

MA Media Design

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The Confluence

Where Le Rhône and L'Arve
rivers meet.

Assignment 2: Method

May 26, 2025

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- 1** How can lo-fi tech or tech that's accessible, be used to understand the natural environment around us, specifically the Arve and Rhône rivers and their confluence?
- 2** What can rivers and confluences teach us about our relationship to technology?

Motivational Statement



September 10, 2024

The first photo I took of the confluence.

On the other side of the Atlantic ocean, I was looking for an apartment in Geneva not knowing anything about the neighbourhoods and landmarks. Originally I was going to be on Rue de l'Ecole-de-Médecine where all the students hang out, but in a turn of events, the flat fell through a month before moving. Luckily, where I am now located is behind Bois de la Bâtie, a large nature park that's accessible to the Le Viaduc de la Jonction.

It only took my second day in the city to discover the confluence, the meeting of the Arve and Rhône rivers. When I first saw it, I immediately had a connection to it. This also happens to be my commute path to school and I'm fortunate to enjoy the sight on a daily basis.

Going into this Masters program, I thought I had a clear idea of what I wanted to do for my thesis but as I reflect back, a lot of the projects I completed were in some shape or form related to nature. I wonder if one of my

first introduction to creative coding, Nature of Code by Daniel Shiffman, or the fact that I'm in a country that's surrounded by beautiful landscapes has influenced me, or perhaps it's me wanting to escape the technology that poisons us by ironically using it to simulate and reference nature.

Thinking about a situated practice, a question I asked myself was "What thesis can I only complete at La HEAD and only in Geneva?" Why study abroad and how can I benefit from the resources that are only located in this area? Turns out the answer has been right in front of me and one of my obsessions since studying here.

My research questions are not 100% solid, and that's okay. Taking inspiration from rivers and their fluidity, I'm open to the ebb and flow yet I know which direction I'm headed and as I continue to gather data, I will find what I want to say. But for now, I know I'm obsessed with the rivers and I want to explore them as much as possible.

Terms & Topics

Animal Locomotion

The study of how animals move through observation, recordings or computer programs.

Anthropocene

A geological era where humans are the driving force for the structural changes on Earth.

Biomimicry

Studying nature to solve complex human problems. Classic example are the hooks on bur fruits inspiring the invention of Velcro.

Data Sonification

The process of taking raw data and producing sounds with them. There are different processes such as audification, earcons and parameter mapping.

Philosophy of Technology

A sub-domain of philosophy examining the nature of technology and the impact on culture and society.

Situated Practice

A design practice that's contextual based in understanding the features and characteristics of the location and the inhabitants, whether human or non-human.

Wood Wide Web

The mycorrhizal network that lives underground in forests and plants where trees and plants use to share resources and communicate with one another.

Confluence

The point where two or more rivers join to form a single channel.

Digital Placemaking

Creating an identity and a sense of place through online and digital technologies.

Participatory Science

Having the general public help with the production of scientific knowledge.

Psychogeography

The study of how a geographic location can affect one's behaviours and emotions.

Umwelt

Translated as environment from German, but it means much more. It's about how we perceive and sense the world around us due to the environment.

Digital Twin

An exact replica of an object, person or place in a digital space to learn or predict about the subject.

Geoengineering

Large-scale interventions to combat climate change.

Ways in which I will conduct research to gain a better understanding of the confluence and rivers.

Interviews

- Locals: Inhabitants, Commuters
- External: Tourists
- Experts: Artists & Researchers
 - Benoit Renaudin
 - Daniel Tapper
 - Natasha Tofield Pasche
 - Guilhem Vellut

Location Field Observations

- Viaduct bridge
- Viewpoint at La Jonction
- Gauging stations
- Along the Rhone and Arve rivers

Data

- **Scraping**
 - Flickr
 - Reddit
 - Instagram
- **Measurements**
 - FOEN
- **Lo-fi Tech**
 - Hydrophone
 - Sechhi Disk
 - Raspberry-Pi Camera

Readings

- See bibliography

Potential questions. For artists and designers I will adapt and make relevant to the work they do.

For Practitioners

Please introduce yourself.

How do you use lo-fi tech in your practice?

How does being in Toronto inform your practice?

Why nature as a subject matter?

Why water? What draws you to this medium?

How do you see your practice evolving as we advance in technology and as Earth's climate becomes more unstable?

