

<https://artnodes.uoc.edu>

ARTICLE

NODE "POSSIBLES"

Undesigned World: what educating through walking means in the Anthropocene

Joshua Korenblat

State University of New York, New Paltz

Laia Solé Coromina

Universitat de Vic-Universitat Central de Catalunya

Date of submission: January 2023

Accepted in: May 2023

Published in: July 2023

Recommended citation

Korenblat, Joshua; Solé Coromina, Laia. 2023. «Undesigned World: what educating through walking means in the Anthropocene». En: Pau Alsina y Andrés Burbano (coords.). «Posibles». *Artnodes*, no. 32. UOC. [Accessed: dd/mm/aa]. <https://doi.org/10.7238/artnodes.v0i32.411197>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/4.0/>

Abstract

For this essay, we draw from a collaborative experience between two educators and thirty students in a course called *Designed World*, taught at a public university, to explore how attention and intention develop within the practice of walking across “patchy landscapes” (Tsing 2015, 20) or the anthropocentric landscape, and how they can assist thinking about the design of “possible worlds” (Haraway 1991).

This essay adopts an interdisciplinary approach that integrates ecofeminist theory with ideas of Romantic empiricism and relates them to aesthetic education and theories about walking. This journey to new places of learning – beyond the indoor structure of the classroom or studio – begins with becoming attentive to the complexity around us. Attention is a lack of intention (Masschelein 2010, 48). In contrast to most design activities that begin with an intent to produce a desired outcome, and a rich methodology, such as Design Thinking, there is no method here and no sequence to follow. Instead, the goal is to allow the present to be sublime to us so that we open ourselves up in a vulnerable way to being changed by that through which we move. This form of teaching helps us practise attention, presence, and responsibility. We do not expect anything in return. The simple act of walking can help us navigate an indeterminate time and place and create a social art and commons.

Keywords

walking; Romantic empiricism; ecofeminism; (un)design; aesthetic education; Goethe; Humboldt

Mundo sin diseñar: qué significa educar caminando en el Antropoceno**Resumen**

Para este ensayo, nos basamos en una experiencia colaborativa entre dos educadores y treinta estudiantes en un curso llamado *Designed World*, impartido en una universidad pública, para explorar cómo se desarrollan la atención y la intención dentro de la práctica de caminar a través de «paisajes parcheados» (Tsing 2015, 20) o el paisaje antropocéntrico, y cómo pueden ayudar a pensar en el diseño de «mundos posibles» (Haraway 1991).

Este ensayo adopta un enfoque interdisciplinario que integra la teoría ecofeminista con las ideas del empiricismo romántico y las relaciona con la educación estética y las teorías sobre el caminar. Este viaje a nuevos lugares de aprendizaje –más allá de la estructura interior del aula o estudio–, comienza con la atención a la complejidad que nos rodea. La atención es una falta de intención (Masschelein 2010, 48). A diferencia de la mayoría de las actividades de diseño que comienzan con la intención de producir un resultado deseado y una metodología rica, como el pensamiento de diseño (Design Thinking), no hay ningún método aquí ni secuencia que seguir. En su lugar, el objetivo es permitir que el presente sea sublime para nosotros, de modo que nos abramos de una manera vulnerable a ser cambiados por lo que pasamos. Esta forma de enseñanza nos ayuda a practicar la atención, la presencia y la responsabilidad. No esperamos nada a cambio. El simple acto de caminar puede ayudarnos a navegar por un tiempo y un lugar indeterminados y a crear un arte social, así como bienes comunes.

Palabras clave

caminar; empiricismo romántico; ecofeminismo; (sin)diseño; educación estética; Goethe; Humboldt

Introduction

Designed World is an entry-level liberal arts course about design as an everyday cultural experience, and design as a verb, a lifelong education. Designed World is available to any student on campus interested in design; many art and graphic design majors choose it. In this course, students develop creative confidence and practise creative thinking, design thinking, critical and ethical reasoning, and systems thinking. They transfer skills and habits of design into their life and world, as if life were a creative project. By anchoring their study with daily experiences, students identify what might be changed. To search for questions and ideas that are ambitious yet actionable, they reframe what they know by studying other cultures, human and more-than-human. Past visiting artists and designers have included David Whitmore, a former Design Editor at National Geographic Magazine. David's artistic practice includes exploring places we tend to overlook (Figure 1). He wanders in his community and encounters ordinary landscapes, shaped by people.

