A phenomenology of *intra-play* for sustainability research within heritage landscapes

*Authors:* Benjamin Richards & Per Ingvar Haukeland

*Affiliation:* Universitetet i Sørøst-Norge (The University of South-Eastern Norway)

*Contact corresponding author:* Benjamin Richards; ber@usn.no

**Abstract**

In this article, we explore a phenomenology of *intra-play* for sustainability research, integral to the processes of transforming both cultural and natural heritage landscapes. Such processes are studied as active – always underway and in flux – across space and time, and through the *intra-play* between the human and *more-than-human* world. The authors have developed the exploration of *intra-play* within the fields of phenomenology and heritage studies with empirical examples of the processes of becoming, especially in experiential landscapes of post-industrial heritage sites. The article presents a phenomenology of *intra-play* as a haptic and ontogenetic philosophy of landscape studies, inspired by the anthropologist Tim Ingold, and a process methodology, inspired in part by the art of what Rita Irwin calls “a/r/tography”. Our approach animates the different forms, both human and non-human, that co-form heritage landscapes. The article traces these playful ways and discusses possible consequences for sustainability research and change within heritage landscapes.

**Keywords**

More-than-human, commons, becoming, co-forming, haptic, heritage, landscape
Introduction

We begin by exploring a heritage landscape through an extract from the first author’s field notes, along with images, from a visual wandering within the post-industrial town of Notodden in Eastern Norway. This town, together with Rjukan, became part of the UNESCO World Heritage List in 2015 because of the unique traces of material and immaterial stories in the landscape. It tells the story of two entrepreneurs, Eyde and Birkeland, who saw the possibility for developing hydroelectric power from the waterfalls for the production of energy-intensive fertilizers. To do so, they built up the two towns for workers with houses, shops, hospitals, schools, recreational areas, roads and railroads. A by-product in the production was “heavy water” (O$_2$), which the Nazis sought for the production of an atom bomb, though they were stopped by Norwegian saboteurs. But how do these stories work with or against the experiences of the wider landscape and the forming of sustainable ways forward?

Rather than being led by a clear intention, our approach sets out to animate both the material and immaterial landscape in ways that give room for more voices than typically surface from official representations, and in ways that show how visitors and locals can participate in the co-forming of what the heritage landscape may become.

Arriving at the bus station in Notodden, you are immediately flanked by both the new and the old along the waterfront of a lake. On one side the newly built culture house and library, the high school and a supermarket, with further developments underway beyond them. On the other side an old industrial area called Hydroparken, a fusion of buildings and sounds, steam rising from a chimney somewhere in the middle. The remanence of industry is still present in sound, but the singular, mechanical rhythm echoing outwards from the mass of structures only emphasises a sense of inactivity.

A sign on a nearby building lists eighteen company names and logos. It is a crisp day, layers of frost cling to surfaces in the shade, the low winter sun casts across the landscape catching the three lamps above the sign and creating shadows pointing north. I turn northward and am drawn to another shadow, this time a very distinct shadow of the railings from some steps going up to the side, the shadow falls next to a no parking sign, a red circle with a line through it. I wonder how many people who work here or go to school here would recognise this scene from a photo.

---

1 All images owned by first author.
The road continues around past a café and some other buildings converted to offices. In front of the café stands an old tree, the scar of a branch cut long ago draws me in, moss grows around the edges.

I climb up on a wall to try to get an overview. There are several routes into the complex of structures, but I continue north, following my own shadow around a large building. Moving between the side of the building and the fenced off railway track, I come to a closed museum. Outside stands some sort of old machine part, a stone plaque in memory of the engineers and a statue of Professor Kristian Birkeland 1867–1917. Inside the windows of the former museum hang logos for Yara International.

On the other side I emerge into the shade of another large building and am confronted by a metal sculpture, composed mostly of rectangles and semi-circular shapes forged together into what appears to represent a man riding an animal. Nearby stands a large turbine repurposed as a sculpture, with three spotlights positioned around its base.

There are now several roads, one heading back in the direction I came and two heading south. But I am drawn to a desire path that continues between the railway track and...
another building. I follow this path into an area that appears to be at the edges of official use. Away from the more curated displays of history, the office spaces and the remaining industry, here natural processes are engaging with the cultural traces. A derelict train track runs through a cluster of new growth trees that in turn grow through the derelict train track. Leaves and moss cover the floor, rusting nuts and bolts can be found, I dig one out from under some stones, I want to take it with me but decide to put it back.

Next there is another small stretch of track on which sit two old wooden train carriages, windowless. The north-facing side of the carriages is covered in graffiti, the other side a painted sign to do with blues music. Trees are growing up around the edges on the north side and in between the carriages, one tree that captured my attention has grown between the metal of the underside of the carriage, curving itself in accommodation of the carriages form. On the south-facing side, the trees have been cleared.³

The aim of this article is threefold. First, to outline a shift from viewing a landscape as being (what it is) to a landscape as forming (what it could become). This is similar to what the anthropologist Tim Ingold (2017b) speaks of as a shift from ontology to ontogenesis, or what Andrew Pickering (2008) calls “an ontology of becoming”. Then, building on this, to describe a methodological and philosophical approach to sustainability research that is forming through the concept of intra-play. Here, rather than an assemblage of different things or objects, we describe the world in terms of forms inseparably made from the same basic stuff. Forms that are being formed in the process of forming other forms. We can then talk about human forms, building forms, bird forms, without implying that they are fundamentally separate and by acknowledging that they are composed of many other forms which pass through them (cells, water, minerals, atoms, experiences, thoughts). And although some forms may seem more permanent than others, in that they exist along different temporalities (e.g., a mountain compared to a human body), all forms are ultimately subject to the metabolic and metamorphic processes of existing in the world. Finally, in the article, we will relate

³ Notodden, 5 December 2018.
the phenomenology of *intra-play* in sustainability research within heritage landscapes to the commoning processes of becoming.

