River Aesthetics

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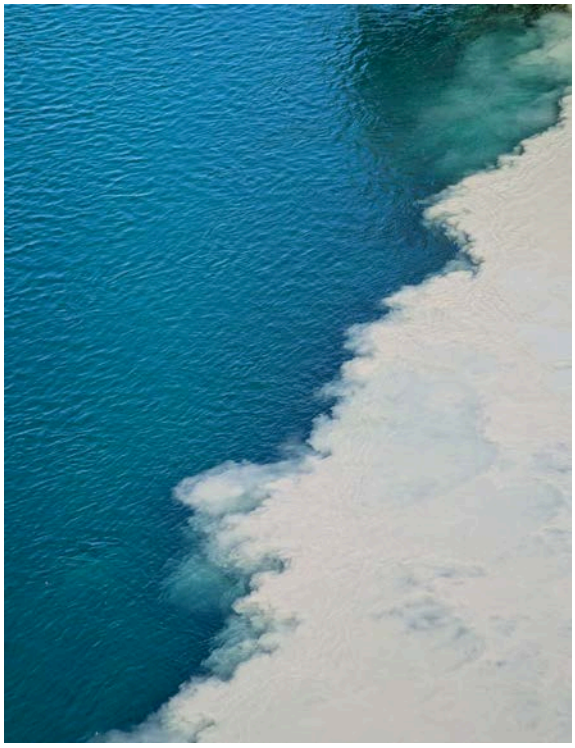
Introduction **1**
Three Models for Technology–Nature Relation **4**
Mimesis 4
Reserve 5
Prosthetic 5
The Picturesque View of La Jonction **7**
That's So Aesthetic! 7
Nature's Beauty 8
Landscape Model 12
A Photographic Study of the Rhône and Arve Rivers **13**
Format and Display 14
Collection of Evidence 16
Expressive Qualities 18
Fluvial Data **22**
Scientistic Scenes 22
Mapping the Land 29
Giving Voice to Rivers **46**
Prosopopoeia 46
Personhood 46
Conclusion **46**

“We have ourselves become foreign to our everyday”[1] — Ronald W. Hepburn

Introduction



Since moving to Geneva in September 2024 for this master's program at HEAD-Genève, I’ve walked over the viaduct in La Jonction over 400 times. This is the perfect spot to view the confluence of the Rhône and Arve rivers. Standing high above from a bird's eye view and seeing this natural phenomenon for the first time, I was immediately in awe. My first encounter with the confluence was on a sunny afternoon, bringing out the teal of the Rhône and the white, milky qualities of the Arve. The waters of the rivers swirled before merging downstream.

SEPT 10, 2024 | FIRST PHOTO TAKEN

SCREENSHOT FROM GOOGLE MAPS WITH LABELS

[1] HEPBURN, Ronald, 2004. Contemporary Aesthetics and the Neglect of Natural Beauty. In: CARLSON, Allen and BERLEANT, Arnold, eds. The aesthetics of natural environments. Peterborough, Ont.; Orchard Park, NY: Broadview Press, pp. 49–66. ISBN 978-1-55111-470-5.

After walking over this bridge many times, I've witnessed the confluence in different conditions. On some days, there's an imbalance of the rivers where one extends over the other, or a grey, cloudy sky dulls the colours. Looking back, I was lucky with my first impression of this sight. By walking this path repeatedly, I am able to appreciate my first experience because I have a frame of reference to compare it to. Walking was not only a means of getting from one place to another, but it also helped me connect with this place.

In the context of art, walking has been explored as a medium of expression. Richard Long, a British land artist, creates artworks with nature. He performs with nature through the simple act of walking. His piece from 1967, "A Line Made by Walking" shows a visible straight line in the grass field of Wiltshire, England. The end result is a black and white photograph of the field with no animals or humans, just the landscape and a trace of the path. There's a stark contrast between the wild and the line. Although there is no one visible in the photo, it serves as a reminder of a human presence. As time passes, we can imagine the line fading away and nature persisting.

As Spanish philosopher Marta Tafalla notes, "[Richard Long]'s relationship with nature is that of one who passes through it, who recovers old, little-used paths or who opens up new ones."[2] This points to our need to create our own paths, metaphorically and physically. Even in a built environment like a city, there are countless examples of paths designed by urban and landscape designers that are subverted by their walkers. We will look for the quickest and shortest path to our destination, often referred to as a "desire path". You can see this right outside HEAD—Genève, where paths are created in the landscaped area around the main building. In contrast to Long's meandering walks, these desire paths in an urban environment are a by-product of our need to efficiently arrive at our destination. We are trying to save time, but Long is taking his time.

I'm somewhat in the middle. I walk across the bridge as a means to arrive at my destination, but I am also there to enjoy the rivers intermingling and Mont Salève and the Jura Mountains in the distance. I try to strike a balance between getting there and taking it in. Walking along the Viaduc de la Jonction, I have no option but to go in a straight line, but this does not mean I cannot appreciate what surrounds me. Although I have to admit, as time goes on, my initial fascination with the confluence blunts. The honeymoon fades and as I start to live my life in Geneva, it becomes part of my everyday. Occasionally, my romance with the site is rekindled.

This is my starting point and the inspiration for my thesis—to explore this relationship I have with this location and understand why I'm drawn to it, despite having no prior connection to Geneva before my arrival. An underlying and more general concern is to examine how we can connect, re-connect, and stay connected with nature in our built environment, fostering a deeper appreciation for it.

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[2] TAFALLA, Marta, 2010. From Allen Carlson to Richard Long: The Art-Based Appreciation of Nature. . Vol. 2.

Pillars of Methods

PHILOSOPHY	FIELD RESEARCH	ART & DESIGN
Philosophy of Technology Aesthetics Environmental Aesthetics	Photo Documentation Field Recordings Interviews Mapping	Case Studies Experiments Objects

[Will update the diagram at the end once I have written everything]

My methodology integrates two core dimensions: theoretical and practical. I will briefly make an incursion into the philosophy of technology to bring attention to how we view nature through interventions and inventions. However, the primary focus here will be on Environmental Aesthetics, a sub-branch of aesthetics concerned with how we appreciate both natural and human-made environments. In this thesis, I will concentrate specifically on natural environments. Environmental Aesthetics first emerged in the 18th century and re-emerged in the 1960s, driven partly by a shift away from viewing nature through the lens of art and toward recognizing it as an aesthetic experience in its own right. This renewed interest was also fueled by growing public concern for the environment and the need to make informed decisions about its preservation and use.[3]

Drawing from Environmental Aesthetics makes sense considering the context of this Master's program, as design can afford aesthetic experiences. But more importantly, it aligns with the concept of mediating between nature and art. Environmental Aesthetics will provide a framework for analyzing my research and guiding my practical outcomes. Furthermore, by examining relevant case studies, I will de-centre my perspective and allow myself to take a broader view in approaching my main concern. I also interviewed sound artists to gain insight into how they perceive and engage with the natural world through sound, which will serve as a foundation for my diploma project.

[3] CARLSON, Allen, 2016. Environmental aesthetics. In : *Routledge Encyclopedia of Philosophy*. 1. London : Routledge. ISBN 978-0-415-25069-6. DOI 10.4324/9780415249126-M047-1.

I have produced a collection of photos which will serve as a basis to examine the visual aesthetic of the rivers, and I have been mapping the soundscape of La Jonction to understand the acoustic and sonic characteristics of the place.[4] My goal is to understand how to appreciate nature through various sensing channels and media and to develop my practice of field documentation and recording.

I've narrowed down on a specific site for my field research. I purposefully want to work with a location that is close to home, literally. The confluence is just around the corner and is accessible to me at any time of day. Besides being a convenient location, this contributes to my goal of building a situated practice. I want to be able to interact wholeheartedly in the site of investigation to understand it, to embody it, to thoroughly grasp its variations and nuances. I have tried to approach my interviews in a similar spirit. In a world where everything is accessible by a mouse click, we can conduct interviews online with anyone around the world. However, spontaneity and magic are lost when we are not face-to-face, just as when we view nature only through the mediation of a screen.

Before exploring the appreciation of nature through the lens of Environmental Aesthetics, I start with a few remarks about our relationship to technology and its connection to the natural world. I think it's essential to set this context, especially because of technology's ambivalence: while it can help us appreciate nature, it can also be detrimental to it.

Three Models for Technology–Nature Relation

There is a conventional contrast between technology and nature. One being a product of human invention and everything else that is not human. One that feels rigid and the other organic. One that is orderly and the other wild. However, this dichotomy, separation, and distance have contributed to the current problematic state of our relationship with our planet. But what if we thought about our relationship differently?

Mimesis

The ancient Greeks understood technology to be a form of mimesis, that is, "technology learns from or imitates nature".[5] This positions nature as a teacher, helping us find solutions to our human development. We can see instances of this with biomimicry and our desire to fly. From

[4] A collection of field recordings hosted on Aporee. This is a sound map project created by German artist Udo Noll as a way to document the soundscapes of places around the world. There's a standard and quality they uphold to ensure a good listening experience and to represent a location's soundscape accurately. https://aporee.org/maps/work/user.php?u=3849

[5] FRANSSEN, Maarten, LOKHORST, Gert-Jan and VAN DE POEL, Ibo, 2024. Philosophy of Technology. In : ZALTA, Edward N. and NODELMAN, Uri (eds.), *The Stanford Encyclopedia of Philosophy* [online]. Fall 2024. Metaphysics Research Lab, Stanford University. Retrieved from : https://plato.stanford.edu/archives/fall2024/entriesechnology/ [accessed 24 April 2025].

the first attempts of flapping our arms to studying the aerodynamic properties of birds.[6] By learning from nature, we improved our flying techniques.

Air is not the only element we've conquered. We've built dams for various purposes such as irrigation, hydroelectricity, water supply, flood control and recreation.[7] Dams date back to 4th century B.C.E. in Mesopotamia. They were constructed to supply water for crop irrigation, thereby sustaining a growing population. There's no evidence of such dams based on animal inspiration. However, there is a recent development of looking to nature's engineer, the beaver, to construct small dams. These small dams are aptly named "human-built beaver dam analogues" where they mimic beaver dams to use local materials and allow for permeability. [8] Here, we are not only looking to nature for a solution to control the flow of water in a river, but also to rehabilitate the ecosystem.

Reserve

According to Martin Heidegger, traditional or pre-modern technology is *poeisis* (bringing something into presence). For example, the windmill draws on wind to produce energy.[9] We are not controlling the wind but instead using the wind as is to produce energy. On the other hand, modern technology forcefully attempts to reveal nature through extraction, and in this sense, nature is seen as a standing reserve. The world is subjected to the grip of technology and is reduced to a reserve of raw material. We are challenging what nature is capable of.
For example, we have altered the landscape of rivers and figured out that we can produce energy through hydroelectric power plants. There are 24 dams in total along the Rhône, with 19 located in France and 5 in Switzerland, which regulate the river's flow while generating electricity. The Seujet dam located in Geneva's city centre accounts for 1% of the city's electricity consumption. In comparison to large hydrodams, this is a relatively small amount as it primarily serves as a way to regulate water flow. However, this small amount illustrates that technology will maximize a resource while revealing what it can do for us.

Prosthetic

The last model is based on the idea that technology is rooted in our human bodies. For Ernst Kapp, technology can be viewed as "organ projection"[10] and in Marshal McLuhan's words,

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[6] PRIMROSE, S. B., 2020. *Biomimetics: nature-inspired design and innovation*. Hoboken, New Jersey : Wiley. ISBN 978-1-119-68334-6.
[7] International Commission on Large Dams, [online]. Retrieved from : https://www.icold-cigb.org/ [accessed 23 October 2025].
[8] WOHL, Ellen and INAMDAR, Shreeram, 2025. Beaver Versus Human: The Big Differences in Small Dams. *WIREs Water*. Vol. 12, no. 2, p. e70019. DOI 10.1002/wat2.70019.
[9] Heidegger: The Question Concerning Technology, [online]. Retrieved from : https://www.english.hawaii.edu/criticalink/heidegger/guide5.html [accessed 6 October 2025].
[10] KAPP, Ernst et al., 2018. *Elements of a philosophy of technology: on the evolutionary history of culture*. Minneapolis (Minn.) : University of Minnesota press. Posthumanities, 47. ISBN 978-1-5179-0226-1.

“technology is an extension of man”.[11] Where Kapp refers to bodily functions, McLuhan means the senses. These distinctions perhaps convey the same concept, because if we say “our eyes”, we are referring to the organ and our sight. For example, cameras, telescopes, and microscopes are all technologies that enhance our ability to see on different scales. Even though Knapst and McLuhan arrive at the same idea, I prefer Knapst's concept of “organ projection” because it foregrounds a relationship to the body, connotes vitality, and connects technology operating as a system.

I would like to propose that we attempt to rethink our relationship to nature through this model. What if we saw nature through this lens, and instead of extraction, we are trying to view non-biological entities like a river as full of life with its own internal organs? The concept of viewing nature as alive with organs is not new. Ancient mythologies personified natural entities as deities and gods. The personification of nature is a clear example of human projection, as we shape non-biological entities into a human form.

The act of personification is an attempt to empathize with nature and to relate to the natural world around us through stories. In contrast, to view a natural entity through Kapp’s technological concept is to understand it and in a way that not only amplifies its function, but also allows the entity to benefit from this understanding. This requires us to attempt to see nature as it is. However, I do wonder if this is even possible since we will view nature through our human perspectives and experiences. This idea of nature = nature is also one of the reasons for the field of environmental aesthetics: how to appreciate nature separately from our appreciation of art and to view nature on its own terms. I am also hesitant about this separation, since the philosophy of art and environmental aesthetics belong in the same branch, and environmental aesthetics is often discussed in relation to art.

To conclude, attempts to control rivers have had detrimental environmental consequences. Instead, we should view rivers as a source of inspiration and design collaboratively with them. In the 1960s, the polluted Cheonggyecheon stream in Seoul was converted into an overpass highway. Thinking this would solve issues of people commuting into the city, it caused people to be displaced, increased air pollution and caused economic turmoil through the closure of businesses.[12] It’s only been recently that the river has been restored. The effects have been positive by allowing for floods to be managed in the urban environment while providing a public space for people to gather. Even if it’s human-made, it demonstrates that we should look to nature and to work with it before making drastic interventions.