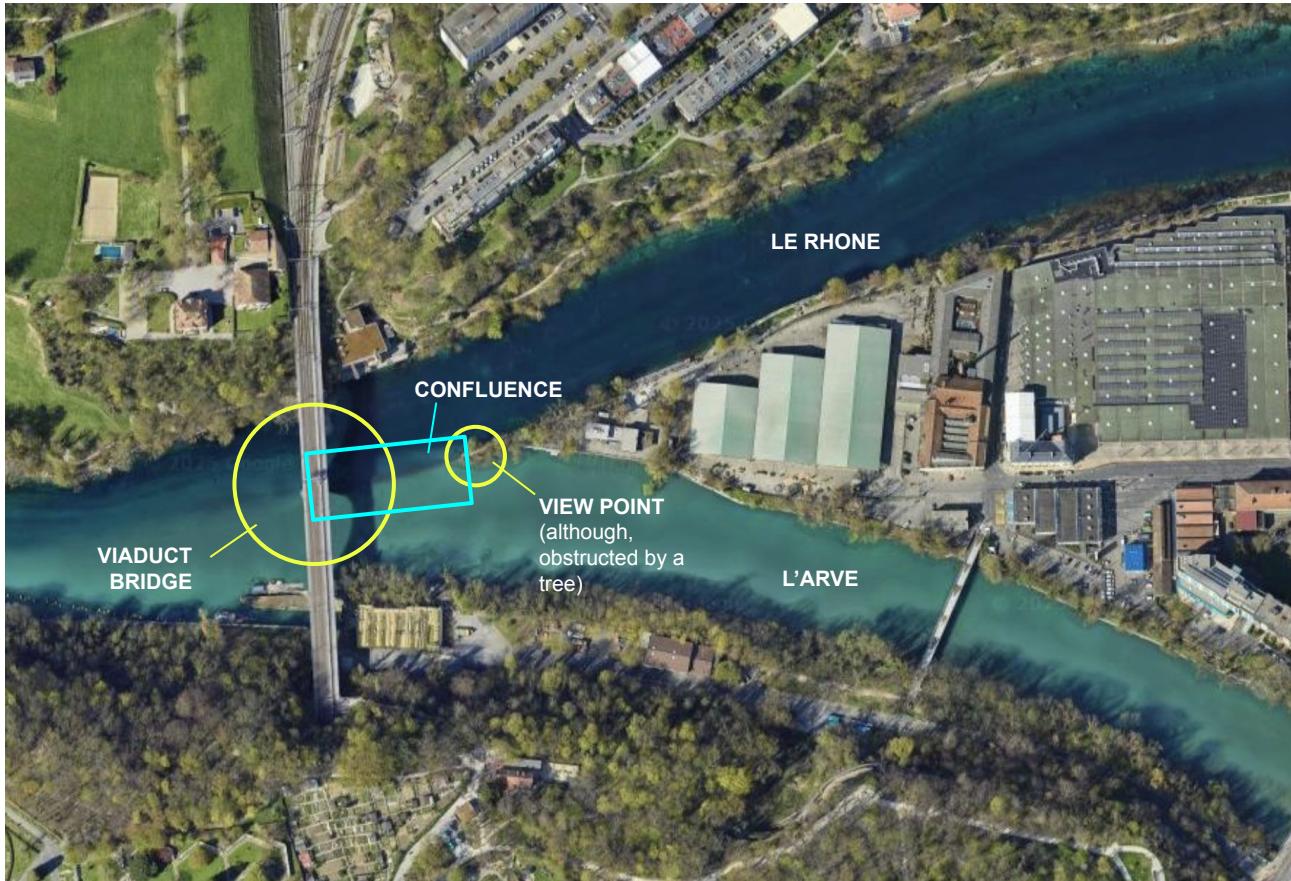
For Inhabitants

What is your first memory of the confluence?

How would you feel if one day this area no longer existed?

How would you describe the meeting of the two rivers?