We seek to activate the landscape we study and to join with the continuous processes of movement and co-forming that are always underway in between different forms, spatially and temporally emerging from the *intra-play*. As such, the distinction between researcher, researched and the wider unfolding landscape becomes blurred.

Sustainability is understood here not as a static end to be achieved but as a creative, adaptive and active process that emerges through space-time. It is not, therefore, a matter of sustaining a landscape as something “out there”, but of allowing the various forms that make up the co-evolving landscape to play freely. We propose a shift in sustainability research and the management of heritage landscapes from protection to process, from landscape to *landscaping*.4 Sustainability involves a process of co-attending, co-listening and co-responding with the multitude of forms *we in-teract* with in a landscape, rather than a narrow focus on human intention. The approach to sustainability research that we propose is both re-evaluative and innovative, using terms such as research, heritage, landscape and sustainability as something to be experienced phenomenologically, rather than abstract concepts to be understood objectively or placed as backdrops to our lives.

We begin weaving different theoretical and methodological perspectives by pursuing the question: how do landscapes become heritage? Drawing inspiration from Tim Ingold, the *a/r/tographer* Rita Irwin and play-theory, we propose a phenomenological research methodology that plays with the world it meets in space-time. Thinking of space and time as separate entities allows for the “invention of places” and “attempts to define, and claim coherence and a particular meaning for, specific envelopes of space-time.” *Space-time* is to think of places rather “as constantly shifting articulations of social relations through time” (Massey, 1995, pp. 187–189), where the past, present and future shape each other, in a process boundlessly open to multiple identities and the wider world (Cresswell, 2015, pp. 98–109).

We set out to explore *what could be* rather than *what is or has been*, while recognising that these temporal aspects are not separate but rather connected within the research process. The focus is on the *intra-play* between traces of the past, the enduring potential of the future and you as a researcher in the present. Finally, we critically discuss the implications and consequences of a phenomenology of *intra-play* and the *space-time* dimension of sustainability research within the field of heritage landscape studies.

**What are heritage landscapes?**

In saying: “There’s no such thing as heritage”, Laurajane Smith (2006, p. 13) argues that heritage is discursively constructed through a nexus of power between technical

---

4 Erling Krogh (1995) described the process of “landscaping” as that which emerges from what we do.
and aesthetic “experts”. Further, she argues that these self-appointed experts represent a particular class, worldview and aesthetic sensibility that maintains itself through shaped “practices, attitudes and behaviours” within the dominant heritage organisations. She uses Critical Discourse Analysis to characterise what she calls the “Authorised Heritage Discourse” and examines its uses in the modern period (Smith, 2006, pp. 11–43).

Direct and indirect critical heritage

This, above, is an example of what we call direct critical heritage, as she is directly critical of the discourses that dominate the field of heritage and the heritage industry. While recognising the value of such an approach, and its role in slowly reshaping attitudes and behaviours within these organisations, we find our approach more suitably located within what we call indirect critical heritage. Examples of this include the work of Caitlin DeSilvey (2017), Tim Edensor (2005), Rodney Harrison (2013, 2015), and the Heritage Futures project (R. Harrison et al., 2020), which, while transformative and critical, remain focused on what else is going on, within the edges and fringes of the Authorised Heritage Discourse. Those authors have contributed to our definition of heritage as a continual, creative *intra-play* between traces from the past and the present, forming futures.

In our approach to indirect critical heritage, we use heritage as Harrison (2013) does, as a verb: *heritaging*—similar to the process of *landscaping* or *commoning*. The commons refers to both the natural environment that sustains life and the cultural codes, systems and practices by which communities have maintained an environment collectively (Bollier, 2014; Bowers, 2006). As such, “there is no commons without commoning” (Peter Linebaugh in Bollier, 2014, p. 19); equally there is no heritage without *heritaging*. This indicates that heritage landscapes can be understood as a commons that may be freely engaged with. In this, we find it important to distinguish between two contrasting notions of freedom. What we propose is a move away from the idea of a freedom from, which has been prevalent in modern Western philosophical thought. We adhere rather to a Naessian interpretation of Spinoza’s notion of freedom within, which is your ability to act within the greater *body–mind* (Haukeland & Næss, 2008, p. 120). It is what we see as a freedom to act and start something new, but from within the space–time we are situated in, and in ways that relinquish control of what is forming.