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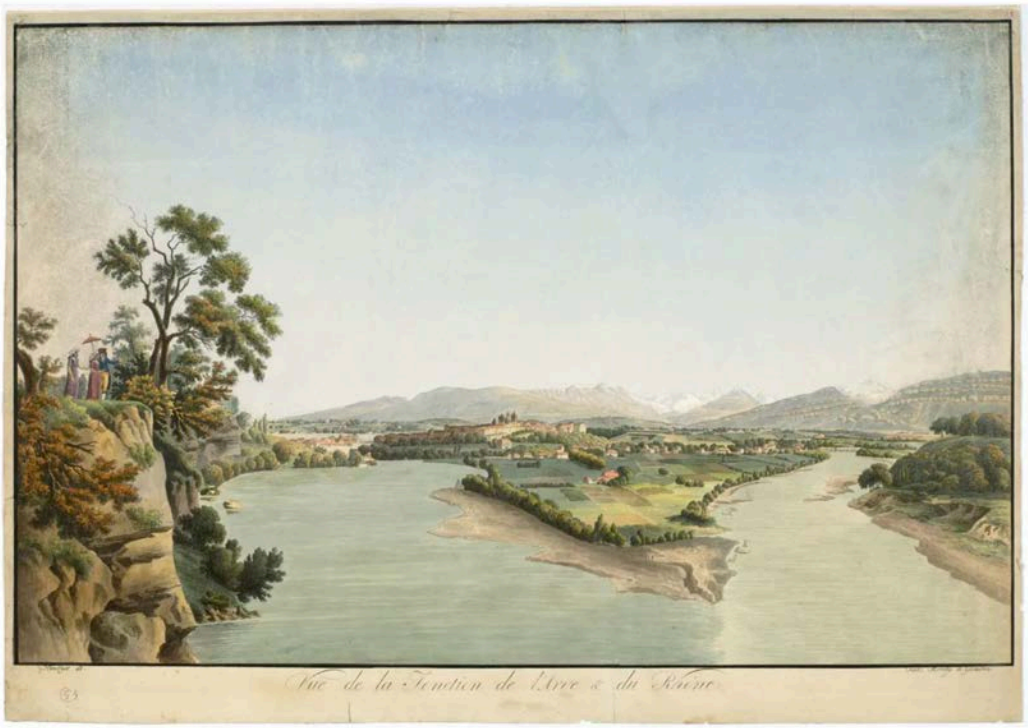
[11] MCLUHAN, Marshall and LAPHAM, Lewis H., 1995. *Understanding media: the extensions of man*. 2nd printing. Cambridge (Mass.) London : The MIT press. ISBN 978-0-262-63159-4.
[12] NOT JUST BIKES, 2025. *They Tore Down a Highway and Made it a River (and traffic got better)* [online]. 25 May 2025. Retrieved from : https://www.youtube.com/watch?v=wqGxqxePihE [accessed 31 October 2025].

The Picturesque View of La Jonction

GENÈVE, JONCTION DU RHÔNE ET DE L'ARVE

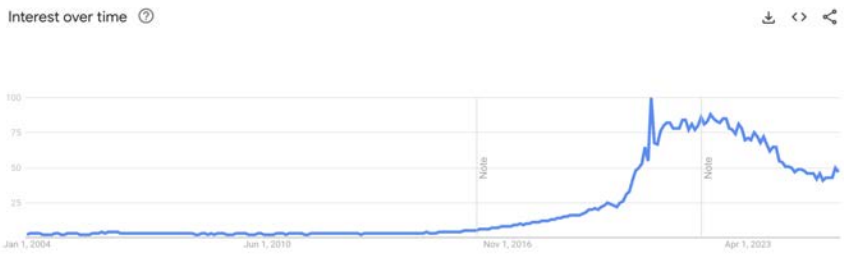


CARL LUDWIG HACKERT
(1740 - 1796), DESSINATEUR
FRANÇOIS MONTY
(1778 - 1830), ÉDITEUR
4E QUART 18E S. (AVANT 1796)

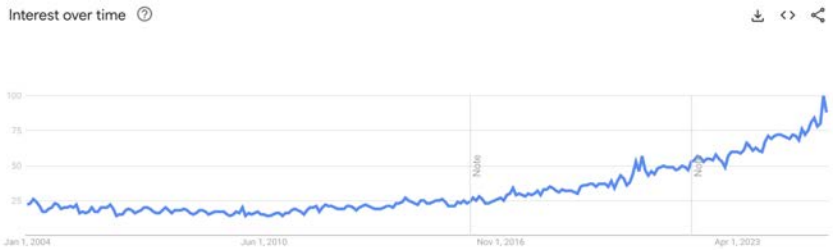
That’s So Aesthetic!

The word "aesthetic" has been co-opted by people on social media to refer to something stylish or pretty, very often reducing what we see to the purely visual. Instead of saying, “that looks nice!”, we now proclaim, “that’s so aesthetic!”. The colloquial usage in a social media context involves finding the best way to present a moment and reducing an experience to enforce its visual aspects. In extreme (though not unusual) cases, such qualifications are meaningless. Language changes and words shift, but as Gabriel E. Lipkowitz has noted, “the central problem with our present usage of 'aesthetic,' … is its omission of nearly all meaning traditionally associated with th[is] otherwise very meaningful term.”[13] While I agree with this statement, this semantic reduction can also provide insight into how we’ve previously judged aesthetic objects.

[13] NASSAUWEEKLY, 2019. The Problem with Calling Something “Aesthetic.” Nassau Weekly [online]. 3 March 2019. Retrieved from : https://nassauweekly.com/the-problem-with-calling-something-aesthetic/ [accessed 30 September 2025].



AESTHETIC - GOOGLE TREND 2004–PRESENT[14]



AESTHETICS - GOOGLE TREND 2004–PRESENT[15]

Nature's Beauty

In the 18th century during the Golden Age of Enlightenment Aesthetics, beauty was understood objectively through the concept of disinterestedness. This was a shift "from its classical associations with love, possession, and desire, emphasizing instead its disinterested character".[16] Philosophers such as David Hume, Arthur Schopenhauer, and Francis Hutcheson, while they didn't all agree on all parts of aesthetic theory, they did "share the central idea of disinterested pleasure as independent from personal interest".[17] In other words, viewing an aesthetic object disinterestedly meant to view an object independently from one's own interests, such as personal, religious or economic gains. For Immanuel Kant, disinterested pleasure also meant that an object's genesis is irrelevant to the aesthetic judgement.[18] To focus on the system in which an object is made, is not focusing on the object itself. For example, to aesthetically

[14] Google Trends, Google Trends [online]. Retrieved from : https://trends.google.com/trends/explore?date=all&q=aesthetic&hl=en [accessed 30 September 2025].
[15] Same parameters as the previous one. The term here is not referring to the field of study of "aesthetics" but instead the colloquial usage. Google Trends, Google Trends [online]. Retrieved from : https://trends.google.com/trends/explore?date=all&q=aesthetics&hl=en [accessed 30 September 2025].
[16] PARSONS, Glenn and CARLSON, Allen, 2024. Environmental Aesthetics. In : ZALTA, Edward N. and NODELMAN, Uri (eds.), *The Stanford Encyclopedia of Philosophy* [online]. Fall 2024. Metaphysics Research Lab, Stanford University. Retrieved from : hanttps://plato.stanford.edu/archives/fall2024/entries/environmental-aesthetics/ [accessed 15 June 2025].
[17] Aesthetic Attitude | Internet Encyclopedia of Philosophy, [online]. Retrieved from : https://iep.utm.edu/aesthetic-attitude/ [accessed 27 October 2025].
[18] ibid.

contemplate a flower is to examine its form instead of its biological processes and growth mechanisms. Essentially, the 18th-century philosophers emphasized that aesthetic judgment requires attending solely to the object and its immediately perceived qualities. Therefore, to talk about our aesthetic judgments, we adopt an aesthetic attitude, appreciating its formal properties (colour, shapes, composition, texture, etc.) through disinterested contemplation.

It's worth noting that in contemporary aesthetics, the aesthetic attitude has been debated and the theory's validity has been contested. Jerome Stolnitz, in a widely referenced article, argues in favour of the aesthetic attitude and states the aesthetic attitude is "disinterested and sympathetic attention to and contemplation of any object of awareness whatever, for its own sake alone".[19] For Stolnitz, the aesthetic attitude is a special kind of attention that's reserved for perceiving an aesthetic object and when we are concerned with an ulterior purpose, or viewing the object as an instrument that can serve us, we are not approaching the object aesthetically. However, George Dickie in "The Myth of the Aesthetic Attitude" debunks this and simply states that we are paying attention or we are not.[20] Dickie contends that there is no unique mental state that distinguishes aesthetic from non-aesthetic experiences. An example Dickie provides to challenge the necessity of a special aesthetic attitude is that of the art critic. According to Stolnitz, a critic, viewing an art object with the purpose of evaluation, would not be aesthetically attending to it. However, Dickie counters that to effectively evaluate an object, the critic must be attentive to identify both its flaws and successes. He argues that one can be both critical and appreciative simultaneously, and this attention does not require the "laser-focused," special concentration that Stolnitz implies. In a more practical sense, this reflects our ability to multi-task—for example, listening to a speaker while mentally preparing a response. Therefore, it is not unreasonable to argue for split or purposeful attention when viewing an art object. While Dickie is critical of the aesthetic attitude, he does see some value because "to take an aesthetic attitude toward a painting…lower[s] [one's] prejudices".[21] In addition, this attitude also allows us to escape a subjective experience and discuss an aesthetic object as a collective experience.[22]

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[19] STOLNITZ, J., 1960. *Aesthetics and Philosophy of Art Criticism: A Critical Introduction* [online]. Houghton Mifflin. Retrieved from : https://books.google.ch/books?id=1pIfAAAAIAAJ

[20] DICKIE, George, 1964. The Myth of the Aesthetic Attitude. *American Philosophical Quarterly*. Vol. 1, no. 1, pp. 56–65.

[21] ibid.

[22] The aesthetic attitude is a contentious idea that has seen little philosophical discussion since Dickie's influential article. Alexandra King notes in "The Aesthetic Attitude" (*Internet Encyclopedia of Philosophy*) that the subsequent silence from thinkers perhaps validates Dickie's central claims. The kind of intense focus Stolnitz describes is comparable to the flow state, a distinct mental state identified by psychologist Mihaly Csikszentmihalyi. Flow is characterized by total absorption, where distractions vanish and one often loses all sense of time. To further analyze the kind of attention involved, it is beneficial to separate the artist from the spectator, as it is questionable whether a spectator can ever achieve the same depth of focus that an artist experiences during the process of creation.

VIEW OF GENEVA FROM THE CONFLUENCE OF THE RHONE AND THE ARVE
ENGRAVED BY FRIEDRICH SALATHE (1793-1860) (COLOURED ENGRAVING)
ORIGINAL BY JEAN DUBOIS

An analysis along the lines of an Enlightenment Aesthetics is to advert to the pictorial properties of a coloured engraving titled "Geneva From The Confluence Of The Rhone And The Arve." For example, the composition utilizes the rule of two-thirds to balance the sky and ground. There's a contrast between the vast sky and the detailed foreground. The soft colours and yellow undertones create a warm morning atmosphere. The inclusion of people in the painting also serves to establish a sense of scale. By now, we are familiar with formal descriptions and their legacy in art and design.

Perception of nature's beauty also extends beyond mere description and is associated with the “picturesque”. Historically, this term acted as a label to simply communicate “the sort of landscape painted by artists” that had a balanced composition of a large outdoor view and is often a way to say “picture-like”.[23] The concept of the picturesque influenced how we perceive nature, but it also motivated human behaviours. For example, beautiful views are often what we try to protect environmentally. This is also evident in scenic tourism, where the allure of natural

[23] PARSONS, Glenn and CARLSON, Allen, 2024. Environmental Aesthetics. In : ZALTA, Edward N. and NODELMAN, Uri (eds.), The Stanford Encyclopedia of Philosophy [online]. Fall 2024. Metaphysics Research Lab, Stanford University. Retrieved from : https://plato.stanford.edu/archives/fall2024/entries/environmental-aesthetics/ [accessed 15 June 2025].

beauty pushes travellers to destinations near and far.[24] Historically, this is reflected in paintings featuring people in the foreground against natural backdrops, and today, in similarly situated selfies. While nature's beauty is viewed objectively and we can all agree on what is beautiful in nature, it seems still to be in the scope of self-interest, at least in terms of the hedonic dimension.

Landscape Model

Landscape paintings modelled our understanding of concepts like beauty and the picturesque, and contributed to the development of art criticism and theory. They also served as important aesthetic objects that fashioned our perspective on nature. Allen Carlson noted that the way we appreciate nature is similar to how we appreciate landscape paintings:

> When aesthetically appreciating landscape paintings … the emphasis is not on the actual object (the painting) nor on the object represented (the actual prospect); rather it is on the representation of the object and its represented features. Thus in landscape painting the appreciative emphasis is on those qualities which play an essential role in representing a prospect: visual qualities related to coloration and overall design.[25]

For example, in the landscape paintings of La Jonction, we can't see the leaves on trees, blades of grass on the ground, or the rocks along the riverbanks. When we view a landscape from a distance, we reduce it, first and foremost, to colour and form. Carlson suggests that we are not appreciating the objects themselves (leaves, trees, grass, rocks), but rather a selection of their salient visual properties.

The Landscape Model for the appreciation of nature brings up another key point mentioned by Ronald Hepurn: art is framed and nature is unframed.[26] Paintings and other art forms are framed because they are bound by their dimensions, selection of scene, descriptions and curation around the artifact. In contrast, nature is unframed since it's constantly changing from moment to moment, season to season, year to year. When we stand in a fixed point, we direct our attention which can be in multiple directions, and as we move through the environment, the horizon line of the landscape changes. In other words, art is contained, and nature is wild.