In early December 2022, a visiting professor and artist from Barcelona joined the Designed World class. She shared insights from conceptual walks undertaken by artists worldwide, who critique and transform spaces of neglect into creative places. Then, we invited our

students to go for a walk. Together, the Designed World community left our indoor class setting and went on an early winter walk. On a frigid, windy morning, we roamed a college campus in upstate New York. We encountered indeterminate landscapes – a pumpkin smashed in a parking area, a broken pavement, a deep ditch caked with improbable trash, and a path trodden off the main campus walkways. When leaving the classroom for the outdoors, students may not have realized that we were embarking on an ancient yet present act that animates aesthetic education: walking. Aesthetic education is about creativity in making forms and, at once, forming ourselves by developing new instruments of seeing and ways of knowing, as Goethe describes in his 1792 essay, *The Experiment as Mediator between Subject and Object*.

Students benefit from walking as a spiritual and even soulful exercise. Even in glimpses, they might learn about themselves and relate to others. Walking helps us look more closely at places that seem neglected or destined only for utility. By stirring creativity and dialogue with what is encountered – the unknown, the unexpected, and the indeterminate – walking can be a step toward transforming disenfranchised, alienating spaces into places of learning and possibility.

Walking can play a role in educating caring, curious, and creative citizens. As the University of Chicago Philosophy Professor Martha

Nussbaum writes, “The word *soul* has religious connotations for many people.” Nevertheless, she situates the soul in a place accessible not in religion but within our innate judgment and intuition: what she calls “the faculties of thought and imagination.” These faculties “make us human and make our relationships rich human relationships, rather than relationships of mere use and manipulation.” By going for a walk, we can at once journey into ourselves, encounter “others” – humans and more-than-human alike (Haraway 1991) – and correspond to them. Nussbaum continues: “When we meet in society, if we have not learned to see both self and other in that way, imagining in one another inner faculties of thought and emotion, democracy is bound to fail, because democracy is built upon respect and concern, and these, in turn, are built upon the ability to see other people as human beings, not simply as objects” (Martha C. Nussbaum 2010).

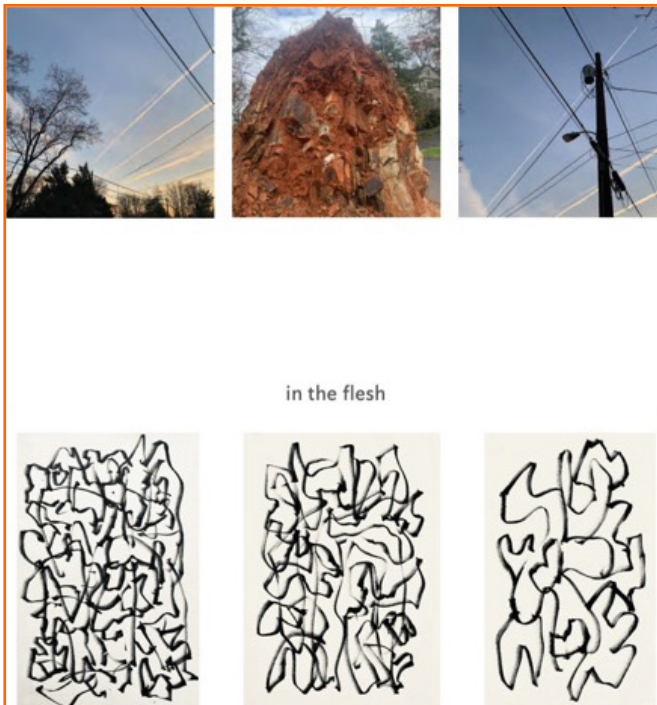


Figure 1. David Whitmore’s work involves exploration across landscapes and often combines walking with drawing, as well as photography with writing. An example is the series of three photographs that he juxtaposes with words that resonate and collide with the images.

Source: courtesy of David Whitmore (2022)

By building our sensibilities and discernment through experience, and sharing what we experience as a group, we practise design as democracy in a pure way, rather than in the transactional way of politics. Walking, stopping to observe, photograph, draw or write “that” which has caught our attention, can help shape our thinking. At the same time, because fleeting notes demand that we slow down and interpret them as a whole, they carry a deep sense of responsibility. Notes point to and describe the experience; the reader, meanwhile, infers, imagines, and makes meaning. We tap into our souls by gathering not just data but experience and making meaning from it. Philosopher of education Jan

Masschelein describes the individual soul through the lens of Walter Benjamin: “the mortal self of action that is susceptible to transformation (and not a kind of substantial, real or deep or purely spiritual self).” (Masschelein 2010, 45). Part of this transformation includes seeing others as ensouled, even if what others share in their experiences differs from that which we already know.