This view identifies the idea of heritage itself as something *active in the present*, always in the process of becoming through an *intra-play* between the traces, memories and stories from the past with the multitude of space–times that make up the present, always opening for futures of infinite potential. The interpretations, values, meanings and uses of these traces are dependent on the space–time they emerge from. One such thread may be discarded as outdated, another placed in a museum and sought to be preserved and yet another changed into something else entirely.
Experiential landscapes

According to the European Landscape Convention, a landscape means “an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”. To protect a landscape, it states, means “actions to conserve and maintain the significant or characteristic features of a landscape, justified by its heritage value derived from its natural configuration and/or from human activity” (Council of Europe, 2000). There is a potential conflict in this understanding of the landscape, between a landscape as perceived by people, always in flux, and the quest to conserve or preserve certain characteristic features of the landscape, such as a building or a story.

In his essay, “The Temporality of the Landscape”, Ingold moves beyond the opposing ideas of what he calls the “naturalistic” view, where the landscape is seen as an “external backdrop to human activities”, and the “culturalist” view, where every landscape is considered a “particular cognitive or symbolic ordering of space” (Ingold, 1993, p. 152). He proposes instead a “dwelling perspective” (which he later terms “inhabitation” (Ingold, 2013)) where the landscape is composed of the processes of formation that have occurred there before. It can be viewed as “a story” accessed through an “education of attention” (Ingold, 1993, p. 153).

This perspective involves not a separation, but an unbounded co-forming between the human and more than human, between nature and culture, body and mind. “Through living in it”, Ingold says, “the landscape becomes a part of us, just as we are a part of it ... each component enfolds within its essence the totality of its relations with each and every other” (1993, p. 154). Here the multiplicity of forms make up the landscape. These forms are “generated and sustained in and through the processual unfolding of a total field of relations that cuts across the emergent interface between organism and environment” (Ingold, 2016, pp. 156–157). This unfolding does not result in a final form that is fixed but is a continuing process of becoming.

To inhabit a landscape, either as a visitor or a local, is to be a part of the intra-play that co-forms it. We attend and respond to other forms in the landscape as co-inhabitants, if only for a moment. The seeming permanence of a landscape is only a matter of the multiple relations to time experienced by various differing forms. The landform, the river or the deer exist within a multitude of overlapping temporalities. If seen in a time lapse over thousands of years, the landscape, as with the daily intra-play of living things, would also be seen to exist in a movement through time (Ingold, 2016, pp. 161–64). A visitor that inhabits a landscape only for a short time still engages with this in space–time. Prior knowledge may enrich our experience of the forms in the landscape, but it may also prevent us from being there (Heidegger’s Dasein) and engaging spontaneously with the other forms we meet.

Intra-play, A/r/thography and sustainability research

Sustainability research requires a long-term view across multiple temporalities and multiple forms rather than across a handful of human generations that we feel empathically
connected to. What would it entail, then, to build a sustainability research on an experi-
ential base of such a broad and longitudinal inhabitation? How can a phenomenology of
*intra-play* be both a philosophical and methodological base for such research?

**Haptic and hylomorphic ways of knowing**

In developing a phenomenology of *intra-play*, and relating it to the field of sustain-
ability research in heritage landscapes, we find it necessary to clarify the distinction
between what Ingold (2011, 2013) refers to as *haptic* and *hylomorphic* ways of know-
ing. According to Ingold, to know haptically is to step in amongst and engage with the
world from within, rather than to attempt to impose our will, intention or abstractions
onto the world from without. He explores this with examples of craftmaking, where
he describes making haptically as “a process of growth,” where the maker is a “par-
ticipant in amongst a world of active materials... adding his own impetus to the forces
and energies in play” (Ingold, 2013, p. 21).

Juhani Pallasmaa (2012), in his critique of modern architecture, points to what he calls
the “hegemony of the eye” (Pallasmaa, 2012, p. 28) at the expense of a haptic, multi-
sensory approach. This “frontal ontology” (Pallasmaa, 2012, p. 33) removes the body
from both the process of making and experiencing space, pushing us out of space. He
highlights the importance of peripheral vision in drawing us in to a haptic sense of space:
“Focused vision confronts us with the world whereas peripheral vision envelops us in the
flesh of the world” (Pallasmaa, 2012, p. 14). This phrase, *flesh of the world*, borrowed from
Merleau-Ponty, speaks of how we carnally extend into the world through the things and
forms we co–respond to as we wander along our way of life (Merleau-Ponty, 2013).

Applied to sustainability research, we suggest a shift from the hylomorphic way of
knowing, represented by abstract science, to the haptic way of knowing drawn from
the flux of concrete experiences and correspondences situated in *space–time*. To sustain
a landscape is not to preserve it as a museal artefact, or as a still image, but to animate
it haptically through the spontaneous *intra-play* of co–inhabitants, including that of
visitors passing through the landscape.

To know haptically is to feel and intuit what makes sense, not simply intellectually
grasping its logic. If sustainability researchers study heritage landscapes in a hylo-
morphic way from “without”, as exhabitants, this forms a different form of knowledge
than if one studies the landscape haptically from “within”, as inhabitants, remem-
bering that researchers and scientists are also inhabitants of the field they study.
What we seek to do here is simply to extend this notion of haptic knowing to the pro-
cess of doing research, considering the research questions, concepts and theories as
something formed haptically, in amongst the different forces at play.

