical context and most especially, his own intentions with the travel narrative. I also hope to understand better how the scenes portrayed in this travel narratives have been fused together through his personal journal, his scientific measurements, but also, of course, the subsequent reflection of his time in Ceylon.

IG: [00:18:46] Mm hmm. So, you had a chance to look at his personal journal? I mean, that must be a bit spine tingling. You know, it brings you quite close to the man himself. Have you had a chance to look at that?

IE: [00:18:59] Yeah, absolutely. I actually just this week started looking at the...the personal notebooks that he brought with him.

IG: [00:19:08] And does he write those with a consciousness that someone is going to read them, or are there...is it like a private diary? This is my nosiness now kicking in...

IE: [00:19:18] Yes. You can...you can tell that he's noting down, for example, the things that he won't perhaps be able to remember that would be great to have in a narrative. So there are, for example, things such as his... like...just noting what kind of people he saw: like the names of them, because of course he met so many people, but so that he would be able to explain it later. The more detailed things are noted down in the writer's notebook. Yeah.

IG: [00:19:54]. So: for later. It's interesting to hear that.

LO: [00:19:58] So is there anything unique about Haeckel's travels compared with the others and what kind of insights do you hope to gain from your time in these archives? Or, what could this journey teach us about the approach to the natural environment today? Can it teach us anything?

IE: [00:20:14] Yeah. Many questions! So, one of the things that make Haeckel's travel narrative quite unique was that he first published his account serially in a magazine while he was still travelling around in Ceylon. And that's also one of the reasons why you can look at those things that were, you know, first published in the magazine and you can tell, okay, he definitely had an eye out for something here that he wanted to write and publish.

So roughly you could say the sort of narrative published was quite close to the narrative instance of his role as a traveller, not as a scientific author who would, at home later, be reflecting and hypothesising about what he saw while he was abroad. So that means the natural environment described consists of many first-hand impressions, and I expect that the notebooks from his journey will confirm this.

As I said, that's what it looks like so far. So, some of the chapters were actually [...] added later to the later editions of the travel narrative – two and ten years later, respectively. And the style of these chapters is very different. They almost take the form of lectures and in some ways they seem a little bit like Humboldt's travel narrative.

So here you really get the sense that the narrative instance is further from the journey itself. Of course, now in the archive, I've actually found out that these two chapters were indeed taken from his own lectures after he got home. So — this is quite funny. You can definitely tell that the place that he has written, these different parts of the narrative have different forms. So that's really interesting.

IG: [00:22:14] Oh, so in the same piece, you can see it's...a cut and paste job!

IE: [00:22:19] Yeah. And so here we are back at this strange dichotomy of seeing and understanding the environment around us. So Haeckel might have had a tendency in his first chapters to...sort of project his preconceived, scientific and artistic understanding of natural phenomena rather than to reflect about it later, as we see in the last two chapters that were later added. But on the other hand, it may also be possible that these first-hand impressions have a stronger, sort of, link to the actuality of what he saw that's closer to sort of, you could say, "reality".

IG: [00:22:57] So you think there's some sort of, to begin with, a confirmation bias: he's looking to find evidence for what he already thinks, in what he sees, but there is also this sort of, first-hand immediacy of the impressions that he's taking in, begin to take over, in the early writing he does, anyway.

IE: [00:23:17] Mm. Yeah. Certainly, you could say this all led him to view nature from a more...deductive angle than Humboldt and Darwin when he travelled. So he already saw things in light of his own sort of...early concepts of nature. Another thing we might think of is that the journey itself took place, in terms of his own career, a lot later than...when he published his most...his greatest works. Whereas for Humboldt in Darwin, they published their main works after their journey. So, he probably had lots of, sort of preconceived ideas of what to look for when he...when he journeyed. Mm hmm.

IG: [00:24:04] Yeah. Just to touch on what you were saying about the difference between imagination and actuality there, and in your own description of your work, you talk about a material world that exists – and I'm going to quote you here Bella – “both within and outside of a human imagination”. I think that's that strange sort of, interdependent dichotomy that you mentioned that, you know...nature sort of exists in and of itself, but it only exists, you know, as it's perceived by us, and I wondered if...is that something that comes out of Haeckel's work, and is that something that you see as being central to how we might approach the crises that we face at the moment, the environmental crises: that interdependency of that difference between, you know, the nature and imagination and nature as being something that's in and of itself?

IE: [00:24:57] I'm not sure I can relate it to Haeckel just now, as I'm still working with him, but certainly it's one of the biggest discussions in ecocriticism. So, the study of culture and environment. So, both ideas, you could say, present their own problems.

Say, for example, if we think only of the natural world as existing within our own imagination, via our own human terms, how do we then accept that it can exist without us? And on the other hand, if we think the natural world is merely there and not something we should form an opinion of – how do you even begin to perceive a so-called healthy relationship to it? How do we get any type of personal attachment to it? And in some ways, I hope my project can show that scientific travel writing, which of course is shaped by the travellers' preconceptions and abstract ideas of nature, but which, as we see in Haeckel's travel narrative, or at least in the...in the two later editions, is also shaped by the having to readjust and reflect about these conceptions by these journey encounters.