The boundary between humans and the rest of nature might even slip. We may see ourselves as walking “in Earth” rather than “on earth.” We can see plants and animals as ensouled beings rather than objects or things; their lives and well-being condition our own. Despite the vastness of the concept, we can see ourselves inside the Anthropocene, what geologists call “the age of humans,” rather than as spectators outside the *Oikos*: the Earth House and the ecosystem that humankind continues to render. Walking helps us understand that knowledge only happens when we connect to our experiences and allow ourselves to be transformed by them. Knowledge is an embodied aesthetic experience. Rather than acquiring knowledge, the knowledge seeker engages in a dialogue with what they observe – a contract of responsibility.

1. Walking: a “poor” pedagogy to become vulnerable and attentive

Why walk? Firstly, research shows that walking significantly enhances creativity without requiring willpower or effort. Stanford University Psychology Professors Marily Oppezzo and Daniel Schwartz write: “Attempts to improve individual creativity often involve training people in the steps of creativity including shifting perspective... trying something counterintuitive... or, in the most direct fashion possible, simply trying to “be more creative...” (Oppezzo & Schwartz 2014, 1143). The problem with these approaches is that the most sustainable practices should not rely on willpower, which often flags over time. They continue: “While effective, these depend on diligence and the direct, perhaps effortful, manipulation of one’s creative processes. Rather than trying to improve people’s command of the creative process, we simply had people walk at a natural pace. If successful, it is an easily adopted (and healthy) approach for enhancing creative output” (Oppezzo & Schwartz 2014, 1143). The authors conclude that the type of creativity involved in brainstorming and reframing through analogies improves dramatically during and after walking. “Walking had a large effect on creativity. Most of the participants benefited from walking compared with sitting, and the average increase in creative output was around 60%. When walking, people also generated more uses, good and bad. Simply talking more, however, was not the sole mechanism for the increased creativity. When walking, people generated more uses, and more of those uses were novel and appropriate” (Oppezzo & Schwartz 2014, 1144).

Even without this contemporary data, philosophers have long sensed the power of walking. As the philosopher Walter Benjamin notes, walking offers more than a new perspective. Flying over a landscape, we sense we’re removed and above a world governed by laws.

Walking dissolves this notion. Experience has more power over us, and we become attentive not in order to gain knowledge or to attain a goal, but to allow ourselves to be changed; we become vulnerable.

Here, walking is more than an action; it is an ancient yet present, situated behaviour that conducts our routines without our awareness. By walking, we become attuned to the spaces we live in and negotiate each day, whether or not we are aware of that ongoing process of attuning, redirecting, and refining our sensibilities and discernment. For example, if we zoom out in an urban space, we can see how ensembles of walkers create a composition: what researcher David Seamon calls a “place ballet”. Here, we witness choreographies of bodies in time that also pulse with “place rhythms”, varied cadences like a musical composition (Figure 2). Walking helps a person become whole, unleashing the senses and gathering experiences, which can later be related and understood. At the same time, walking is a medium to experience a person’s whole system – the nature/culture in which they live.



Figure 2. Image of a group of people walking within *Rieres/Rambles*, a research project promoted by Stalker and organized by Osservatorio Nomade/Barcelona.

Source: photograph by the author

Walking has a long history in aesthetic education. Francesco Careri, professor at the Architecture Department of Roma 3 University and one of the founders of the collective Stalker, revisits walking as an aesthetic practice and relates it to nomadic cultures and civilizations in *Walkscapes* (2004). Once the basic needs – food, information – are met, walking “becomes man’s first aesthetic act” by which they shape or bring into certain order the space in which they navigate (21). The foundational excursion organized by Dada across Paris in 1921, the collective walks across *territori attuali* by Stalker since the nineties, or the explorations across land, air, and water of the arts collective Rotor in Barcelona in the first decade of XXI century, provide examples of walking as a powerful way to develop attitudes that break through what philosopher of education Maxine Greene describes as a sense of “fixed reality” (Greene 1984); that is, a reality in which we are passive observers and thus not responsible. Instead, aesthetic encounters are grounded in the awareness of “what is not yet,” in the desire of finding

meaning, and thus have the potential not only to animate thought and cultivate curiosity, but to act upon one’s reality (125).

In the book *Why is Landscape Beautiful? The Science of Strollology*, German architectural theorist Lucius Burckhardt (2015) calls *strollology* the science of walking: an offbeat science unfamiliar to many today. Strollology walks in cadence with an earlier generation of Romantic empiricists such as Goethe and Humboldt. This science unfolds as a sequence of experiments in experiencing nature/culture. Burckhardt likens a walker’s experience of traversing and observing a landscape to a “string of pearls” or what he calls “a feat of integration” (235). How we journey to a place creates the lasting impression of an experience just as much as the intended destination.