**From objects to lines, from network to meshwork**

The initial question, how landscapes become heritage, opened up the questions of what
heritage is, and how something comes into being. The use of *is* often implies a defining
and determining of something to someone. It is the story about Sam Eyde or it is the true story of the saboteurs. It easily becomes subject centric and suggests instrumental value: What is it to me (or them)? Another way would be to ask, following Bruno Latour: What do heritage landscapes do? Does the heritage story of Rjukan–Notodden generate pride or shame, inclusion or exclusion? Latour sought also to include the non–human as a part of the social network, as actants actively influencing what is happening (Latour, 2005). By changing is to do, we can create an expanded we that includes the non–human as active co-creators of the network. It is to bring in the voice of the waterfall and the smell of grass, the tactility of the buildings or rusty tracks, and the role they have in forming what we experience. However, this again poses the questions: What part of the network is the heritage? Where does the essence of heritage reside?

Object-oriented ontologists offer another way, building on Latour’s ideas – that of a flat ontology between human and non–human objects (referring to “objects” as all things), focusing not only on what an object does, nor simply on what it supposedly is, but rather on what Kant called the noumenon, the thing–in–itself that we do not have direct access to (Harman, 2018, pp. 66–69).

According to Harman, Latour “loses sight” of the difference between what a thing is–in–itself (where the object remains in a vacuum) and what it does (Harman, 2018, p. 109). An object–oriented approach is interested in an object’s potential beyond what is observable, in that certain qualities always remain hidden, and therefore the possibility for it to become something other than what it is, or what it does in a particular network of relations, is always present and in theory “infinite”. This brings us back to the question of is again, but in a new way, asking not what heritage is to us or does with us in space–time, but what it could become. While it may be true that an object’s potential is infinite and therefore its real qualities always beyond our reach, as Harman suggests, a criticism of this by Ingold is that the object, in object–oriented ontology, remains too static (Ingold, 2017b, p. 13).

With his concept of lines, Ingold shifts the focus away from the object altogether to its pathways of becoming as part of a meshwork (Ingold, 2015). Where Harman speaks of objects, Ingold speaks of things consisting of a myriad of lines interwoven intrinsically in the meshwork (as illustrated in the sketch5). Walking through the heritage landscape of

---

5 Sketches drawn by first author.
Notodden-Rjukan, the lines we so often divide into nature and culture are seen to flow through one another, woven together in forming the landscape. Whether it is the sound of the water as it runs freely in the river and channelled through the turbines, or the “presence of its absence” (Frers, 2013) in a dry gorge, nature and culture become inseparable.

Ingold criticizes Latour for presupposing a world of given actors/actants interacting with other actors/actants in a network extrinsically. Ingold (2011) argues that we are rather like “knots” in a meshwork, that can add new threads and discard others. Such a view sets the question in motion again, asking not what heritage is (to us or in itself) or what it does in a particular context, but what it is becoming while entangled with other lines. It is in this meshwork of *lines of becoming* that the human and *more than human* are becoming together.

Correspondence thinking, Ingold says, “necessarily entails a focus on ontogenesis – on the generation of being – and how this, in turn, allows us to imagine a world in which openness, rather than closure, is a fundamental condition of existence” (2017b, p. 9). In this sense, sustainability research is an experiment with unknown lines which you should follow and respond to rather than describe and represent. It is about joining *with* the world and learning *from* rather than *about* it (Ingold, 2013, p. 8). Ingold relates, as such, sustainability to *inhabitation*, not to abstract models of science that numb our senses and make us less attentive to the changes going on in the places we inhabit.

Sustainability research needs to step into what Ingold calls the “in-between”, the life of lines, where “there are no subjects, no objects, no subject–object hybrids, only verbs” (Ingold, 2015, p. 152). A form of participant observation, open to its own becoming within the process of attending to the “affordances” (Gibson, 2014) the *world we meet* offers, which is a process that never really closes. If movement is life, as Ingold suggests, then in order to study it, researchers must also be mobile, free to move and become along its path, free to play with what appears in the field of study.

---

6 Also Nietzsche, who wrote “all that lives, moves; this doing does not exist for specific purposes, it is life itself” (in Menke & Jackson, 2013, p. 89).
Let us take an example. Consider the tree depicted in the field notes, growing straight upwards from the soil, reaching out with its young branches. After some time, it realised another form stood over it; we can call this the grain of the world. As is the canvas to the painter, the grain of the world is not an opposing object you can hammer down or ignore (that is to fight an unwinnable battle). It is the other forms we must form with. An object isolated from the intra-play can do nothing, just as a painter without a canvas, so the tree had to form with the forms it met. As it grew, the tree curved its way around the carriage, altering its form, finding a small gap between the metalwork of the carriage before straightening again.

The question then is not: how does a landscape become a heritage? But rather: what is becoming in these landscapes? Where becoming is viewed as synonymous with heritage(ing). It is close to what Erling Krogh (1995) calls “landscaping”, i.e., a landscape that emerges from being active in it. It is the active use of the past that we pass on and that is of value to those who come after us. With such an approach, the questions we ask in sustainability research for change are themselves shown to live along lines, weaving through various perspectives in a process of becoming, always leading to new questions.

**Intra-play as becoming**

Conflicts within heritage studies between “preservationists, architectural productionists and developers” (Oevermann & Mieg, 2015, pp. 3–10) often revolve around the notion of authenticity. If heritage is understood (as we have proposed) as a continual process of forming, then the notion of “authentic preservation” becomes untenable; the two terms no longer fit together. Authenticity would instead be viewed as that change under the conditions of which competing discourses of heritage preservation, architectural production and urban development align. Not under a market-economising logic, but as an evolving creative process of engaging with the past in new ways.