I hope that this can in some ways balance both ideas. And I think this balance is necessary for how we approach the natural world, because in this current age of environmental crisis, it encourages us to stay curious and open minded in understanding what our own position in the environment really is.

IG: [00:26:35] Do you think there was a change, then? Was that the start of the change of thinking of nature as been separate, because in the 19th century that was very much a thing, wasn't it: nature being separate from what they termed as man, you know, the

human? And today we're moving away from that. And do you think their journeys were kind of central to the start of that shift in attitude?

IE: [00:27:02] I think central? I wouldn't place it...but certainly some of the...many of the things encountered that were then later, you know, reflected about.. So, say for example for Darwin, the idea that in its essence, you know, we are interconnected to nature. There were definitely these strong impulses in the 19th century that did start to, you know, change this idea of just living without nature: of man being separate from nature. Absolutely, yeah.

LO: [00:27:42] So just a quick question, one personal to myself, I guess. Is there any artwork or anything in Haeckel's notebooks? And obviously we can't see them, but could you possibly describe what medium he used. Did he use pencil, did he paint? What do they look like?

IE: [00:28:04] Oh yeah. Haeckel is really interesting if you compare him with Darwin and Humboldt because he was a very visual person. I mean you can find sketches as well by Darwin and Humboldt, especially Humboldt. But it seems to me Haeckel really, really, utilised his artistic skills.

So just yesterday, in fact, I was sitting with one of his small notebooks. You have to imagine, you know, a quarter of like, an A4 paper, like a really small notebook. And see two pages where he is trying to make sense of a certain landscape that he's pencilled in, in the small notebook. And you can tell he's trying to prepare two things at once.

So, he's writing with pencil what kind of colours are in this picture. And then at the same time, on the other side, there are the scientific names of the plants that are in the tree line, then on the mountain: what kind of plants are in the mountains, and so on. And just fascinating how it...just, you can see the way he thinks about the place he's in: a sort of artistic or aesthetic sense. But at the same time, he constantly also thinks about what kind of specifics or characteristics are in this place – in this more biological manner.

LO: [00:29:39] That sounds wonderful

IG: [00:29:41] Yeah, it must be. It must be brilliant to handle his original notebooks. I'd love to see them. I mean, I don't know a lot about Haeckel, but I just love...I love the way objects like that, and artefacts like that, can sort of shrink the time between where we are and where they were, you know?

IE: [00:29:58] Yeah, it is very impressive, at the moment, you know, sitting in this house. And you have these books in your hand. I'm very excited to see the actual watercolour paintings, though. Of course, they are separate from the notebooks. But that won't be until maybe in two weeks' time or something, yeah...

IG: [00:30:20] Is it just when you get to them, or is it scheduled in: the kind of artefacts that you can gain access to?

IE: [00:30:26] I'm just taking one step at a time. So far, I've been looking at the material he produced after his journey. So, for example, I was looking at those lectures that he was

making after his journey. And now I've been looking at his notebooks where there are a few sketches in, but they're mostly by pencil. And then later I'll be looking at the watercolour paintings.

IG: [00:30:56] Such a great insight.

IE: [00:30:57] Oh it's just, you know, you can't look at everything at once. But of course, I might have to at some point, you know, go back to some material.

IG: [00:31:07] Yeah, it certainly sounds like it's exciting you anyway. Sounds like you're getting a lot from it.

IE: [00:31:12] Absolutely.

LO: [00:31:14] So, final question. What contributions overall do you hope to make with your research? And do you have any idea of what comes next?

IE: [00:31:26] Um, yeah, as you'll have noticed, I have talked about Humboldt, Darwin and Haeckel in a chronological manner, and I hope the thesis in a sense will be an addition to the overall historiography of environmental literature: trying to understand what the generic form of travel writing has added to our understandings of ecology. But it's important to say, though, that it should not be seen as a sort of developmental or progressive history of the genre, but instead as a project that considers the ways in which the different scientific travel narratives encapsulated new understandings of ecology in this literary format. So, when the physical world, international politics and the natural sciences all change their faces during the 19th century, so did the ways in which the travellers imagined the environments that they travelled within their literature.

So overall, I hope my thesis will show that some of the first environmental literature was created alongside, and not merely as a reaction to, the ecological sciences — that it was not just, you know, authors creating fictional pieces that reacted to, you know, the results of the ecological sciences.

IG: [00:32:48] Well, that's been...it's an amazing insight, especially to hear Haeckel's artistic side, you know, and that idea that naturalists perhaps then were...there was less separation between the arts and the sciences, and that the two could inform each other, which I think is a nice aspect of it.

IE: [00:33:06] Yeah, it is. It's...I absolutely adore my project [laughing] and I still think it's incredible that in one and a half year that I've been studying so far, I am not tired yet of my project.

IG: [00:33:21] That's a good sign.

IE: [00:33:22] [Laughs] It's a pretty good sign...

IG: [00:33:23] I'm getting a bit weary personally — of my own, I mean! It's been lovely to talk to you Isabella.

LO: [00:33:29] Okay. Thanks ever so much!

IG: [00:33:31] And see you again.

IE: [00:33:32] Yeah. In Aberdeen.

LO: [00:33:34] Yeah. Perfect.

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