“In the nineteenth century,” he elaborates, “the age of railroads and terminals, the landscape shrank to a postcard cliché: this is Ostend, and this Scheveningen, Interlaken or the isle of Mont Saint-Michel... The stroll was reduced thus to the choice of a holiday destination, the purchase of a ticket and the rental of a hotel room with a view to match the postcard” (226). The railroad traveller sees nature as a landscape from a window. Only the person viewing from a window can frame a complex ecology as an aesthetic object. Ironically, urban dwellers created the landscape, which is what we might call a secondary nature. This aesthete may feel guilt for their material role in the ecological distress they notice and learn about. However, they lack the deeper sense of responsibility that only active engagement with a place can cultivate.

Burckhardt observes that we are all like these tourists. “We are interested in the walk not as a means of representation, but rather as a mode of perception. However, such perception is premised on cultural baggage derived from earlier representations, for only in exceptional cases is man capable of perceiving that which has not already been mediated and made visible to him by pictorial or literary means” (231).

Burckhardt cites the Romantic poet Friedrich Schiller, a friend of Goethe, and his poem *The Walk* as “The most intelligent thing ever to have been written about the stroll” (273). In the poem, the walker traverses from an urban setting to a rural one. As University of Sydney Professor Dalia Nassar writes in her book *Romantic Empiricism*, “the narrator is a wanderer, and as he walks through a landscape, he describes what he sees and the feelings these various views inspire in him...the narrator’s bodily movement punctuates and animates the poem’s structure. His movement, in turn, is captured within the landscape, and as a response to it. By describing movement and change – in the landscape, in the narrator, and in the narrator’s feelings toward the landscape – the poem conveys precisely what a landscape painting cannot: transformation” (Nassar, 228). In contrast to this experience, “Nature only becomes something ‘out there’ once we enter the walled city” (229). For Burckhardt and his muse Schiller, the walk transforms the postcard landscape our mind’s eye wishes to mint and print into a more alive place, imprinted with learning, growing, and possibility.

In *Places of Learning: Media, Architecture, Pedagogy* (2005), Elisabeth Ellsworth sees pedagogical potential in architecture, per-

formance, and media, and speaks about them as “anomalous pedagogy”. The pedagogical potential lies in the “sensation construction” we experience as we move through them: an experience which can be understood as an encounter “with the future in the making” (38). Uncertainty has the potential to orientate the design process, which we understand as a “search for something that is unknown in advance, or an exploration into an alien territory” (Pallasmaa 2019, 109). Walking through indeterminate territories has the potential to open up new perspectives of neglected, banal, and ruined spaces. The precariousness of such spaces and practices – understood as the availability of being vulnerable or open to transformation – mirrors the precariousness of a pedagogy invested in the practice of attention, presence, and generosity. “Poor pedagogies” such as walking (Masschelein 2010) are poor in that they do not require a methodology but rather a practice that favours attention in spite of intention (43). They are poor, too, in that they develop through an “ecology” of means and actors: there is the presentness – the certainty of knowing the embarkation point and simultaneously ignoring what it ensues – and the willingness to reach out [e-ducare] and at the same time to be vulnerable: that is, to be open to “that” which comes from a space toward us, open to encounters.

When we walk outside, we are exposed to encounters with objects, humans, non-humans, weather conditions, and so on. Encounters interfere with our purpose and have the potential to anchor, punctuate, challenge our thinking, and thus to transform us. Encounters assume another dimension within the context of the Anthropocene and its unpredictable developments, as writer Amitav Gosh recalls in *The Great Derangement: Climate Change and the Unthinkable* (2016). Upon encountering extreme weather, we recognize and are reminded of how the boundaries between human/nature are in flux, or that we have always been part of nature: “a moment of recognition occurs when a prior awareness flashes before us, effecting an instant change in our understanding of that which is beheld. Yet this flash cannot appear spontaneously; it cannot disclose itself except in the presence of its lost other. The knowledge that results from recognition, is not the same kind as discovery of something new: it arises rather from a renewed reckoning with a potentiality that lies within oneself” (5).

Our identity is not fixed; it is always moving. That identity is stirred by our interests: the activities that draw us in. As creative educators, we are responsible for making the act of walking with attention one of those interests. In personal and public settings, walking can become an educational habit. Walking helps us to care for things and to be patient and present. When we invite our students to step outside our studio spaces and go for a walk with attention and without intention, we also transform their learning experience. By walking, noticing, recording, and sharing their experiences, students build a portrait of difference within unity.