Given this brief historical context, we can now examine how to move beyond the picturesque and the frame, which can be particularly challenging within a visual culture that is increasingly shaped by screens in general and social media in particular. Hepburn and Carlson, along with many others in the field of Environmental Aesthetics, have answers to this question. I'll apply

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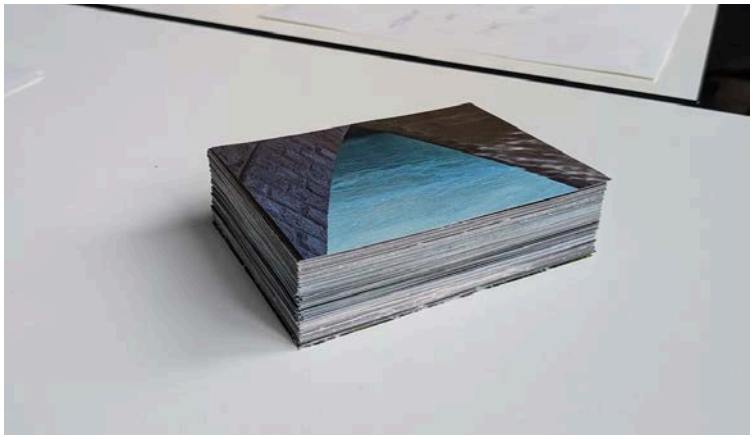
[24] ibid.
[25] CARLSON, Allen, 1979. Appreciation and the Natural Environment. The Journal of Aesthetics and Art Criticism. Vol. 37, no. 3, p. 267. DOI 10.2307/430781.
[26] HEPBURN, Ronald, 2004. Contemporary Aesthetics and the Neglect of Natural Beauty. In: CARLSON, Allen and BERLEANT, Arnold, eds. The aesthetics of natural environments. Peterborough, Ont.; Orchard Park, NY: Broadview Press, pp. 43–62. ISBN 978-1-55111-470-5.

their claims in discussing works produced by other artists, designers and myself with the goal of arriving at comprehensive models of appreciation.

A Photographic Study of the Rhône and Arve Rivers



[still need to retake photos of the photos]

Over the three-month period from April to June 2025, I documented the Rhone and Arve rivers with a Nikon Z 6II with a 24-70mm f/4 S lens. The photos are of the rivers from various vantage points around the confluence, primarily from the viaduct. Initially, the photos served as image documentation and field research, but after printing and viewing them outside of a screen, I was drawn into a reflection on the medium of photography and how it can facilitate an appreciation of nature.

Format and Display

A photograph immediately frames nature. This encompasses everything from hardware to post-production and how the photos are displayed within a space, as well as the most obvious, the photo frame. The photographic act is also rooted in framing. There are multiple steps that guide our decision before pressing the shutter button known as “previsulization”. As Daniel Pinkas notes in *Santayana at the Harvard Camera Club*:

> [F]raming and shooting encapsulate the very essence of the photographic act, an act that culminates indeed in the “pressing of the button” but under the guidance of a conscious and sophisticated perceptive operation. The expressions “instant recognition of subject and form”, “spontaneity of judgment” and “composition by the eye”, are some of the ones used to designate what precedes and determines the decision to “press the button”.[27]

The photographic act can be described as the art of framing, a throughline that runs from the moment of composing an image to the way it is ultimately presented. Having a mental frame, however, does not only need to apply to taking a photo. As Stolnitz notes:

> [T]he scene in nature lacks a frame and therefore cannot be grasped and comprehended by the eye and the mind….[A]lthough nature lacks a frame when it simply exists, apart from human perception, this is not true when it is apprehended aesthetically.[28]

The concept of the “frame” appears to be valuable not only in art but also in the aesthetic appreciation of nature. Without mentally framing nature in its presence, we might perceive it as wild and chaotic. This raises the question of how we might engage with the idea of framing and unframing in photography, and how such an approach could contribute to our aesthetic understanding of nature.

[27] PINKAS, Daniel, 2024. Santayana at the Harvard Camera Club. Limbo: boletín internacional de estudios sobre Santayana. No. 44, pp. 5–41.
[28] ibid.

This exercise or arrangement attempts to address the frame issue. The photos printed are 12.6 cm x 9 cm on regular printer paper. The quality of the paper was less important since I was concerned with how to organize the photos in a coherent display. The focus was on how to present the final image once it is produced. Faced with multiple photos, the viewer can see beyond just one moment and perspective; more specifically, they can see a season in its entirety. This is reminiscent of David Hockney's photographic collages, where he arranges photos from different vantage points and assembles them to create a new scene. In contrast, I've created an orderly display to represent the location of the confluence. There's a clear horizontal axis with the viaduct, and a vertical axis with the dyke separating the rivers that leads to the lookout point.

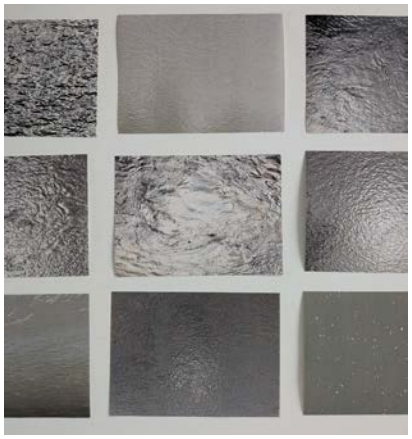
The reproduction of the location is an attempt to address one of Carlson's points about appropriately appreciating nature:

> We must experience our background setting in all those ways in which we normally experience it, by sight, smell, touch, and whatever. However, we must experience it not as unobtrusive background, but as obtrusive foreground![29]

Carlson argues we shouldn't view nature simply as a backdrop. Instead, by actively engaging and directing our attention and letting nature disrupt us, we can then fully appreciate it. Of course a photo cannot replicate smell or touch. I'll attempt to address what the medium of photography can achieve momentarily. The dimensions of the individual photos are small but the overall display could be huge if there were many photos. This would offer the viewer an approximation of being on the viaduct. There are close-ups to see details as if you were face-to-face with the rivers, which addresses Carlson's point about the landscape model and the limitations of only viewing nature through colour and form.

[29] CARLSON, Allen, 1979. Appreciation and the Natural Environment. The Journal of Aesthetics and Art Criticism. Vol. 37, no. 3, p. 267. DOI 10.2307/430781.

One key aspect of nature is that we move through it. We are surrounded in it which brings us closer to nature and reduces the distance that is present in art.[30] However, is it necessary to replicate nature as if you were there to appreciate it through photos?[31]



Collection of Evidence

According to Laura T. Di Summa in “Collecting What? Collecting as an Everyday Aesthetic Act”, “with the act of collecting, there is a sense of adventure and discovery.”[32] In her paper, she refers to the collection of mundane objects, but this notion can also apply to our everyday environments—in my case, the confluence I pass by daily. I would often look forward to reaching the bottom of Bois de la Bâtie, catching the first glimpse of the rivers through the bridge archway. Before choosing this thesis topic, I took photos casually on my phone, mostly for myself and the occasional post on social media. I would look forward to the new formations of the confluence; even though my path was always the same, the adventure unfolded within the confluence itself. Once I committed to this research, my vision became more focused. I began carrying my DSLR, intentionally seeking various aspects of the confluence to photograph on my way to and from school.

This growing collection soon led me to reflect on the nature of digital photography itself. With digital photography, we are no longer constrained by the economic limits of film. This freedom allows us to document over a period of time and enables us to generate a series of photos at ease. Yet, with this abundance comes a new challenge: we can capture anything, but we must ask whether we are truly capturing, collecting, curating or simply just amassing data. When

[30] PARSONS, Glenn and CARLSON, Allen, 2024. Environmental Aesthetics. In : ZALTA, Edward N. and NODELMAN, Uri (eds.), The Stanford Encyclopedia of Philosophy [online]. Fall 2024. Metaphysics Research Lab, Stanford University. Retrieved from : https://plato.stanford.edu/archives/fall2024/entries/environmental-aesthetics/ [accessed 15 June 2025].
[31] Friday answers with a no and more in depth than what I am able to do within this thesis context. FRIDAY, Jonathan, 1999. Looking at Nature through Photographs. *Journal of Aesthetic Education*. Vol. 33, no. 1, p. 25. DOI 10.2307/3333733.
[32] SUMMA, Laura Di, 2022. Collecting What? Collecting as an Everyday Aesthetic Act. In : CHEYNE, Peter (ed.), *Imperfectionist Aesthetics in Art and Everyday Life*. Routledge.

digital photos are stored on our devices (mobile, computer or hard drives), they can easily become a “dark archive” where collections are forgotten or rarely accessed and enjoyed.[33] This kind of “digital forgetting” mirrors the way we relate to nature in contemporary life: ever-present, yet too often overlooked.

It also becomes difficult to decide which photographs are “the best.” In this exercise, by presenting the images as a collection that viewers can pick up and rearrange, I invite them into the artistic process itself. As Thi Nguyen notes, “we often cherish the making of aesthetic judgements, for they require us to put our own efforts into it.”[34] I intentionally give agency to the viewer, allowing them to organize the collection according to their own sensibility and invite them to work on their aesthetic judgement. In doing so, the work not only deepens their aesthetic engagement with the photos but also with the rivers. This also mirrors the constant change of the environment itself—each interaction changes the top photo of each stack, leaving them different for the next person.

A specific aesthetic experience occurs when we see a set of photos as a collection. We can view the object in multiple instances and appreciate it across different time periods and points of view. Through repetition, certain visual qualities are amplified, creating rhythm and intensity that a single image cannot achieve. When organized thoughtfully, this accumulation becomes a powerful visual form. With each new image, we are given a new element that contributes to our overall aesthetic judgement of the object. This is evident in Instagram carousel images, which allow users to post a series of related photos, as well as in monolithic coffee table photo books that highlight one object, or a museum curating a collection. This can be extended to a series of photos of the same subject matter in nature. It’s the diversity and variation that draw us in.

This diversity of photos, I would argue, acquaints us with the landscape. This implies that we appreciate learning about the environment, whether it’s the changes within a season or the appearance of the water's surface at different times of day. As Hepburn puts it, "Nature is not a ‘given whole,’ nor indeed is knowledge about it".[35] This suggests that nature cannot be aesthetically experienced as a whole but rather individually through its parts. Necessarily, through the appreciation and coordination of its parts, it also implies a “cognitivist” view that we appreciate nature through knowledge about it.[36]

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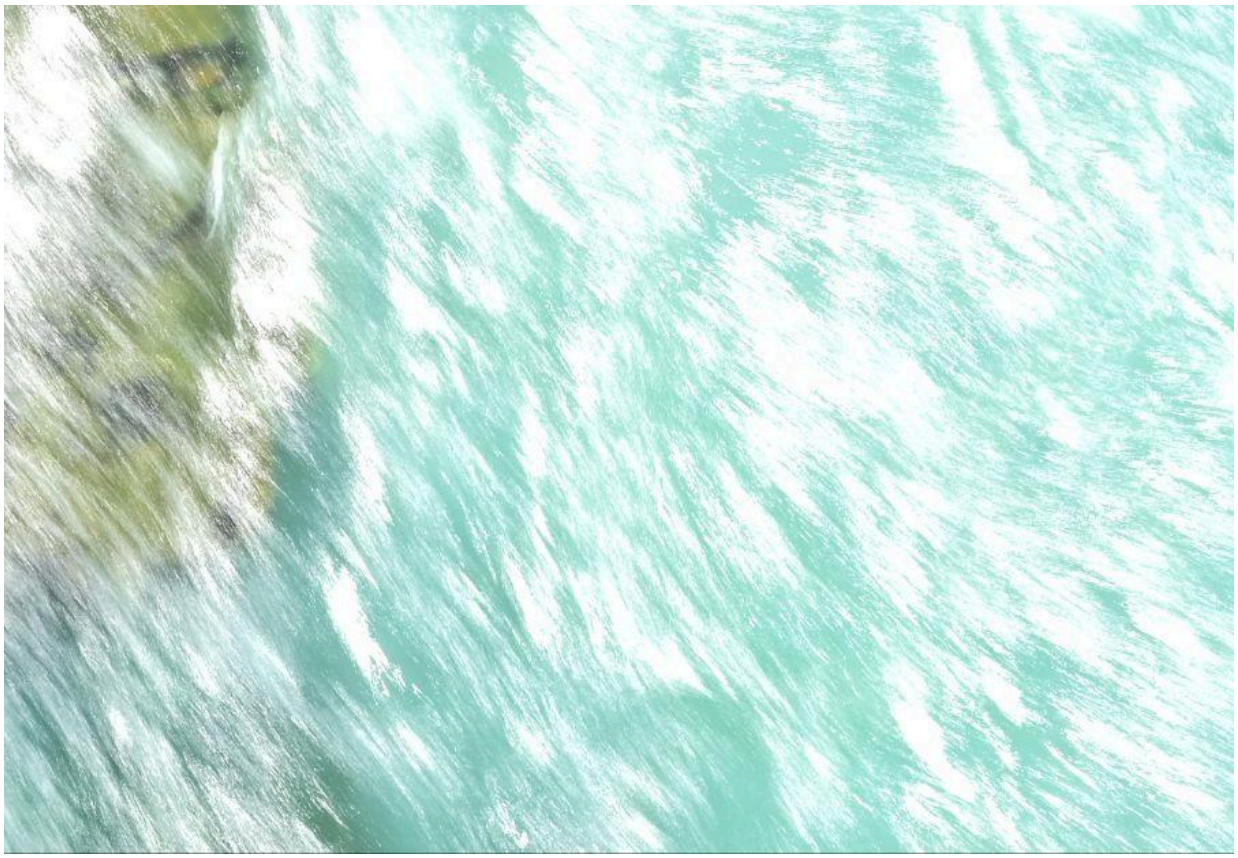
[33] CERONI, Andrea et al., 2015. To Keep or not to Keep: An Expectation-oriented Photo Selection Method for Personal Photo Collections. In : *Proceedings of the 5th ACM on International Conference on Multimedia Retrieval*, pp. 187–194. New York, NY, USA : Association for Computing Machinery. 22 June 2015. ICMR ’15. ISBN 978-1-4503-3274-3. DOI 10.1145/2671188.2749372.

[34] Author directly quotes Nguyen from ‘Autonomy and Aesthetic Engagement. SUMMA, Laura Di, 2022. Collecting What? Collecting as an Everyday Aesthetic Act. In : CHEYNE, Peter (ed.), *Imperfectionist Aesthetics in Art and Everyday Life*. Routledge.

[35] HEPBURN, Ronald, 2004. Contemporary Aesthetics and the Neglect of Natural Beauty. In: CARLSON, Allen and BERLEANT, Arnold, eds. The aesthetics of natural environments. Peterborough, Ont.; Orchard Park, NY: Broadview Press, pp. 49–66. ISBN 978-1-55111-470-5.

[36] PARSONS, Glenn and CARLSON, Allen, 2024. Environmental Aesthetics. In : ZALTA, Edward N. and NODELMAN, Uri (eds.), The Stanford Encyclopedia of Philosophy [online]. Fall 2024. Metaphysics Research Lab, Stanford University. Retrieved from : https://plato.stanford.edu/archives/fall2024/entries/environmental-aesthetics/ [accessed 15 June 2025].