*Intra-play* functions both as a theoretical concept of a world always underway in between forms and as a methodological approach whereby the research process is also formed through *intra-play*. It draws inspiration from a number of methodologies and philosophies but strives towards a simplicity, in that it leaves a freedom and openness for creativity, the forming of new concepts and unique ways of engaging with and expressing the world. In short, it encourages us to play.

Play is considered here as a fundamental aspect of the process of becoming, a force through which we do that which we have not done before, and is understood as such in art, innovation and creativity generally (P. Bateson & Martin, 2013; Bogost, 2016; Ryall, Russell & MacLean, 2018). “Play” (as described by Menke in his reading of Nietzsche) is the force of a “non-teleological… aesthetic concept of life”, the nature of man “prior to the formation of rational faculties” (2010, p. 554). It is aesthetic “because it is not yet ‘clear’; not cognition but feeling” (2010, p. 557), expressive. It is non-teleological as it does not adhere to external laws or organic desires as the other biological and
mechanical forces do, it is pre-moral, pre-rational, it is not subject to these divisions, it is just a force (Menke, 2010, pp. 554–565). It is “to learn that faculties and forces and hence action and play, the good of action (as social purpose) and the good of play (as living self) are categorically different”. According to Menke, it is from the artist that we learn the “aesthetic suspension of the practical exercise of faculties in the play of living forces” and that leads to the experience of this other form of good and the formation of new faculties (Menke & Jackson, 2013, p. 97).

Considering the distinction between action and play, we use the prefix *intra* (as Barad (2007) does with *intra-action*) instead of *inter*-play. The distinction being that with *inter* the play would be between separate things in a nodal network, whereas *intra* means play in between forms (Barad, 2003, p. 815), in which the different forms are inseparable from the play and the intentions, meanings, values and the forms themselves come into being in new ways through this process.

What “play” suggests is a continuous, unfolding process of engaging with and responding to a plurality of forms and a plurality of imaginative aesthetic expressions, through a haptic (or full sensory) engagement with the world. A process that does not seek end goals external to itself (such as good or rational action) but rather seeks the experience of the process. It is the aesthetic freedom that allows us to go beyond and experience or create something new (Menke & Jackson, 2013, p. 87).

As such, the word “play” invokes an openness and freedom to new intra-relations that dissolves the notion of a singular intentionality (or hylomorphic imposing of an idea on to a passive material world) that lingers over words like action or craft.

**Non-methodological renderings in the art of A/r/tography**

Methodologically, Ingold is keen to point out the distinction between ethnography and anthropology, the method of which, he says, is participatory observation. He says that such research is a form of transformational learning that forms the person you become through your research rather than the objective documenting approach of the ethnographer (Ingold, 2013, p. 4; 2017a, p. 23). As such, writing is a part of this when it is not simply a Geertzian description of what is seen but a transformational process of participation. Participant observation is about joining with the landscape in speculation “about what life might or could be like, in ways nevertheless grounded in a profound understanding of what life is like in particular times and places” (Ingold, 2013, p. 4). He proposes types of research that are open to participate more artistically with the world they encounter, to correspond with it (Ingold, 2016, pp. 10–11).

Despite Ingold’s argument regarding the distinction between ethnography and anthropology, there are a number of examples of ethnographic methodologies that actively explore the sensory, phenomenological and non-representational qualities of lived experience, including Visual Ethnography (S. Pink, 2006, 2007; S. Pink et al., 2015; Redmon, 2019) and Sensory Ethnography (Knight, 2020; S. Pink, 2009; Vannini, 2015). These not only challenge the assertion that ethnography is not participatory or
transformative, but do so by exploring creative methods such as video ethnography, soundscaping, drawing and other (traditionally) artistic practices.

One such research approach we draw much inspiration from is the “non-methodology” proposed by Professor Rita Irwin at the University of British Columbia called “a/rtography” (integrating the words artist, researcher, teacher-ography). “A/rtography” maintains “that meaning is constituted between beings” (2008, p. 3). It is a “non-methodology”, as Irwin instead regards it as a process “similar to an understanding of action research that does not follow a prescribed plan or method, but rather pursues an ongoing inquiry committed to continuously asking questions... [where] knowledge is always in a state of becoming” (2008, p. 2). Such methodological gaps require an approach to research “that is playful, exploratory, and expressive” (Springgay, Irwin & Kind, 2005, p. 897), which we seek to promote in the phenomenology of intra-play and sustainability research within natural and cultural heritage landscapes.

In studying the heritage landscape of Notodden, methods such as soundscaping, videography, photography, sketching and field notes were used to capture and express the co-attentional encounters, exploring and documenting how particular senses attuned to the non-representational qualities of phenomena and the other kinds of stories these told. Through such methods, the body of the researcher becomes inter-twined: “Bringing audiences into the world of the subject in striking, visceral ways”. (Redmon, 2019, p. 3). Such methods become “entangled in relations and objects, rather than studying their structures and symbolic meanings, thus animating the potential of these meshworks for our geographical imagination” (Vannini, 2015, p. 320).

It is then in the writing, interwoven with multi-sensory mediums such as sound, imagery and sketches, that the intra-play continues; in dialogue, testing its validity “in conversation with the world, with other writing, and, reflexively, with itself” (Knudsen & Stage, 2015, p. 224).