There are three types of walking: purposive, discursive, and conceptual (Matos Wunderlich 2008). Designers of spaces prioritize pragmatic walking: purposive, finding our way through an environment to achieve a task. But the other types are ongoing in our “place ballets” (138); designers can negotiate these dances more. Discursive walking is similar to strolling. This

behaviour reveals itself by the walker varying their pace, being in touch with the sensory experience and responding to it, and potentially daydreaming. Conceptual walking, like Burckhardt’s science of strolling, entails the walker thinking about the walk before they embark upon it, and often critically responding to their environment through their walking in order to inspire and influence new questions and ways of being and doing in spaces.

Designers can also prioritize discursive and conceptual walking by designing for the five senses, keeping in mind that these spaces are “place ballets” and “place rhythms”, akin to dance and music. Designers of the built environment can induce varied space rhythms and experiences and foster new ways of thinking and relating to each other through that which they introduce into the world. They may also use conceptual walking methods to gather information about the world that they might otherwise not have noticed. To transform this information into knowledge, designers need to allow themselves to be shaped by the walking experiences and pay heed to what they hear, what they experience, and what they notice the “lifeworld” needs.

2. Educating the gaze to notice: attention versus intention

Designers and poets value “slow looking” techniques, such as the open inventory to transcend categories, because the world is complex, and we need devoted ways of looking to help frame and compose that complexity, like a painting. Designer Bruce Mau recommends getting lost in the woods for this reason. If we suspend intentions for attention and presence, pausing and waiting before moving toward our goal, we compose a richer picture of that which we seek.

Through walking and slow looking, it is vital to change perspectives, displacing our gaze, let that which we seek place demands on us, listen to the world, and let the evidence it discloses impress upon us. Displacement is essential when thinking of educating the gaze: “E-ducating the gaze is not about getting a liberated or critical view, but about liberating or displacing our view. It is not about becoming conscious or aware, but about becoming attentive” (Masschelein 2010, 43). This displacement of gaze celebrates blind spots and peripheral territories in contrast to a centrality that is reminiscent of intent and purpose, but also of mainstream and normalized ways of seeing. It celebrates the situated and embodied nature of seeing by which, as suggested by Donna Haraway (1991), we can become at once agents of change and accountable. We need to learn in our bodies.

Even though we may not have intent when displacing the focus from the centre towards that which the normative gaze has rejected, has not expected, or has not even thought of, we practise the art of careful discernment, delving below the surface of our first impressions.

One concern of slow looking is that too much emphasis on the “whatness” of things can create a subject and object divide. To describe something well, we suggest that we must be a subject observing

an object. However, by taking this position, we miss the “howness” of things. In contrast to “the what”, “the how” involves looking at flows, movement, change, and relationships, including how the knower relates to the known. “What” is a portrait; “How” is a “moving portrait”.

The Romantic era polymath, poet, and naturalist Johann Wolfgang von Goethe often wrote about his experiments in slow looking, and like his friend Schiller, he also wrote about the poetic motif of wandering. Goethe realized that to encounter “the how,” we need even more than our sight, other senses, and discernment shaped by experience. We need what the writer Italo Calvino called our “mental cinema”, our mind’s eye, to collaborate in creating new knowledge. New knowledge occurs when we experiment with subtle variations of experience, allowing ourselves the vulnerability to be shaped by experience rather than controlling it. Goethe called this process a “tender empiricism”, an infinite education.

Goethe describes an infinite education as being about not just the “what” but the “how”:

“The German language has the word *Gestalt* for the complex of existence of an actual being. By using this expression, one abstracts from the moving, and assumes the congruous whole is something fixed and closed in its character. But if we observe all *Gestalten*, especially the organic ones, nowhere do we find what is permanent, at rest, or closed; rather, everything fluctuates in continuous motion. This is why the German language frequently and fittingly makes use of the word *Bildung* to describe both the end product and what is in the process of production.” (Nasser 159).

In German, *Bildung* means *forming* and also *education*. The Romantic genre of the *Bildungsroman* is an educative story of a young, unknowing person who goes against the grain of society on a journey of spiritual and ethical growth. Goethe often contrasts the wanderer with the motif of the hut: a place of comfort but also of limits. This young person is a wanderer – a walker, in a sense – and their coming-of-age is at once about growth and education, to reconcile their angst and alienation from culture. Their learning is not just an outcome but a process: an infinite education corresponding to rich senses, real places, and tangible, worldly experiences.

3. Landscapes of learning: wondering and wandering

What does it mean to learn outside? By learning outside, we return to places of learning that stretch back to our collective gatherer-hunter legacy in savannahs and deserts. Walking can help us see patchy landscapes rather than flattened postcard views, shaped and shared by humans and non-humans. Even in Ancient Greece, where abstract philosophy took shape, our places of learning were often not static. Knowledge seekers and their schools walked outside. Consider the Ionian Enchantment, when even an abstract subject such as mathematics was directly related to nature. Pythagoras and his followers studied the patterns in nature. They could see the golden rectangle in the nautilus shell and the patterned spiral sequences in sunflowers and pinecones.