Expressive Qualities



The preceding paragraphs may suggest that I believe in the transparency theory. Photographic transparency is a recurring topic in writings on photography, and although the theory is questionable—since it claims that we are actually looking at the very object in the photo—it continues to shape how we discuss the medium.[37] To briefly summarize the counterarguments to the transparency thesis: the bodily orientation argument claims that a photograph doesn't

[37] WALTON, Kendall L., 1984. Transparent Pictures: On the Nature of Photographic Realism. *Critical Inquiry*. Vol. 11, no. 2, pp. 246–277. DOI 10.1086/448287.

allow us to spatially locate the depicted object or orient ourselves around it as we would in real space. The optical discontinuity argument, on the other hand, draws on scientific reasoning, pointing out that the light emitted from the photographed object is altered by the medium of display—whether on a screen or on paper—thus breaking the direct connection between the viewer and the object.[38]

In *Looking at Nature through Photographs*, Jonathan Friday uses mirrors to support the transparency thesis. He states, “Mirror images have the same counterfactual dependence upon the appearance of the world that photographs do.”[39] In other words, mirrors and photographs operate similarly: if you were to wave at yourself in a mirror, the reflected image would change accordingly, just as a camera would capture that change in a photograph. Friday continues:

> Moreover, we treat mirror images as means by which we can see objects in the world that could not otherwise be seen given our position. For example, we can use mirrors to see what is behind us or around corners.[40]

Friday introduces mirrors to reinforce the transparency theory. He argues that they enable us to see things beyond our direct perspective. This idea opens an intriguing avenue for thinking about photography. Like mirrors, cameras can reveal what lies beyond our immediate position or attention. The notion of “blind spots” becomes a compelling concept, and I wonder what the camera renders visible that our eyes alone might miss?

[38] PINKAS, Daniel, 2024. Santayana at the Harvard Camera Club. *Limbo: boletín internacional de estudios sobre Santayana*. No. 44, pp. 5–41.
[39] FRIDAY, Jonathan, 1999. Looking at Nature through Photographs. *Journal of Aesthetic Education*. Vol. 33, no. 1, p. 25. DOI 10.2307/3333733.
[40] ibid.

One example is long exposure photography. This technique has the ability to capture motion and light over an extended period of time. In this photo, the aim is to document the aesthetic quality of confluence waves. While shimmering light offers a sense of movement in person, the naked eye cannot perceive the continuous, interwoven lines of water flowing in different directions. This distinctive and dynamic pattern is solely revealed and rendered by the photographic process.

Friday argues that the unique capability of photography lies in its power to isolate and capture nature's expressiveness, offering viewers an aspect of that experience they cannot attain through direct, unmediated engagement.[41] This goes beyond documentation and not presenting exactly what we see in person. We could say that this photo conveys a tranquil feeling due to the soft whisper-like waves and the calming blue-teal tones. But what exactly do we mean by "expressive"? According to Noël Carroll, this is how expression is understood generally and within the context of art:

> At root, all expression theories maintain that something is art only if it expresses emotions. "Expression" comes from a Latin word which means "pressing outward" —as one squeezes the juice out of a grape. What expression theories claim is that art is essentially

[41] FRIDAY, Jonathan, 1999. Looking at Nature through Photographs. *Journal of Aesthetic Education*. Vol. 33, no. 1, p. 25. DOI 10.2307/3333733.

> involved in bringing feelings to the surface, bringing them outward where they can be perceived by artists and audiences alike.[42]

Carroll goes into greater depth, but the key idea to take away is that something within the artist is transferred into the artwork, allowing audiences to perceive and extract that emotion—eliciting a corresponding feeling within themselves. However, since nature is not created by humans, how is it possible that we still experience emotional responses toward natural objects?

One might argue that the expressive qualities of a photograph stem from the depiction of a natural object, yet we also project our own feelings onto nature. For example, we call a tree a *weeping willow*. According to Hepburn, when we aesthetically contemplate nature, a *rapprochement* occurs between the viewer and the natural object—in other words, a sense of unity forms.[43] This is what we mean when we say "to be one with nature." For Hepburn, such unity emerges through a process of humanizing nature, attributing it human emotions.

Expressive contrast in a photograph also shapes our aesthetic experience. In design, we understand contrast as a key principle that helps us perceive and organize visual information. But what about in nature? For Hepburn, contrast in nature takes the form of a "paradoxical union" where opposing qualities coexist.[44] His example is a boulder tumbling down a hill: a massive, seemingly immovable object suddenly in motion. Witnessing this contradiction produces an aesthetic experience that captivates us precisely because it defies our expectations of how such a natural object should behave.

In viewing long-exposure photographs, we might experience a similar paradox. The soft teal tones of the converging waves convey tranquillity, yet the visible motion of the water introduces a sense of vitality and excitement. This suggests that we appreciate multiple aspects of nature simultaneously—and that when these qualities are captured in a photograph, they evoke our aesthetic appreciation of both the photo and the natural world it depicts.

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[42] CARROLL, Noël, 1999. Philosophy of art: a contemporary introduction. London : Routledge. Routledge contemporary introductions to philosophy. ISBN 978-0-415-15963-0.
[43] HEPBURN, Ronald, 2004. Contemporary Aesthetics and the Neglect of Natural Beauty. In: CARLSON, Allen and BERLEANT, Arnold, eds. The aesthetics of natural environments. Peterborough, Ont.; Orchard Park, NY: Broadview Press, pp. 49–66. ISBN 978-1-55111-470-5.
[44] HEPBURN, Ronald, 2004. Landscape and the Metaphysical Imagination. In: CARLSON, Allen and BERLEANT, Arnold, eds. The aesthetics of natural environments. Peterborough, Ont.; Orchard Park, NY: Broadview Press, pp. 127–140. ISBN 978-1-55111-470-5.

Fluvial Data

Scientistic Scenes

Attempts have long been made to translate what we find visually appealing into numbers. A simple example is the rule of thirds, where a composition is divided into nine equal parts by two horizontal and two vertical lines. By following these guides and positioning the subject at any intersection, the image becomes pleasing through the contrast between the empty space and the focal point. Proportion, ratio, and symmetry have likewise been subjects of fascination since antiquity, notably in the *Canon of Polykleitos*, as an effort to define the ideal proportions of the human body.[45] Beneath these systems lies a tension between perception and measurement and whether the experience of beauty can ever be fully captured by numeracy?

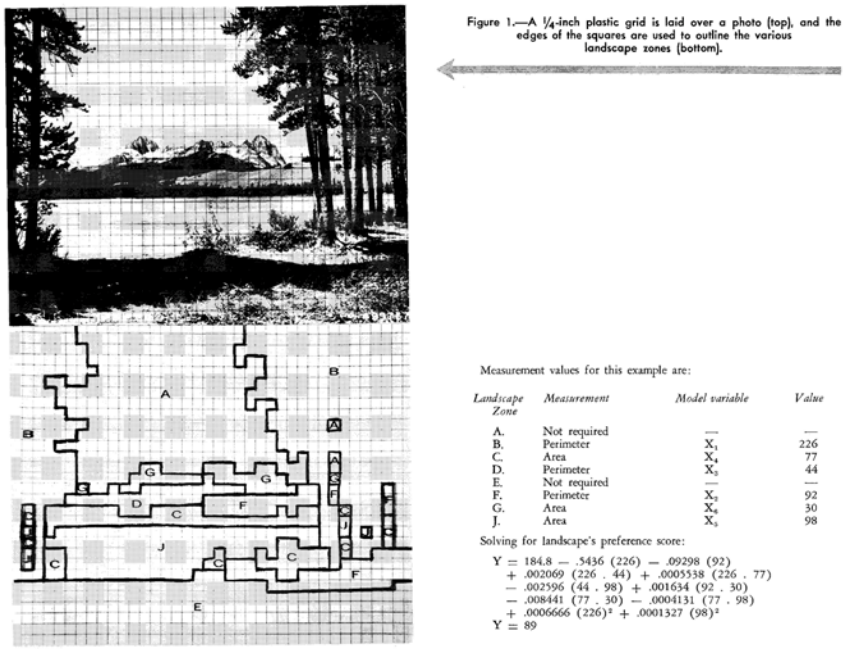


Figure 1.—A ¼-inch plastic grid is laid over a photo (top), and the edges of the squares are used to outline the various landscape zones (bottom).

Measurement values for this example are:

Landscape Zone	*Measurement*	*Model variable*	*Value*
A.	Not required	—	—
B.	Perimeter	X_1	226
C.	Area	X_4	77
D.	Perimeter	X_3	44
E.	Not required	—	—
F.	Perimeter	X_2	92
G.	Area	X_6	30
J.	Area	X_5	98

Solving for landscape's preference score:

$$Y = 184.8 - .5436\ (226) - .09298\ (92) + .002069\ (226 \cdot 44) + .0005538\ (226 \cdot 77) - .002596\ (44 \cdot 98) + .001634\ (92 \cdot 30) - .008441\ (77 \cdot 30) - .0004131\ (77 \cdot 98) + .0006666\ (226)^2 + .0001327\ (98)^2$$

$$Y = 89$$

46

The notion of disinterestedness invites us to view beauty objectively; therefore, the question of whether beauty itself can be determined scientifically—a discipline grounded in objectivity—becomes one worth considering. A study conducted in 1969 by the Forest Service of the U.S. Department of Agriculture tried to determine which landscapes people preferred. They did so by showing participants sets of photos and had them rank seven landscape images.

[45] TOBIN, Richard, 1975. The Canon of Polykleitos. American Journal of Archaeology. Vol. 79, no. 4, pp. 307–321. DOI 10.2307/503064.

[46] SHAFER, E. L. and MIETZ, J., 1970. It Seems Possible to Quantify Scenic Beauty in Photographs. . Upper Darby, PA : USDA Northeastern Forest Experiment Station.

The researchers quantified the image by dividing the landscape into 8 weighted zones.[47] The top-ranked image featured a combination of a waterfall, stream, and lake. Perhaps the most obvious flaw in this study is the fact that participants are viewing photos rather than seeing the actual landscape. The authors of the paper are aware and state, “research is needed to test how well preferences for photos of landscapes compare with preferences for those same landscapes when viewed on the ground.”[48] In other words, to test and confirm the study’s results, the researchers would need to observe how the same participants rank landscapes when experiencing them in person. This would be an interesting follow-up study, though perhaps a considerable undertaking, since nature is in constant flux.

Komar, Vitaly and Melamid, Alexander *Most Wanted Paintings* 1994

USA

Artists Vitaly Komar and Alexander Melamid conducted a similar study in the 1990s to determine what people wanted in a painting.[49] They surveyed the American public, using the results of a poll to inform their painting choices. The findings revealed that the public preferred blue landscapes. When the survey was conducted in other countries, it yielded remarkably similar results.

[47] See study to view the details of each zone and how they calculated the results. ibid.
[48] ibid.
[49] KOMAR, Vitaly et al. (eds.), 1999. Painting by numbers: Komar and Melamid’s scientific guide to art. 1. paperback printing. Berkeley, Calif. : Univ. of California Press. ISBN 978-0-520-21861-1.

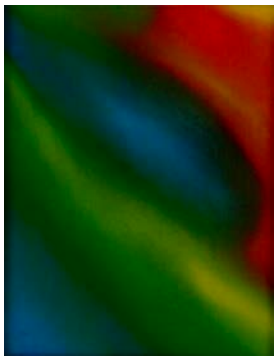
China

Denmark

Finland

France

One might be skeptical of the project itself, but the point was never simply to paint what people want in a painting. One of the survey questions asked, “If you had unlimited resources and could commission your favorite artist to paint anything you wanted, what would it be?”[50] The most common answer, perhaps unsurprisingly, was family portraits. Additionally, Holland was the only country to prefer abstract paintings which also suggests that we cannot have universal truths when it comes to aesthetic preferences. This data, however, was ignored in favour of the project’s broader objective: to identify what the public desires collectively, rather than what individuals want personally.



Holland

[50] ibid.

There was still an element of interpretation in how Komar and Melamid chose to realize the final outcome. Although the end result took the form of a painting, it can also be understood as a kind of data visualization—a central theme of their project, which was based on a public poll. In their travelling exhibition *The People's Choice*, they also displayed three-dimensional data visualizations alongside the paintings. These data visualizations had a significant impact on their assistant at the time. In an interview, Komar remarked:

> [O]ur assistant, a young architect, said that in his view these graphs are the most aesthetic part of the show, that behind beauty and design of these abstract works, we see some truth, some actual fact of life.[51]

Here, instead of applying numbers to determine what is aesthetically pleasing, the numbers have turned into an aesthetic object through visualizations. The paintings, data visualization and exhibition are all means to answer the question that Komar and Melamid set out, which is, what do people want in a painting? It appears that Komar and Melamid have found a solution to their problem by employing scientific methods. However, their approach aligns with scientism, the idea that science can solve all problems. As described in *Scientism: Prospects and Problems*, scientism is:

> [T]he view that only science can provide us with knowledge or rational belief, that only science can tell us what exists, and that only science can effectively address our moral and existential questions. As Alex Rosenberg says, scientism "is the conviction that the methods of science are the only reliable ways to secure knowledge of anything," the view that "science provides all the significant truths about reality".[52]

Turning to science and science alone, we might claim to objectively understand everything there is to know about ourselves, the world, and even aesthetics. In the field of environmental aesthetics, this view is reflected in the cognitive approach, particularly in Carlson's Natural Environmental Model (NEM).[53] According to this model, just as we rely on art history and art theory to appreciate artworks properly, we should turn to natural history and the natural sciences to appreciate nature on its own terms. Carlson argued that understanding nature through scientific categories allows us to meet it as it truly is:

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[51] ibid.
[52] RIDDER, Jeroen de, PEELS, Rik and WOUDENBERG, René van (eds.), 2018. *Scientism: prospects and problems*. New York, NY : Oxford University Press. ISBN 978-0-19-046277-2.
[53] PARSONS, Glenn and CARLSON, Allen, 2024. Environmental Aesthetics. In : ZALTA, Edward N. and NODELMAN, Uri (eds.), *The Stanford Encyclopedia of Philosophy* [online]. Fall 2024. Metaphysics Research Lab, Stanford University. Retrieved from : https://plato.stanford.edu/archives/fall2024/entries/environmental-aesthetics/ [accessed 15 June 2025].