As well as offering another way of expressing research, such methods offer a mode for reflecting back, using, for example, field notes, sketches, video, photos and audio collected as mnemonic triggers (Keightley & Pickering, 2012) to stimulate memories and imagination. Through reflection we can draw out themes and concepts that unfolded during the intra-play, allowing us to look deeper into what was forming and propelling the research forward, asking new and deeper questions.

Four ways of intra-play

We have identified four ways of animating a phenomenology of intra-play for a non-prescriptive research methodology: co-attending, co-responding, co-forming and co-rendering. In both our research approaches, we use ourselves as a participant in ways that animate the various forms we intra-play with, in order to reveal new understandings of what the landscape could become and the possibilities it has to move, touch and form meaning. In the following, we alternate between “we”, as identifying
the four ways, and “I”, exemplifying them in reflections on field notes from Notodden by the first author.

First, we find that “attention” is a more haptic word than “intention” to describe how we open to the world of forms in the heritage landscape. To be attentive or “pay attention” is a way of opening our body-mind to forms we meet. This openness involves a wide-angle, peripheral vision at first. To follow the way of attention is to move with this sense of openness. The other side of attention is focused vision on the lines and knots we encounter. This is to “attend” to what we meet along the way. And as we attend to a form, it attends to us; we co-attend. What we seek through way of attention is to get a feel for the landscape. Abram (1996) speaks of perceiving a landscape as “reciprocal participation – between one’s own flesh and the encompassing flesh of the world” (p. 128).

The day of visiting Notodden happened to be a sunny day: the low sun struck every form in its path, and together they formed sharp, clear shadows that caused the landscape to lean over. I, too, was formed into shadow, this other me stretched out in my periphery, beckoning me towards it. On another day with cloud or rain or the higher summer sun, I would have perhaps been led along a different line. That day, however, two sides of the area were revealed, the light side and the shadow side, not separate but connected. Without light there would be no shadow, without shadow there would be no forms and without forms there would be no visible reflection of light. I was drawn to the shadow; I chose to walk into the shadow instead of the sunlight. This path led me to the edges of the area, to what I would instinctively call the back of the area, but it could be called north, or shade or something else. Opposed to the light, south, front side, the side of human activity, of pruned trees and mown lawns, a more edible aesthetic.

Second, the intra-play takes place when we accept the invitation to play. We co-respond with each other through the haptic and imaginative process we have called intra-play. It is as if we send “messages” to each other, just as with other forms
of correspondences. Co-responding is also a way of “care”, in the Heideggerian sense of “mattering”. Some doors open, while others close in the intra-play. We may speak of an aesthetic of drawn-ness in what opens, but also an ethic of distinction between what opens and what closes. There is a skill of discernment involved in the way we co-respond, or what the composer, John Cage, called “response-ability”. How we respond to what the anthropologist, Gregory Bateson, called “a difference that makes a difference” (1972, p. 459). There is something obliging us in the face-to-face meeting with this form, as if the form “demands” to be seen or heard and in which we respond to each other.

On seeing the two carriages, their backs lined with trees and strewn with graffiti, their fronts pruned and neatly painted with a logo for a blues festival, I was drawn towards them.

The train carriage is made from metal and hardened wood; it is more solid, so the tree had to form around it. But the carriage too is changing. Not only in appearance but in form: the tree is changing the carriage in various ways. It tells us a different story about the carriage than the front side, or a carriage preserved in a museum it speaks more openly of the temporal nature of the carriage, that it is not separate from or frozen in time but moving in time. The leaves of the tree in summer create more shade, trapping moisture and encouraging animals, birds, insects and natural processes of decay and entropy. The story of the tree bending to the carriage is only a story of a particular moment in space-time that has already passed, but it does not define the tree or the carriage. A story can be read in the curve of the tree, but it does not tell the story of what is or will happen as they continue their co-forming.

7 From Essay one, Cage, John. Silence: Lectures and writings. (1961). Middletown, CT: Wesleyan University Press.
As we recall from David Abram, in this encounter it is not me over here and the tree over there; we are connected through the earth, touching each other through the ground, the flow of the air, the light and sound. I perceive through the tree: I am able to experience something with the tree and draw insights and understandings from that experience: understandings that speak of heritage, of landscapes and the nature of the becoming together of forms, of intra-play; understandings that, in a continuing process, extend far beyond the nature of the tree, or the carriage, or the history of that moment in space-time.

Third is the way of co-forming that arises from this “response-ability”. It sets out to express that which comes through the intra-play. This working together to express what is there is a relational process, enhanced by the means of expression that you as a researcher choose. Yet, this choice is not completely “free”, as the forms that you intra-play with, whether a tree or a river, have their “say” in the choices made. Poetry captures, perhaps, more of the haptic dimension of what we experience, but is also a human-centred means of communication. And even though we do not find anthropomorphism problematic, seeing as we are human, we can through what Naess calls “the process of identification” (Haukeland & Næss, 2008) also see the world from the perspective of the other. Expressing this perspective, we often find that sounds, photos, film or drawing are better suited. These means of communication, or expression, are also forms that are co-formed through intra-play.