Figure 3. Photographs of “assemblages” seen as walking through the University Campus: cracks in the asphalt, indeterminate objects, or construction materials of ongoing works blending present time and spaces into possible futures. Source: image by the author

The philosopher of education John Dewey believed in returning to everyday outdoor enchantment. The anthropologist Tim Ingold elaborates:

“The problem with school education, in (Dewey’s) estimation, was that it has a way of isolating what is taught from the crucible of lived experience in which real knowledge is generated. The result is a tendency to reduce knowledge to information, conveyed by means of verbal and other symbolic forms, the meanings of which are lost upon those who have no opportunity to participate in the practices that may, in past times and remote places, have originally given rise to them. Hypotenuse might have been part of the everyday vernacular for ancient Greek builders, but it is no longer so for today’s schoolchildren.” (Ingold 2017).

Returning to landscapes today is to be exposed to indeterminacy. Leaping from the “whatness” and focusing on the “howness” of current landscapes, we recognize what anthropologist Anna Tsing (2015) calls “patchy landscapes” and the assemblage as its condition. Assemblages are reminiscent of Haraway’s metaphor of a cyborg: half human and machine, a dangerous creature with the potential to show and alert; a monster, like the anthropogenic forces that have led to the Anthropocene, can also shape and transform (1991). A metaphor for the flux of the fluidity and transcendence of categories and limits, but also a means to be aware of our responsibility in building them. Italian architect Annalisa Metta (2022) interprets the landscape as a monster: an assemblage that dissolves and breaks through binarisms. In current landscapes, the urban, the human-made, and the natural become entangled. This “monster” [*mostro* in Italian] that shows or reveals [from *mostrare*] our current situations is uncanny and ambiguous. In order to see it, to reenchant with current territories, we need to wander and wonder again; we need, as Anna Tsing proposes (2015), to acknowledge the terrain that an “anthropo-” refuses to acknowledge (Figure 3).

The Romantic empiricists inspire us to transform our tendency to abstract the world, control it, and direct it, with a more wandering, dialogical, and holistic approach. This wandering might lack directedness, allowing us to create canvases of experience and to show context, association, and relation, rather than walking in a straight line. This group of Romantic empiricists from late 18th and early 19th Century Germany included poet-naturalists, such as Schiller and Goethe, and Alexander von Humboldt, the explorer, essayist, and naturalist who created ‘nature canvases’ to communicate his experiences and insights into nature. Together, they gathered in the quaint university town of Jena to develop their philosophy of life and express it. Notably, as we have touched upon, the “walker” and the “wanderer” were primary themes in the work of many Romantic poets as well as in that of the Romantic empiricists, Goethe and Humboldt.

Goethe offered an alternative approach to science, which at the time could be called the study of nature. As a poet and appreciator of art, he saw the value in aesthetic education. Instead of a top-down approach, forming a hypothesis and finding examples to support it, or a bottom-up approach, finding concrete examples and then creating a theory from them, Goethe dwelled with the phenomena he encountered. Goethe practiced neither a top-down nor bottom-up approach: he refined a back-and-forth approach. Rather than assuming nature was mute, he worked in an actual dialogue with it.

In Goethe’s work, science, poetry, and art correspond. For instance, Goethe believed in observing a plant in its particulars and as a whole, conditioned by its context. “All was leaf,” he thought, a generative source that created every part of the plant. Each part of a plant was a manifestation and representation of the whole. After observing and vividly drawing the plant forms, one could enter the mode of exact sensorial imagination. Here, the observer of the plant can imaginatively recreate the plant, growing and unfolding. The process would play out in the im-

agination like a stop-motion video of a plant from seed to flower: the leaf archetype contracts into the stem and unfolds as a leaf, then expands from leaf to sepal and petal, then contracts again as the stigma and stamen. This process can also run in a non-linear way. The vital difference in Goethe is that he focused on growth and change, not the snipped categories that a botanist might display in a case of flower specimens.

For a long time, Goethe’s scientific ideas lacked a hospitable home. They were critiqued as too poetic for science and too scientific for poetry. Nevertheless, his way of thinking serves as an inspiration when not considered too literally.