> [A]s in art appreciation, in these cases, to appropriately appreciate the objects or landscapes in question aesthetically—to appreciate their grace, majesty, elegance, charm, cuteness, delicacy, or "disturbing weirdness"—it is necessary to perceive them in their correct categories. This requires knowing what they are and knowing something about them—in the cases in question, something of biology and geology. In general, it requires the knowledge given by the natural sciences.[54]

This comparison to art and using it as an analogy is criticized by Glenn Parson:

> [A] given natural thing will fall under a myriad of different categories, some more general and some more specific. In the case of art categories, it seems natural to employ the more specific categories, as when we view cubist portraits as a certain kind of work (cubist, say), rather than simply as paintings in some more generic sense. Presumably, we do this, in large part, because this is how their creators intended them to be viewed. But in the case of nature, the matter is less clear: can we view a Venus Fly-Trap merely as a plant, or ought we view it as a very specific kind of plant (carnivorous), with specific needs, traits and environment?[55]

The challenge here is that we can view art in a specific way due to context and the artist's intentions. To expand on the cubist painting, we wouldn't judge it from a contemporary lens because the painting was not created during this time (although, our knowledge about art now does influence how we talk about art in the past). With nature, there are many different disciplines to approach it as Glenn has pointed out, so then how do we choose which natural science to apply our aesthetic judgement?

[54] CARLSON, Allen, 2005. *Aesthetics and the Environment*. 1. ISBN 978-1-134-62388-4.
[55] PARSONS, Glenn, 2007. The Aesthetics of Nature. *Philosophy Compass*. Vol. 2, no. 3, pp. 358–372. DOI 10.1111/j.1747-9991.2007.00073.x.

Masai Mara National Reserve, Kenya
Photo by David Clode on Unsplash, https://unsplash.com/fr/photos/arbres-a-feuilles-vertes-92MgFhlWD-8

One possible approach is to draw on behavioural ecology, which examines the evolutionary foundations of animal behaviour. As Steven Pinker notes in *How the Mind Works*:

> The biologist George Orians, an expert on the behavioral ecology of birds, recently turned his eye to the behavioral ecology of humans. With Judith Heerwagen, Stephen Kaplan, Rachel Kaplan, and others, he argues that our sense of natural beauty is the mechanism that drove our ancestors into suitable habitats. We innately find savannas beautiful, but we also like a landscape that is easy to explore and remember, and that we have lived in long enough to know its ins and outs.[56]

To illustrate this point, an experiment was conducted with American children and adults who were shown various landscapes and asked to indicate how much they would like to visit or live in the depicted places. No one liked deserts and rainforest but everyone preferred savannas.[57] Savannas have qualities that allow us to survey the land at a glance for predators and for resources, while offering safety. Pinker notes that we don't have a "mystical longing for ancient

[56] PINKER, Steven, 1999. *How the mind works*. Nachdr. London : Penguin. Penguin books. ISBN 978-0-14-024491-5.
[57] ibid.

homelands”[58] but it does suggest that we are not only drawn to a landscape because of its aesthetic qualities, but for their functionality.

Tropical Savanna
Taita Hills Wildlife Sanctuary, Kenya

Photo by Christopher T Cooper, CC BY 3.0, https://commons.wikimedia.org/w/index.php?curid=20213028

Tree Savanna
Tarangire National Park, Tanzania

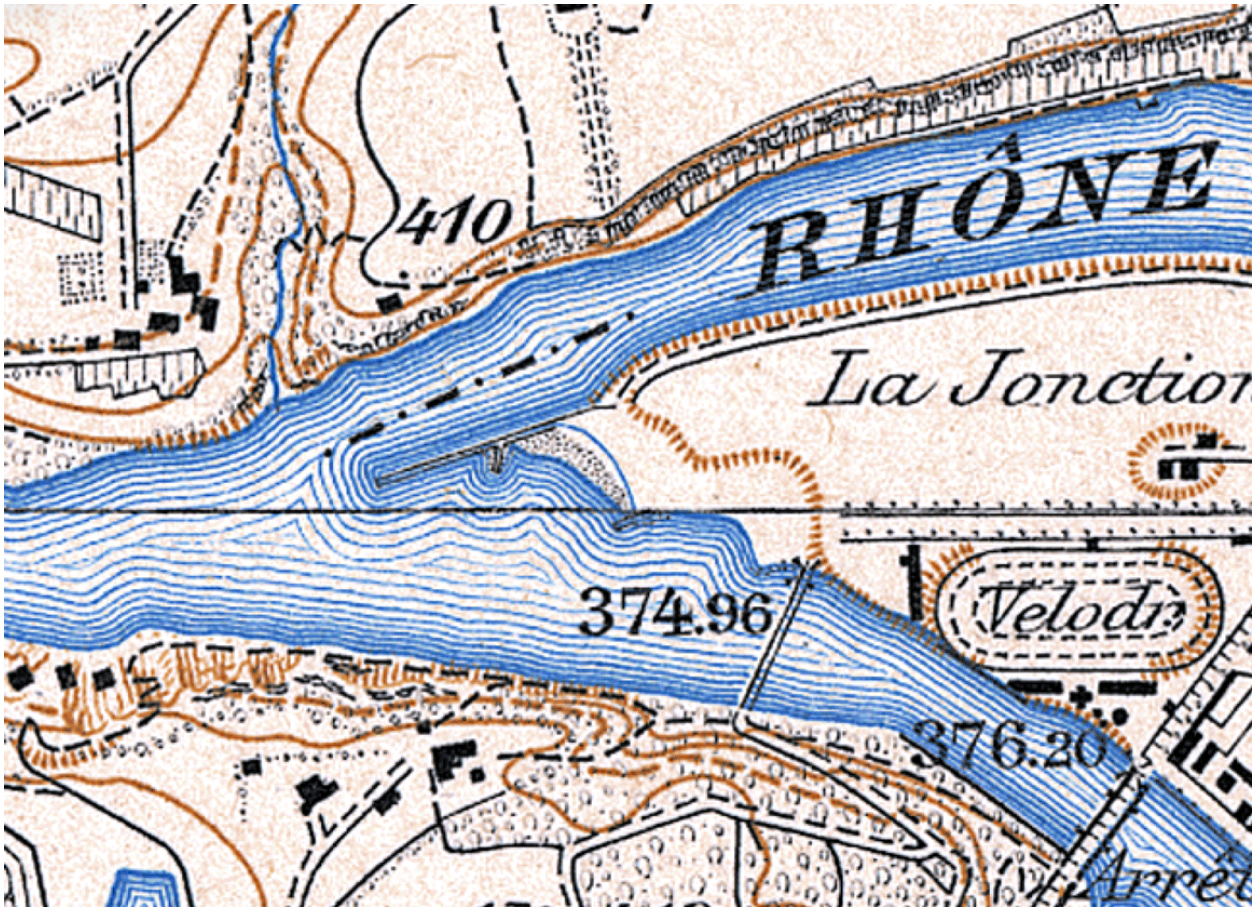
Photo by ProfessorX - Own work, Public Domain, https://commons.wikimedia.org/w/index.php?curid=282227

Pinker goes on to say, “The geographer Jay Appleton succinctly captured what makes a landscape appealing: prospect and refuge, or seeing without being seen.” When I think about my own attraction to the confluence and the vantage point from which I experience it, it’s from high up on the viaduct, where I have a bird’s-eye view of the rivers. In the near distance lies the city, and beyond that, the mountains. Perhaps it’s the openness where I can view everything—similar to that of a savanna—that draws me in. There’s also something about being elevated,

[58] ibid.

partly hidden, where people below can't easily see me. This particular vantage point allows me to survey the landscape at a glance, much like how a map offers an overview of the terrain.

Mapping the Land



Map of Geneva, 1988, https://map.geo.admin.ch/

Mapping can help us make sense of the world around us, but at what cost? We take 3D space and render it 2D through translation and distill only the relevant information for the viewer so that we can orient ourselves on the map, but also in the actual 3D space. Of course we can see challenges arise from this and as Alan Henrikson aptly noted, "All maps lie flat; all maps lie".[59] One reason is because we are representing the world in a 2-dimensional space and depending on the objective of the map, the cartographer chooses which aspect—shape, area, distance or direction (acronym: "sadd")—to focus on.[60] To incorporate at least three fundamental principles

[59] HENRIKSON, Alan K., 1979. All the World's a Map. *The Wilson Quarterly (1976-)*. Vol. 3, no. 2, pp. 164–177.

[60] A few projection types are: "equal-area projection, used by atlases, which respects areas; conformal projection, used by topographic and marine maps, which preserves angles; aphylactic projection, which

of a map, and because of the complex nature of the world, it's inevitable that a fourth will be lost.[61]

Beyond the technical aspect and the challenges they pose, there are also biases from the cartographer. Ruben Pater states in *The Politics of Design*:

> The notion that maps provide an objective or scientific depiction of the world is a common myth. The graphic nature of maps simplifies reality, giving makers and users a sense of power without social and ecological responsibilities.[62]

To add to Pater, it's not only a sense of power, but according to the critical framework developed by Peter A. Hall and Patricio Davila in *Critical Visualizations: Rethinking the representation of data*, it's also how "data assemblages enhance and maintain the exercise of power".[63] A classic example is the Mercator map projection, which emphasizes the Northern Hemisphere by excluding the poles and visually lowering the equator.[64] This distorts our perception of the world by exaggerating the scale of landmasses in the upper hemisphere. The effect isn't only due to size distortion, but also to our tendency to interpret elements placed at the top of an image as more important within a hierarchical structure. In doing so, the projection also reinforces historical power structures rooted in European colonialism.

The last issue I'll address is the idea that the cartographer renders what is out of sight. Henrikson observed:

> Unlike a photograph or a painting, a map represents its subject schematically. Because the areas it shows are too large to be seen in their entirety, and may include regions that have never been explored, some principle of extrapolation—from the known to the unknown—is needed.[65]

This means that when a cartographer creates a map, we might assume they have personally explored every area they depict. In practice, this is impossible—not only because of the sheer scale of the territory, but also because some regions may be inaccessible. As a result, the

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keeps the distances on the meridians and constitutes a compromise between area and shape." Original translation: la projection équivalent, utilisée pour les atlas, qui respect les surfaces ; la projection conforme, utilisée pour les cartes topographiques et marines, qui conserve les angles ; la projection aphylactique, qui garde les distances sur les méridiens et constitute un compromis entre surface et forme. KUGLER, Jolanthe and LONGFELLOW, Scott, 2023. *Objectif Terre – Le design de notre planète*. Les presses du réel and le MUDAC. ISBN 978-2-37896-447-4.

[61] HENRIKSON, Alan K., 1979. All the World's a Map. *The Wilson Quarterly (1976-)*. Vol. 3, no. 2, pp. 164–177.

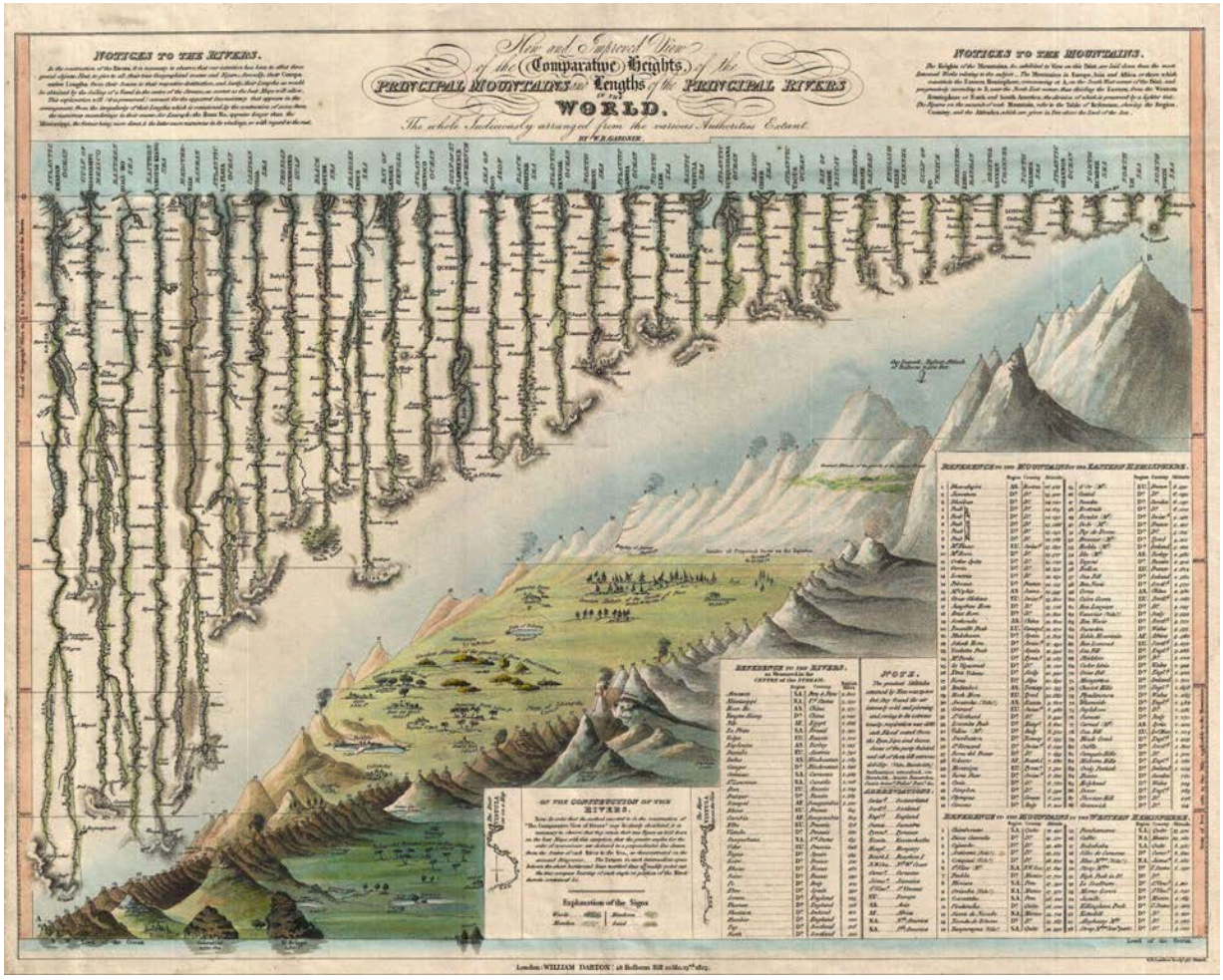
[62] PATER, Ruben, 2021. *The politics of design: a (not so) global manual for visual communication*. 7th printing. Amsterdam : BIS Publishers. ISBN 978-90-6369-422-7.

[63] HALL, Peter A., 2022. *Critical Visualization: Rethinking the Representation of Data*. London : Bloomsbury Publishing USA. ISBN 978-1-350-07723-2.

[64] ibid.

[65] HENRIKSON, Alan K., 1979. All the World's a Map. *The Wilson Quarterly (1976-)*. Vol. 3, no. 2, pp. 164–177.

cartographer must rely on what is already known through exploration and then extend their knowledge, using the logic and conventions of the mapping system, to imagine how the unknown areas should appear.