Fourth, to open a way of understanding what a landscape may become, there is a need for what we call “haptic mapping”, using our body-mind to bring forth what Irwin calls “renderings”. Irwin is reluctant to speak of “concepts” in the expressive process, since that seems too defined, fixed and final. Renderings are, on the other hand, in flux and may change through space-time: “performative concepts of possibility” (Irwin, 2008, p. 4.), making explicit what is implicit in the co-forming. This is about what the co-forming of the landscape tells us about what is, what has been and the potential for what may become, in our movement through it.

This has been a small example of how we can begin to draw out meaningful understandings from the landscapes we encounter and discover ways into the plurality of potential qualities and the multiplicity of stories told through traces in time. The experience of moving through a heritage landscape in such a way opened up a contrast between the different sides, between the expected form of heritage and its edible aesthetic (front), described as authentic, historic and valuable. And the unauthorised heritage (back) consisting of desire paths, unofficial uses and the intra-play of trees and animals, usually described in terms of ruin, decay and neglect. It is within these edges though, where the two sides meet, that the intra-play is most visible, and where attempts to delimit cultural and natural objects within a landscape are shown to be temporary.
Notions uncovered here such as the *edges* that join the back and front, the attraction and *edibility* of certain aesthetics and our *co-forming* with the grain of the world become something to work with, new renderings for conceiving what heritage landscapes can become. Opening for new questions and driving the research forward from within the diverse, multi-form world that creates the conditions for sustainability.

**Openings for future sustainability research**

We will end this article by identifying some openings for future sustainability research in heritage landscapes. Philosophically, we have attempted to make a case for an ontogenetic approach to researching landscapes. Methodologically, we have taken a participatory stand, opening up for different ways the researcher may engage in the co-forming of heritage landscapes through *intra-play*. It is this *intra-play* that gives us a glimpse of what has been, what is and what may become of the landscape. Heritage, as such, can be thought of as ways of forming the past into the future through the present in a process that remains open. And it is this lineage of co-forming that is our heritage, realised in how we experience it in the movement of time.

We consider *intra-play* as a creative form of phenomenology, as suggested by Ingold, Irwin and Redmon. A phenomenological research that is open, attentive and free to move along lines, wherever they lead. A haptic approach to research that moves within the bodily, sensory, aesthetic realm of participating actively with the world, where both what is experienced, learned and sought are co-formed along the way with the forms we *intra-play* with. Arguing that you cannot know exactly what it is you seek if it has not yet come into being, you can only experience it by joining in. A (phe)nomenon is, as such, inseparable from the meshwork it is a part of forming with, which includes the researcher.
These experiences come into dialogue with other forms of research, theories, concepts and perspectives. Through the processes of reflection, writing and being presented, they provide openings for deeper questioning and new understandings of the heritage experience. This approach is not only a study of heritage landscapes as processes of becoming. Sustainability research within landscapes are also shown to be processes of becoming themselves, in which field work, conceptualization and theory are entangled. As such, sustainability research within heritage landscapes contributes to the continued flourishing of intra-play between all forms, which is a radical pluralism, opening up heritage as a commons that includes the more-than-human world. From a management perspective, this means a shift of focus from what is being preserved to how landscapes are forming. Where the objects and stories we value as heritage are seen as an unfolding lineage through time, within landscapes that are nature–culture, back–front and past–present–future intra–playing. Opening for the generation of multiple experiences, and opposing actions that hinder such pluralism from flourishing, enclose the commoning process and limit the possibilities for inhabitants and visitors alike to touch and be touched by the heritage landscape.

About the authors

Benjamin Richards is a PhD-candidate at the Institute for culture, religion and social studies at the University of South-Eastern Norway. He is a researcher in the field of industrial heritage and sustainability and a member of the research group ‘Cultural heritage in use’. He has a background in film making, heritage studies, ecological economics and borderology with an interest in visual, sensory and phenomenological research methods.

Per Ingvar Haukeland, PhD, is a professor in Outdoor studies at the University of South-Eastern Norway with a focus on ecophilosophy, pedagogy and entrepreneurship and the head of the research group ‘Outdoor studies, society and sustainability’. He is also a co-founder of the Alliance of wild ethics and the author of Life’s philosophy (University of Georgia Press, 1998/2003, with Arne Næss). His academic interests lie in the field of nature-connection, phenomenology and action research.