4. Tender empiricism

Tender empiricism offers a complementary way of observing today. It removes the subject/object separation that occurs when we collect observations. Instead of separation, in order to remain objective, the person observing is aware of their relationship with the object in time and place. The knower enters into an unwritten contract of responsibility with that which they try to know (Nasser 172). Why? True knowing involves participating in the things being observed and collaborating with them. The key is to stay with the particulars of the things being observed over a committed time and not leave them behind. We cannot reach the truth by turning real things into abstract things.

Despite seeming like an invented method, tender empiricism is accessible and intuitive because we can practise it daily. Tender empiricism relates to visualization, which is not technological; it originally meant our “mind’s eye”. We all practise the techniques Goethe describes because we are drawn to the world around us. We look, see, imagine, and show every day, in any new environment.

Yet tender empiricism asks us to slow down. While Goethe applied it to science, it is a process that poets and artists already know well. Many people, for example, came to know their neighbourhoods better because there were fewer places to go to during the pandemic. We were finally able to slow down and notice the world around us with fresh eyes and senses.

Our typical mode: any time we go to a new environment, we look around us. From this looking, we see, usually based on that which we want to do in that environment. For Goethe, looking is about going out and inward; this takes time. Tender is also often translated as delicate, which means looking is fragile and can be reinforced by looking many times at a thing in order to build a living portrait of it. Seeing is not about control but about going deeper into that environment. Imagining is not about what we want to do but about becoming one with the thing being seen. Showing is knowledge and wisdom. Wisdom considers our relationship with the rest of nature.

Through writing, sketching, and visualizing, Goethe and Humboldt consciously gave us educational models for relating to nature. Humboldt was inspired by his friend Goethe. Where Goethe studied small

scales of nature, Humboldt set out on vast global adventures. He tried to understand entire landscapes and how they related to each other across vast geographies. Humboldt was one of the first European ecological thinkers. He believed that vicious empiricism would be a seeing, ordering, and presenting method focused only on accumulating data, devoid of poetic beauty. He called this “killing the living breath of nature.” (Millán Brusslan). People who appreciate nature need to understand how best to communicate their findings to the public in a vivid, accessible way that does not reduce the information so much that they cannot be intellectually and emotionally affected by it. Humboldt’s nature canvases (Figure 4) and essays are a patient guide to nature with an elaborative educative aim, rather than an explanatory reductive aim. He designed his canvases to help readers make connections within a web of life; they are more than mere travel narratives or postcard landscapes for this reason.



Figure 4. Plant distribution on Chimborazo and Cotopaxi in the Andes, folding hand-coloured engraving, entire, Alexander von Humboldt, *Ideen zu einer Geographie der Pflanzen* (1807). Zentralbibliothek Zürich. Source: Wikimedia commons

Conclusion

We need to become aware of how we know things through a set of skills, tools, and habits. After all, how we know things determines how things appear to us and, ultimately, how we treat them. Romantic empiricism creates an ethical framework because we enter into a knowing relationship with that which we try to know well. We are responsible for listening to the phenomena, not trying to speak on its behalf (Nasser 172).

Goethe and Humboldt reflected on how people are thinking and feeling beings who are an integral part of the ecosystem. Today, the Anthropocene is at once all too human, evoking our anthropocentrism, and more than human. Individual and collective actions have yielded externalities – consequences, intended and unintended, for the rest of nature. Given the vastness of destruction and the alienation many feel from the earth, the Anthropocene needs artists who can recentre feeling as the object of inquiry, as the Romantics did.

The Anthropocene formalizes the idea that we are a dynamic part of the ecosystem, but science alone does not give us the tools to reposition our old story of self as separate from the rest of nature. Here, we call for an aesthetic education, infinite and transformative. To know things means to enter into an ethical relationship with them, and that relationship can change our identity. Here, we seek and pursue questions: how might we embrace our new sense of self as part of a vulnerable community? How might we respond to the ongoing, gigantic destructive scale of human actions? How might we balance tenderness and vulnerability – our condition as beings in an ecology – with an awareness of our capacity for gigantic destruction? How might we listen and share experiences, with sympathy, outside of ourselves? Maybe we wander away from our buildings, intentions, plans, and designs; maybe we build ourselves and each other by walking.