Darton and Gardner Comparative Chart of World Mountains and Rivers
1823
29.21 x 36.83 cm

As shown, maps are problematic because they reflect technical limitations, the cartographer's biases, and the tendency to depict unknown areas as if they were fully known. In addition, they attempt to fix in place landscapes that are constantly changing. Geography illustrates this instability through the coastline paradox: the edges of landmasses can never be precisely measured because coastlines, rivers, and other bodies of water continuously shift over time.[66] Yet this did not prevent Darton and Gardner from producing their *Comparative Chart of World Mountains and Rivers*. While it's absurd to depict rivers linearly as if it's a bar chart, the goal

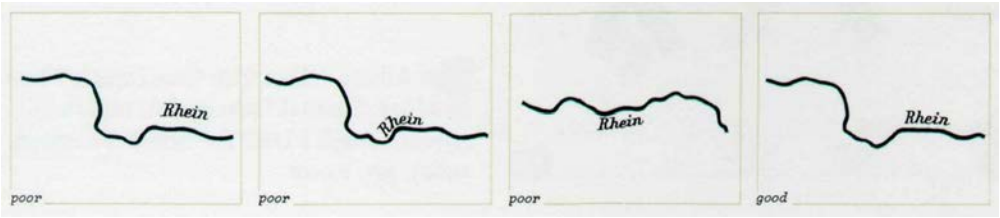
[66] DHANESHA, Neel (host). 2025. Solve me a river: Unexplainable [audio podcast episode]. In: Unexplainable. Vox Media Podcast Network ; 29 October 2025. Available from: https://open.spotify.com/episode/0QT1r24qlDNYQNqJNUuN6L?si=fdf7a4b8797d4bb6. [Accessed: 14 November 2025].

isn't accuracy. The layout offers a quick, comparative sense of length, while the precise measurements remain available in the accompanying table. The visualization functions as a comparative display of rivers, highlighting how we perceive their relative sizes.

When it comes to maps, size inevitably plays a role because of the translation of scale, but what other qualities should we attend to, and how might they shape our aesthetic experience of maps and in extension, nature? In *Envisioning Information*, Edward Tufte introduces the notion of "flatland" to describe how the vibrancy and complexity of the living world become compressed into two-dimensional diagrams:

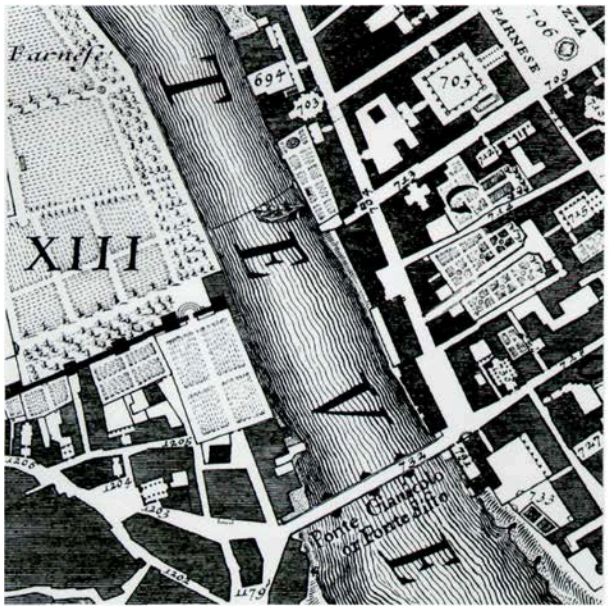
> All communication between the readers of an image and the makers of an image must now take place on a two-dimensional surface. Escaping this flatland is the essential task of envisioning information—for all the interesting worlds (physical, biological, imaginary, human) that we seek to understand are inevitably and happily multivariate in nature. Not flatlands.[67]

Tufte's interventions are relatively modest, grounded in a commitment to representing information as accurately and legibly as possible by offering practical strategies. For example, positioning labels so they follow the flow of a river while avoiding awkward gaps, or adjusting the shading of river lines to create clear contrast with surrounding landforms and typography.[68]

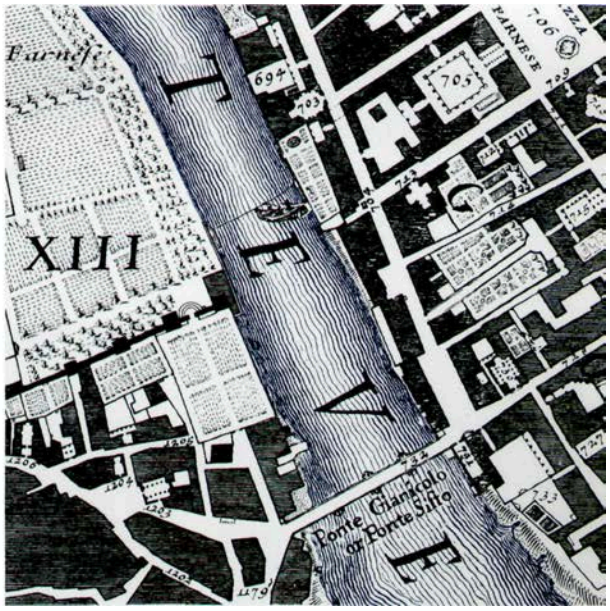


Tufte shows this example from "Positioning Names on Maps" by Eduard Imhof.

[67] TUFTE, Edward R. (ed.), 2013. *Envisioning information*. 14. print. Cheshire, Conn : Graphics Press. ISBN 978-0-9613921-1-6.
[68] ibid.



Map of Rome by Giambattista Nolli, 1748

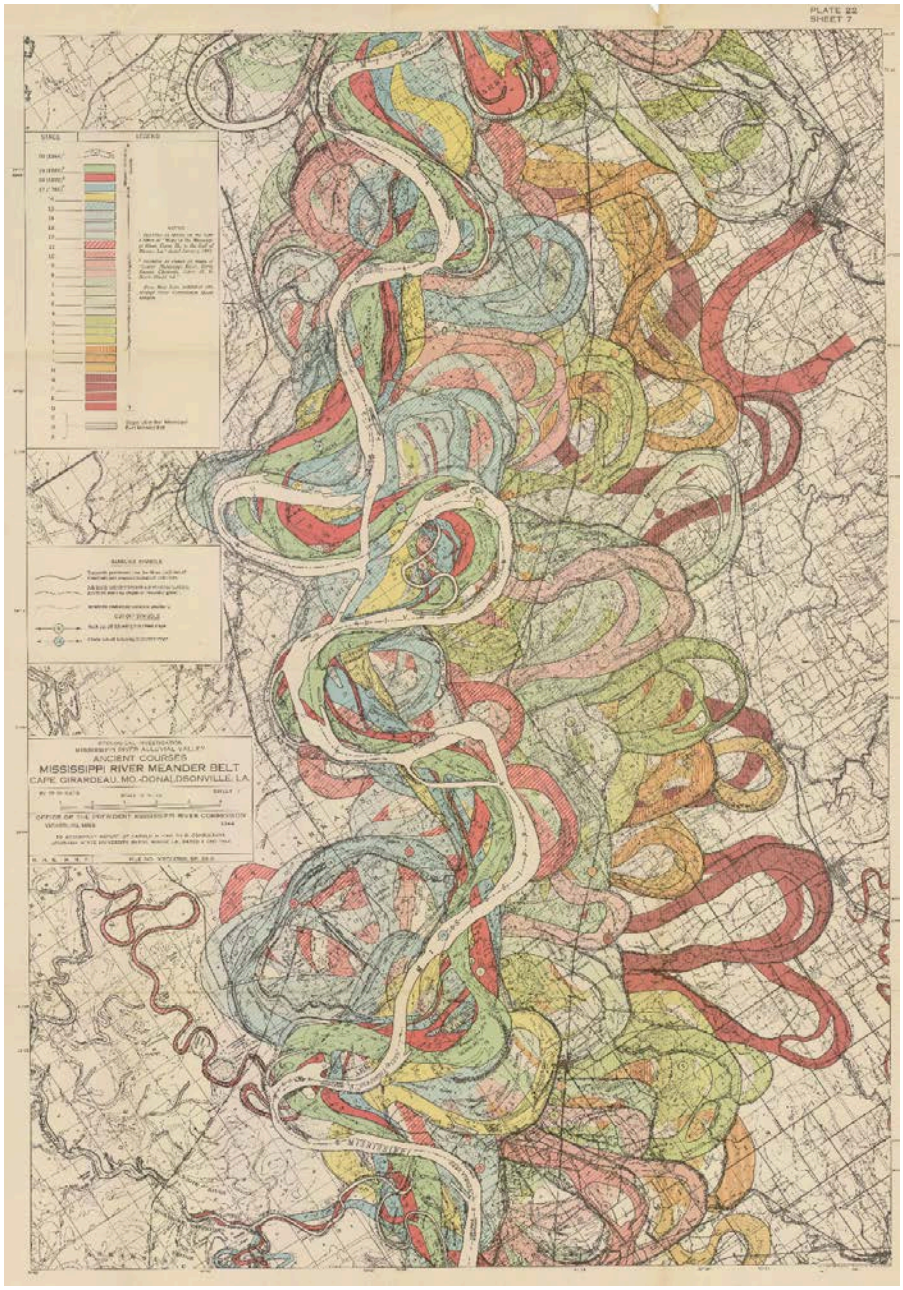


Tufte Redesign

Tufte considers the Tevere River to be a tranquil area, but the use of black linework against dark surroundings—undercuts this sense of calm. Still, it may be a stretch to expect a map like this, even with adjusted shading, to convey tranquility when its primary purpose is to represent the city of Rome rather than evoke an atmosphere. Moreover, the dense shading of the river lines creates a subtle three-dimensional texture, more reminiscent of tree-bark illustration than of a serene waterscape.

While Tufte's interventions are modest, the concept of "flatland" and trying to escape it, is worth considering further. When Harold Fisk, a geologist and cartographer, working for the US Army Corps of Engineers, this is what he had in mind: to explore the ever shifting nature of the lower Mississippi River through time and space.[69] To do this, he separated the river's movements into different time periods, each represented by a distinct colour. His maps were informed by historical cartographic records, aerial photography, and geological studies of the terrain.[70] The purpose of these meandering maps was to contribute to a government report. Fisk could have chosen to produce conventional "objective" maps, yet he opted for a more interpretive approach. Whether this choice stemmed from personal curiosity or from an awareness of the inherent problems of cartography, his work suggests a desire to honour the river's dynamic, living qualities rather than freeze it into a fixed form. This interpretation allows us to appreciate both the map's novel method and the river's influence on the landscape.

[69] Ancient Courses: Harold Fisk's Meander Maps of the Mississippi River (1944), *The Public Domain Review* [online]. Retrieved from : https://publicdomainreview.org/collection/maps-of-the-lower-mississippi-harold-fisk/ [accessed 14 November 2025].
[70] ibid.



Harold Fisk
Meander Map of
Mississippi River
1944
Plate 22, Sheet 7

https://biotech.law.lsu.edu/climate/mississippi/fisk/plate_22-7.pdf

Although the Mississippi River appears to have shifted course on its own, many of its changes were driven by European settlers, who reshaped the landscape by digging new channels, clearing logjams, and installing floodgate systems.[71] These interventions point to a broader issue of land control and our separation from nature, especially when considering the context in which they were produced—namely, a government report on "the nature and origin of the Alluvial Valley of the Lower Mississippi River."[72] As Vanessa de Oliveira Andreotti notes, "The first thing that separability does is that it turns the land, in its broader sense, into property."[73] Her observation demonstrates how from a colonial perspective, nature has been treated as something to be owned, managed, and controlled.

In *Imagine*, authors François et al. quote Alfred Korzyski, "the map is not the territory" and proceed to pose a series of questions:

> What landscapes await beyond our vision? What relationships remain uncharted? What ways of knowing lie just beyond our grasp?[74]

To address these questions, we might turn to psychogeographic maps as a way to extend our relationship to the environment. As Merlin Coverley notes, "psychogeography, as the word suggests, describes the point at which psychology and geography collide, a means of calibrating the behavioural impact of place."[75] In essence, it considers how environments affect our mood and how we engage in a space. The concept has roots with the Situationist movement in France, where wandering and drifting without a destination because a method for re-orienting oneself within the urban landscape and cultivating personal personal connections to place.[76]

This approach inspired Exercice #4: Arpentages in *Exercise d'Observation* by Nicolas Nova, in which the readers are encouraged to observe an environment through drifting and attentive noticing. Nova suggests focusing on objects, people, smells or sounds and then creating a map based on those observations.[77] A similar method informed an exercise given by Sabrina Calvo in our Media Design program during a virtual-reality workshop. Calvo's goal was to have us deepen our awareness of the environment so that we could design virtual spaces with greater sensitivity.

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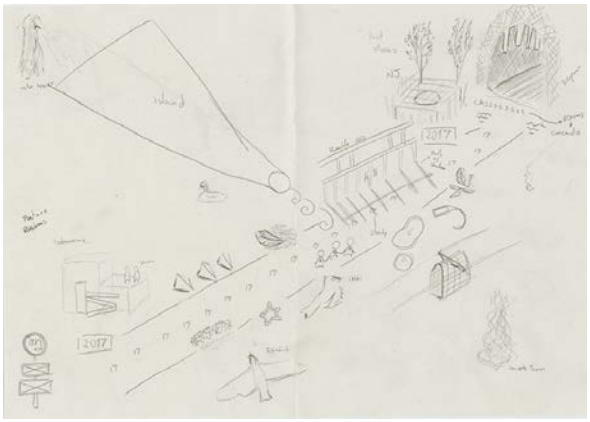
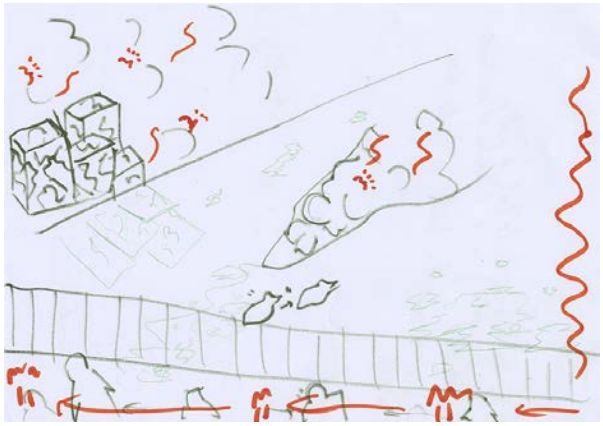
[71] ibid.
[72] ibid.
[73] FRANÇOIS, Laura et al. (eds.), 2025. *Imagine: embracing chaos and possibility in a planetary emergency*. 1st edition. Karlsruhe : Slanted Publishers UG (haftungsbeschränkt). ISBN 978-3-948440-89-3.
[74] ibid.
[75] COVERLEY, M., 2018. *Psychogeography* [online]. Oldcastle Books. ISBN 978-0-85730-270-0. Retrieved from : https://books.google.ch/books?id=QyxHDwAAQBAJ
[76] SADLER, Simon, 1998. *The situationist city*. Cambridge (Mass.) London : the MIT press. ISBN 978-0-262-19392-4.
[77] NOVA, Nicolas, 2022. *Exercices d'observation: dans les pas des anthropologues, des écrivains, des designers et des naturalistes du quotidien*. Paris : Premier parallèle. La vie des choses. ISBN 978-2-85061-141-4.