References

Abram, D. (1996). The spell of the sensuous. New York: Vintage Books.
Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. Signs: Journal of Women in Culture and Society, 28(3), 801–831. https://doi.org/10.1086/345321
Barad, K. (2007). Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. Durham: Duke University Press.
Bateson, G. (1972). Steps to an ecology of mind. New York: Ballantine Books.
Bateson, P. & Martin, P. (2013). Play, playfulness, creativity and innovation. New York: Cambridge University Press.
Bogost, I. (2016). *Play anything: The pleasure of limits, the uses of boredom, and the secret of games.* New York: Basic Books.
Bollier, D. (2014). *Think like a commoner: A short introduction to the life of the commons.* Canada: New Society Publishers.
Bowers, C. A. (2006). *Revitalizing the commons: Cultural and educational sites of resistance and affirmation.* Lanham, Md: Lexington Books.
Council of Europe. (2000). *The European landscape convention.* European Treaty Series – No. 176. Retrieved from https://www.coe.int/en/web/conventions/full-list/-/conventions/rms/0900001680080621
Cresswell, T. (2015). *Place: A short introduction.* UK: Blackwell.
DeSilvey, C. (2017). *Curated decay: Heritage beyond saving.* Minneapolis: University of Minnesota Press.
Edensor, T. (2005). *Industrial ruins: Spaces, aesthetics and materiality.* Oxford: Berg.
Frers, L. (2013). The matter of absence. *Cultural Geographies, 20*(4), 431–445. https://doi.org/10.1177/147447401347775
Gibson, J. J. (2014). *The theory of affordances.* New Jersey: Psychology Press.
Harman, G. (2018). *Object–oriented ontology: A new theory of everything.* UK: Penguin.
Harrison, R. (2013). *Heritage: Critical approaches.* London: Routledge.
Harrison, R. (2015). Beyond “natural” and “cultural” heritage: Toward an ontological politics of heritage in the age of anthropocene. *Heritage & Society, 8*(1), 24–42. https://doi.org/10.1179/2159032X15Z.0000000036
Harrison, R., DeSilvey, C., Holtorf, C., Macdonald, S., Bartolini, N. & Breithoff, E. (2020). *Heritage futures: Comparative approaches to natural and cultural heritage practices.* London: UCL Press.
Haukeland, P. I. & Næss, A. (2008). *Dyp glede: Med Arne Næss inn i dypøkologien.* Oslo: Flux.
Ingold, T. (1993). The temporality of the landscape. *World Archaeology, 25*(2), 152–174.
Ingold, T. (2011). *Being alive: Essays on movement, knowledge and description.* London: Routledge.
Ingold, T. (2013). *Making: Anthropology, archaeology, art and architecture.* London: Routledge.
Ingold, T. (2015). *The life of lines.* New York: Taylor and Francis.
Ingold, T. (2016). From science to art and back again: The pendulum of an anthropologist. *Anuac, 5*(1), 5–23. https://doi.org/10.7340/aniuac2239-625X-2237
Ingold, T. (2017a). Anthropology contra ethnography. *Hau: Journal of Ethnographic Theory, 7*(1), 21–26.
Ingold, T. (2017b). *Correspondences: Knowing from the inside.* Aberdeen: University of Aberdeen.
Irwin, R. (2008). “A/r/tography”: The SAGE encyclopedia of qualitative research methods. California: Thousand Oaks.
Irwin, R. L. (2013). Becoming A/r/tography. *Studies in Art Education, 54*(3), 198–215. https://doi.org/10.1080/00393541.2013.11518894
Keightley, E. & Pickering, M. (2012). *The mnemonic imagination: Remembering as creative practice.* London: Palgrave.
Knight, L. (2020). *Draft copy: Inefficient mapping: A protocol for attuning to phenomena.* California: Punctum Books.
Knudsen, B. T. & Stage, C. (2015). *Affective methodologies: Developing cultural research strategies for the study of affect.* London: Palgrave.
Krogh, E. (1995). *Landskaps fenomenologi*. Institutt for økonomi og samfunnsfag, Norges landbrukshøgskole, Ås.

Latour, B. (2005). *Reassembling the social: An introduction to actor–network–theory*. Oxford: Oxford University Press.

Massey, D. (1995). *Places and their pasts*. *History Workshop Journal*, 39, 182–192. https://www.jstor.org/stable/4289361

Menke, C. (2010). *Force: Towards an aesthetic concept of life*. *MLN*, 125(3), 552–570. https://doi.org/10.1353/mln.0.0271

Menke, C. & Jackson, G. (2013). *Force: A fundamental concept of aesthetic anthropology*. New York: Fordham University Press.

Merleau-Ponty, M. (2013). *Phenomenology of perception*. London: Taylor and Francis.

Oevermann, H. & Mieg, H. A. (2015). *Industrial heritage sites in transformation: Clash of discourses* (Vol. 6). New York: Routledge.

Pallasmaa, J. (2012). *The eyes of the skin: Architecture and the senses* (3rd ed.). Chichester: Wiley.

Pickering, A. & Guzik, K. (2008). *The mangle in practice: Science, society, and becoming*. Durham: Duke University Press.

Pink, S. (2006). *Doing visual ethnography*. London: SAGE.

Pink, S. (2007). *Walking with video*. *Visual Studies*, 22(3), 240–252. https://doi.org/10.1080/14725860701657142

Pink, S. (2009). *Doing sensory ethnography*. Los Angeles: SAGE.

Pink, S., Leder Mackley, L. & Moroșanu, R. (2015). *Researching in atmospheres: Video and the ‘feel’ of the mundane*. *Visual Communication*, 14(3), 351–369. https://doi.org/10.1177/1470357215579580

Redmon, D. (2019). *Video ethnography: Theory, methods, and ethics*. London: Routledge.

Ryall, E., Russell, W. & MacLean, M. (2018). *The philosophy of play as life*. New York: Routledge

Smith, L. (2006). *Uses of Heritage*. London: Routledge.

Springgay, S., Irwin, R. L. & Kind, S. W. (2005). *A/r/tography as living inquiry through art and text*. *Qualitative Inquiry*, 11(6), 897–912. https://doi.org/10.1177/1077800405280696

Vannini, P. (2015). *Non–representationlal ethnography: New ways of animating lifeworlds*. *Cultural Geographies*, 22(2), 317–327. https://doi.org/10.1177/1474474014555657