References

- Burckhardt, Lucius, Markus Ritter and Martin Schmitz. *Why Is Landscape Beautiful?: the Science of Strollology*. Markus Ritter and Martin Schmitz (eds.). Basel, Switzerland: Birkhäuser, 2015. DOI: <https://doi.org/10.1515/9783035604139>
- Careri, Francesco. *Walkscapes*. Barcelona: Editorial GG, 2004.
- Ellsworth, Elizabeth Ann. *Places of Learning: Media, Architecture, Pedagogy*. New York: Routledge, 2005. DOI: <https://doi.org/10.4324/9780203020920>
- Greene, Maxine. “The art of being present: educating for aesthetic encounters”. *Journal of Education*, vol. 166, no. 2, (1984). DOI: <https://doi.org/10.1177/002205748416600203>
- Ghosh, Amitav. *The Great Derangement: Climate Change and the Unthinkable*. Chicago: The University of Chicago Press, 2020.
- Haraway, Donna Jeanne. *Simians, Cyborgs, and Women: the Reinvention of Nature*. New York: Routledge, 1991.
- Ingold, Tom. *Anthropology and/as education*. Routledge, 2017. DOI: <https://doi.org/10.4324/9781315227191>
- Korenblat, Joshua, “Inspiration from Goethe’s Tender Empiricism: How to be the Person Collecting, Analyzing and Visualizing Data”. In: Chelsea Miya, Oliver Rossier and Geoffrey Rockwell Right (eds.). *Right Research: Modeling Sustainable Research Practices in the Anthropocene*, (2021): 173-216. Cambridge, UK: Open Book Publishers. DOI: <https://doi.org/10.11647/OBP.0213.08>
- Masschelein, Jan. “E-Ducating the Gaze: The Idea of a Poor Pedagogy.” *Ethics and education*, vol. 5, no. 1 (2010): 43-53. DOI: <https://doi.org/10.1080/17449641003590621>
- Matos Wunderlich, Filipa. “Walking and Rhythmicity: Sensing Urban Space.” *Journal of Urban Design*, vol. 13, no. 1. (2008): 125-139. DOI: <https://doi.org/10.1080/13574800701803472>
- Metta, Annalisa. *Il Paesaggio è un Mostro: Città Selvatiche e Nature Ibride*. Derive Approdi, 2022.

Millán Brusslan, Elisabeth. "Learning to See Nature, Learning to Love Nature: Lessons from Alexander Von Humboldt". *Humans Nature*. <https://humansandnature.org/learning-to-see-nature-learning-to-love-nature-lessons-from-alexander-von-humboldt/>

Nasser, Dalia. *Romantic Empiricism: Nature, Art, and Ecology from Herder to Humboldt*. Oxford University Press, 2022. DOI: <https://doi.org/10.1093/oso/9780190095437.001.0001>

Nussbaum, Martha. *Not for Profit: Why Democracy Needs the Humanities*. Princeton University Press, 2010.

Oppezzo, Marily, Daniel L. Schwartz. "Give your ideas some legs: The positive effect of walking on creative thinking." *Journal of Experimental Psychology: Learning, Memory, and Cognition*, vol. 40, no. 4 (2014): 1142-1152. DOI: <https://doi.org/10.1037/a0036577>

Pallasmaa, Juhani. *The Thinking Hand: Existential and Embodied Wisdom in Architecture*. Chichester, U.K: Wiley, 2009.

Tsing, Anna Lowenhaupt. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton: Princeton University Press, 2015. DOI: <https://doi.org/10.1515/9781400873548>

CV



Joshua Korenblat

Associate Professor of Graphic Design, State University of New York, New Paltz

korenblj@newpaltz.edu

ORCID: <https://orcid.org/0000-0001-6539-2947>

He teaches information design, data visualization, and illustration to some wonderful students. He is also a writer and art director with fifteen years of experience in storytelling across media. His most recent writing about social design and care ethics has been published in the book *Design Education Across Disciplines: Transformative Learning Experiences for the 21st Century*, published by Palgrave Macmillan. He earned his MFA from the Maryland Institute College of Art (MICA), his MA in Writing from Johns Hopkins University, and a Master in Teaching at Brown University. In 2012, he helped to co-found and art direct a Washington DC-based information graphics/data visualization startup, Graphicacy. He also has a combined seven years of full-time staff experience in the Art Department at National Geographic Magazine and in the Design Department at Science News Magazine.



Laia Solé Coromina

Professor at Universitat de Vic-Universitat Central de Catalunya

laia.sole@uvic.cat

ORCID: <https://orcid.org/0000-0001-7873-925X>

She is an artist, art educator and researcher. She has developed a body of work centred on space: building situations that have the potentiality to question, to fuel imagination, and to reshape social spaces. She has investigated contemporary art practices as sites of learning, creative barriers in higher education students, and is currently involved in research projects on art and sustainability. Her work has been exhibited at the Drawing Center in New York City, Cuchifritos Gallery in New York City, Fundació Chirivella-Soriano in València, Arts Santa Mònica in Barcelona, among others. She earned a Fine Arts degree from Universitat de Barcelona and a doctorate degree from Teachers College, Columbia University. She has taught at educational institutions in Spain and abroad.