We carried out the exercise by walking back and forth along the Viaduc de la Jonction twice without any technology, taking only mental notes. Moving slowly, we tried to remain fully attentive to the surroundings. Afterwards, we went down toward the Rhône, near the cliffside, where a small rocky beach offered a place for focused listening. Calvo guided us to close our eyes and attend to the layers of sound—from the waves on the river to the incessant metallic pounding of machinery across from us. Afterwards, we went back to the classroom to produce our maps.

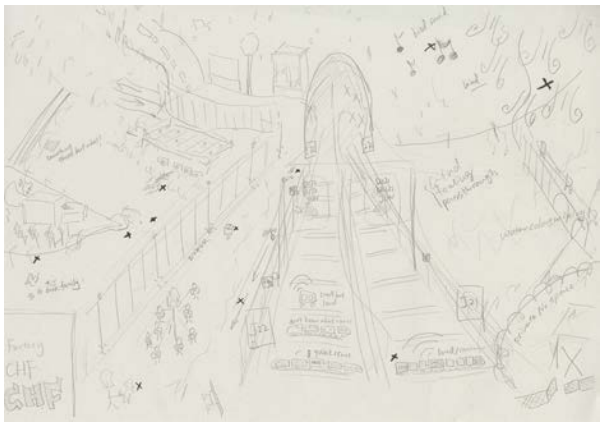
Ayoub Azzouzi



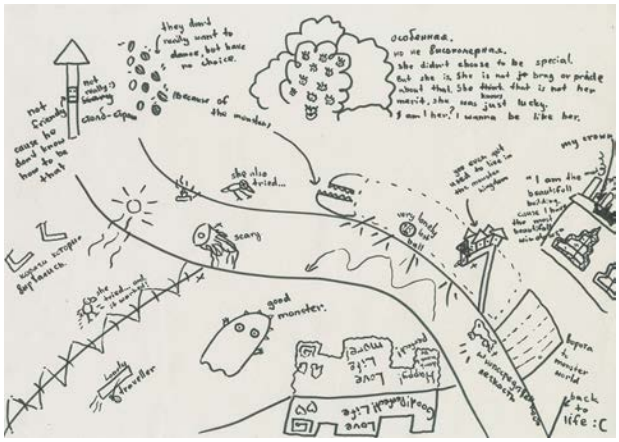
Karina Wolff



Lise Mendes



Liuliu Zhu



Polina Fihman

Tara Hächler

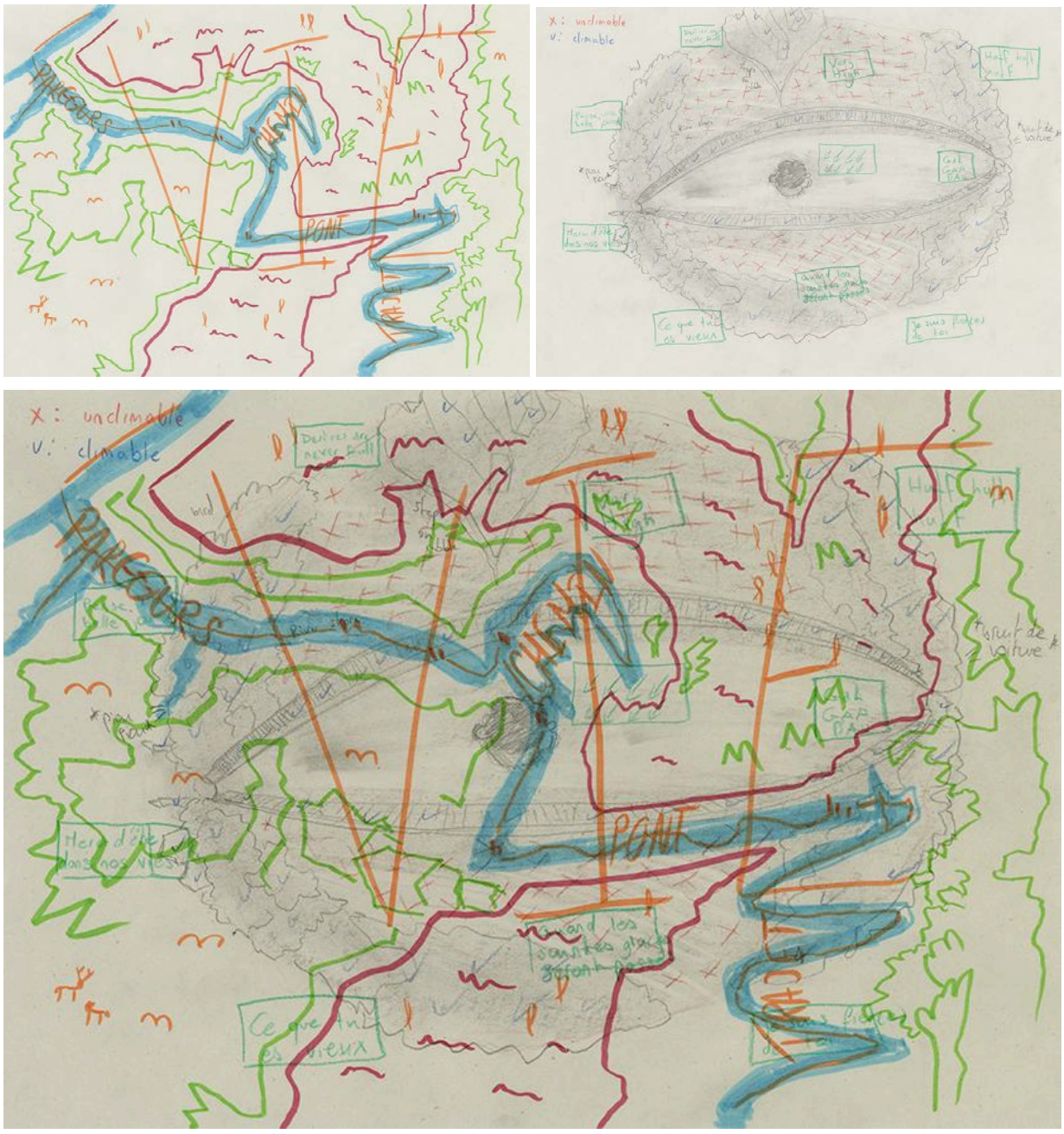
What I found remarkable in the maps produced by my peers was the diversity of perspectives. Not everyone grew up in Geneva or knew the location. For some, it was their first encounter; for others, like Antonin Ricou and I, it was familiar terrain. Yet even as a regular visitor, I discovered new details—such as noticing cargo train instead of the passenger train I normally see. It was also nice to share a collective moment of seeing a geese go upstream and then fly back downstream.

Since each person notices different things and brings a uniquet aesthetic sensibility, to resulting maps inevitably diverged from one another. The purpose wasn't legibility, but cultivating a personal relationship with the environment. Thomas Heyd, critiquing Carlson's natural environmental model, observes:

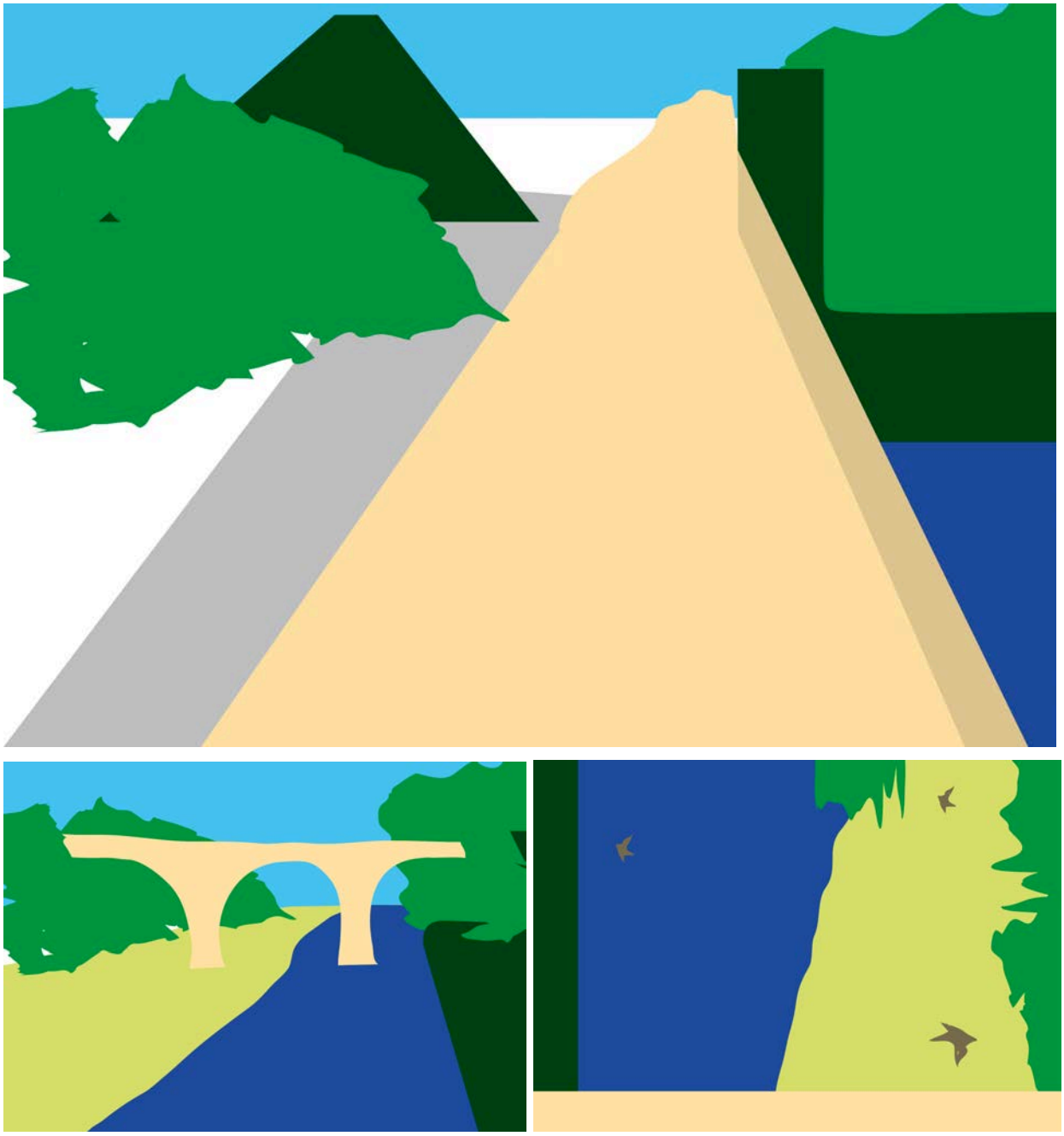
> [S]cientific knowledge may be neutral, or even harmful, to our aesthetic appreciation of nature, because it directs our attention to the theoretical level and the general case, diverting us from the personal level and particular case that we actually need to engage.[78]

If we had been instructed to focus on scientific or cartographic accuracy to produce a legible map, then we might have missed the immersive, attentive experience the exercise encouraged. At the same time, allowing each participant to approach the task in their own way fosters a stronger personal connection to the environment, and consequently a deeper appreciation, since we are more likely to recall what is personal than what is abstract or general.

[78] HEYD, T., 2001. Aesthetic Appreciation And The Many Stories About Nature. *The British Journal of Aesthetics*. Vol. 41, no. 2, pp. 125–137. DOI 10.1093/bjaesthetics/41.2.125.

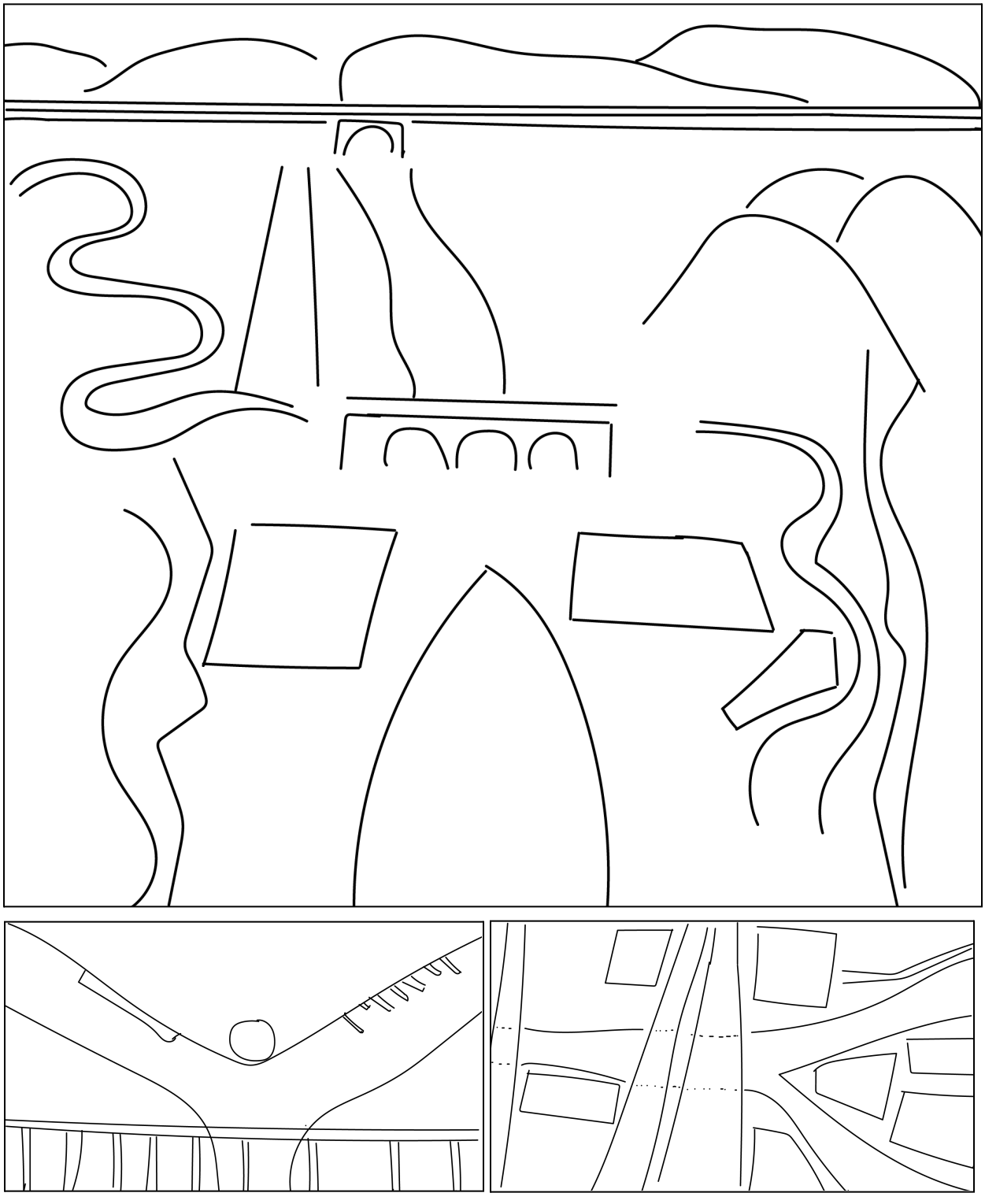


Chakir Ali
Two maps are designed to overlay one another to create a complete reading

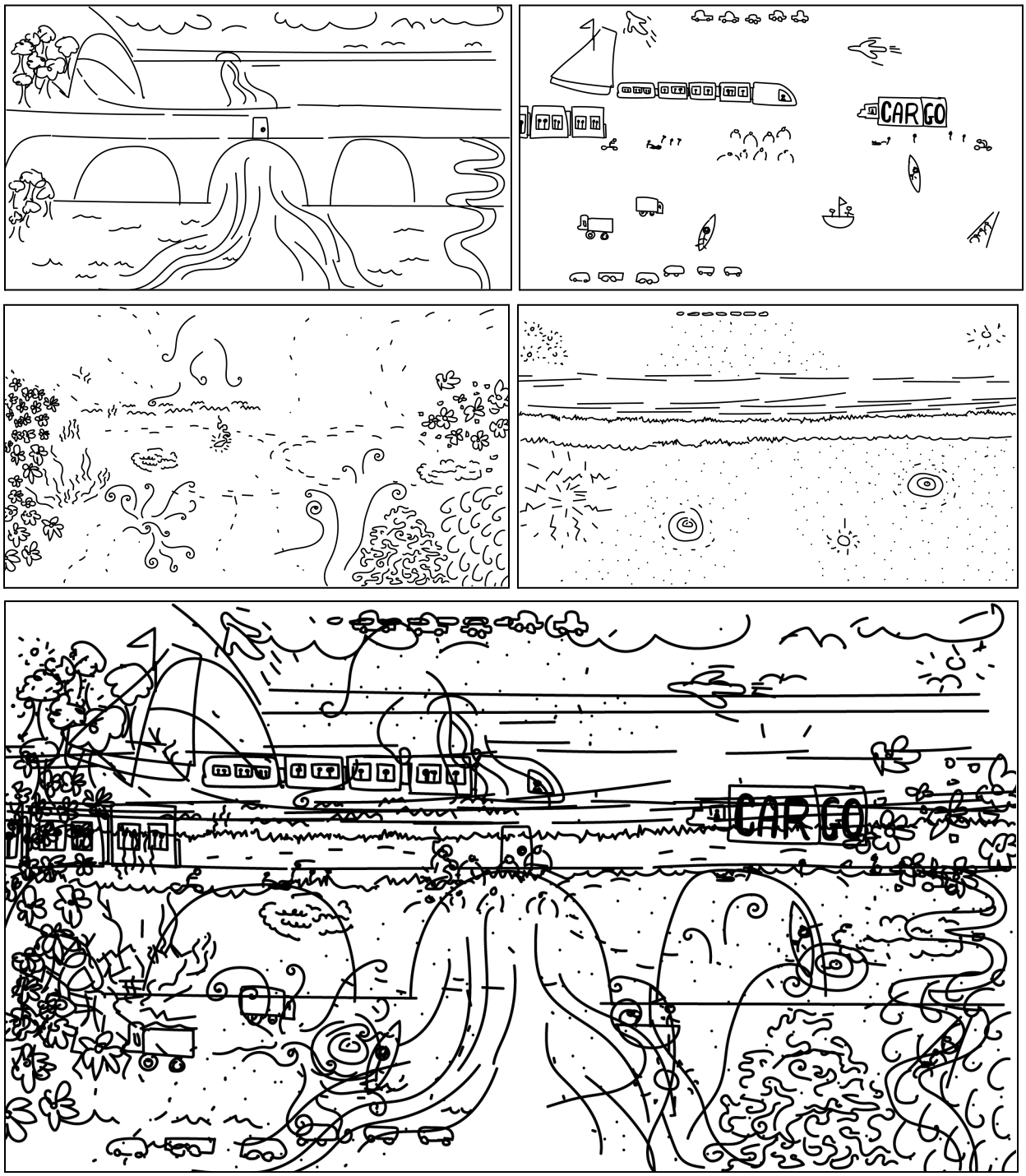


Antonin Ricou
Illustrations

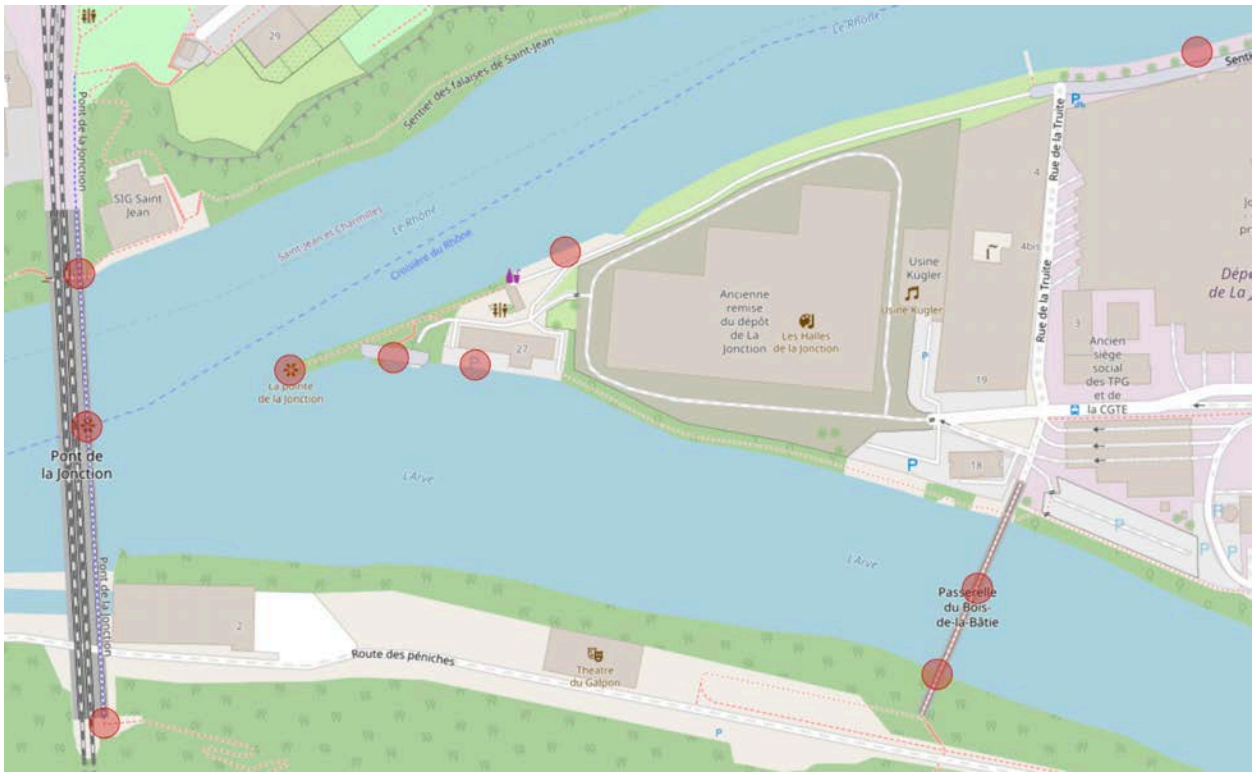
Similar from Ricou's approach, I created a series of simple illustrations to reconstruct the location from multiple viewpoints and to draw on the cartographic language that reduces a place to lines. My aim was to identify and depict the landmarks that remained vivid in my memory—such as the viaduct, the rivers, the distant mountains, and the surrounding buildings.



From there, I created several maps based on different categories—landmarks, vehicles and people, odours, and sounds. I tried to recall each element as vividly as possible so that I could map them accordingly. The aim was to follow Ali's approach, in which the maps are designed to overlay one another to create a holistic reading. When layered, these maps reveal the density and disorder of the environment, conveying something closer to the chaotic feeling of nature.

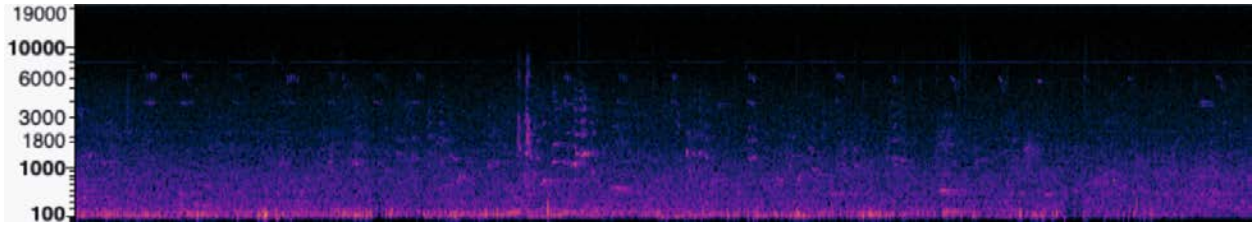


Of course, going through the exercise and producing a visual output of my own was satisfying. But it also sharpened my observation skills and deepened my recollection of the location. Each time I pass by now, I find myself looking for new details rather than becoming hyper-focused on the confluence alone.



To extend the sound map and move beyond the purely visual, I also recorded the soundscapes of La Jonction at different times of day and uploaded the field recordings to Aporee, a platform that hosts environmental sound recordings from around the world. According to Bernie Krause, a pioneer of soundscape ecology, these sounds can be grouped into three categories: biophony, the sounds of living organisms such as birds or dogs; anthropophony, sounds produced by humans; and geophony, non-biological natural sounds like wind or waves hitting the bank.[79] When I listened back to my recording *Pointe de la Jonction 21.09.2025*, I noticed a persistent high-pitched sound, which the spectrogram also made visible. Blips appeared at regular intervals around the 6000 Hz frequency, drawing attention to patterns in the soundscape that I had not immediately perceived on site.

[79] KINGDON, Amorina, 2024. *Sing Like Fish: How Sound Rules Life under Water*. 1st ed. New York : The Crown Publishing Group. ISBN 978-0-593-44277-7.



Going through the process of putting on headphones, using a high-quality recorder, and editing the sound file in Audacity sharpened my attunement to sounds in the environment that I had not noticed before. When I later revisited the location, I was able to listen for this particular sound more intentionally, and I believe it may be a bird.

When I was adding my recordings—particularly those made on the viaduct—I found myself instinctively labelling them as the “entrance” and “exit” of the bridge. This reflected my own routine: the south side marks the beginning of my day and feels like an entrance, while the north side feels like the exit. Yet, a bridge is fundamentally a passage, where entrance and exit are interchangeable, depending on one’s direction of travel. This personal bias shaped how I perceive the area, and it’s also evident in my line-drawing map, where I rendered the south side larger because it is where my daily journey begins.

After discovering Aporee, I wondered whether anyone else had created recordings around this area. This led me to an interview with Flavien Gillié, a Belgium-based sound artist and active Aporee contributor, who had also recorded the Arve. For Gillié, recording is not driven by a specific intention; he does it primarily for his own personal archive. During his visit to Geneva, making a recording was simply part of his habitual routine. He emphasised that he is more interested in the city than in “nature” in a traditional sense:

> I wouldn't say I'm a recorder of nature things. I'm not a naturalist. I live a lot in the cities and I make trips to cities mostly and I always like to record the interactions between people and everything else living somehow. So I try to find the liminal places, I mean going to the bank of rivers, you're in the city but somehow you have to be a bit outside.[80]

Gillié raises an important point about rivers in urban environments—and about La Jonction in particular: rivers provide an escape from the city while remaining firmly embedded within it. One can never fully detach from the built environment, and this becomes obvious in the recordings themselves, where airplanes and trains crossing the viaduct are inseparable from the soundscape. The built environment has a measurable impact on the city’s ecology, and Gillié described how older recordings he made in Lyon once captured large flocks of starlings—sounds that residents say they no longer hear today.

[80] GILLIÉ, Flavien, 2025. Conversation on Gillié’s practice. Interview by Peter Ha, Brussels, 5 Sep 2025. [Unpublished interview].

This growing quietness is echoed by acoustic ecologist Dr. Eddie Game, who notes that although we assume the world is becoming louder due to anthropogenic noise, it is in fact getting quieter because fewer species are vocalising.[81] If this is the case, how might we bring nature back to the forefront by giving back its voice?

[81] WARD, Alie. 2024. Acoustic Ecology (Nature Recordings) with Dr. Eddie Game [online; podcast episode]. In: Ologies. 4 May 2024. Available from: https://www.alieward.com/ologies/acousticecology [Accessed: 14 November 2025].

Giving Voice to Rivers

Prosopopoeia

With sound, there's also the idea of a voice. Personifying/humanizing rivers and referencing Ronal Hepurn on his ideas of humanizing nature. Support with projects such as Natural Networks by Six:Thirty x Matteo Loglio and The Ecological Intelligence Agency by Superflux which uses a poetic tone for personifying the rivers.

Interviews.

Personhood

"To imagine beyond the map is to understand that First Nations stores are not confined by imposed colonial geographies—they are living, layered, and deeply embedded in Country."[82]

Conclusion

[82] FRANÇOIS, Laura et al. (eds.), 2025. *Imagine: embracing chaos and possibility in a planetary emergency*. 1st edition. Karlsruhe : Slanted Publishers UG (haftungsbeschränkt). ISBN 978-3-948440-89-3.