Overview of Area

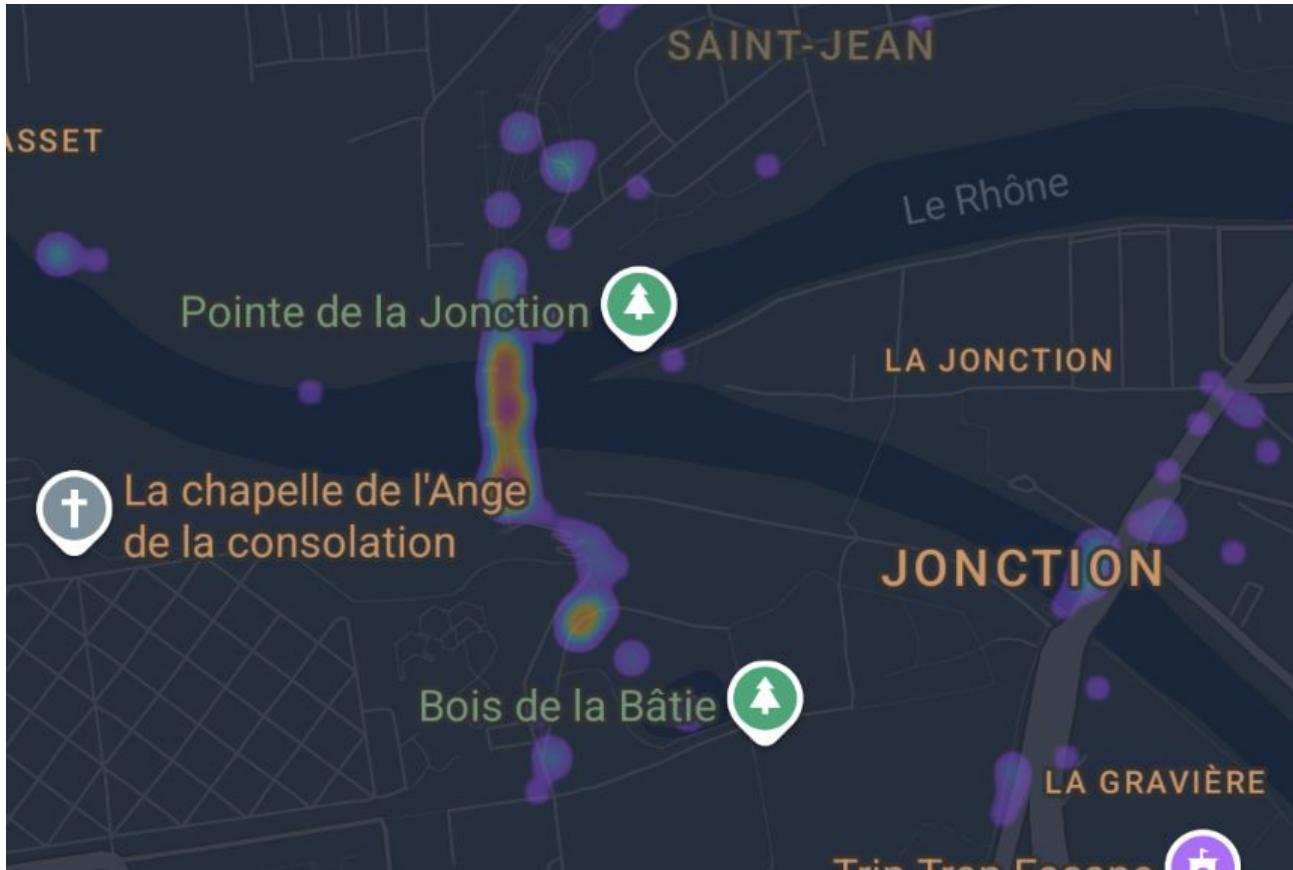


Satellite view of La Jonction. Screenshot taken from Google Maps.

Questions

- At what point does the confluence start and end?
- How is the dominant river determined?
- What do residents and tourists think of the confluence and this area?

Photo Heatmap



Not that I need to prove my obsession, but this heatmap of where I've taken photos highlights my interest. I often take photos on my way to school and on my way back. One area that's missing is actually in the Jonction and where the view point it is.

Looking at Google Maps, it looks popular during summer when the weather is nice. I won't be here during the summer, which I'm actually feeling sad about because I won't get to enjoy the rivers and observe, but I wonder if there's a way to make a connection to my time in Toronto? Still observe body of waters in Ontario that I can then use same methodology at Rhone and Arve?

Water Movement

Drawn to the confluence because of the contrast of the two rivers. One clear, one murky, one with colour, one lacking.

This capture was a good day because the mixing of the two obscures the wall that divides the two rivers, making it look like as if there was no human intervention.

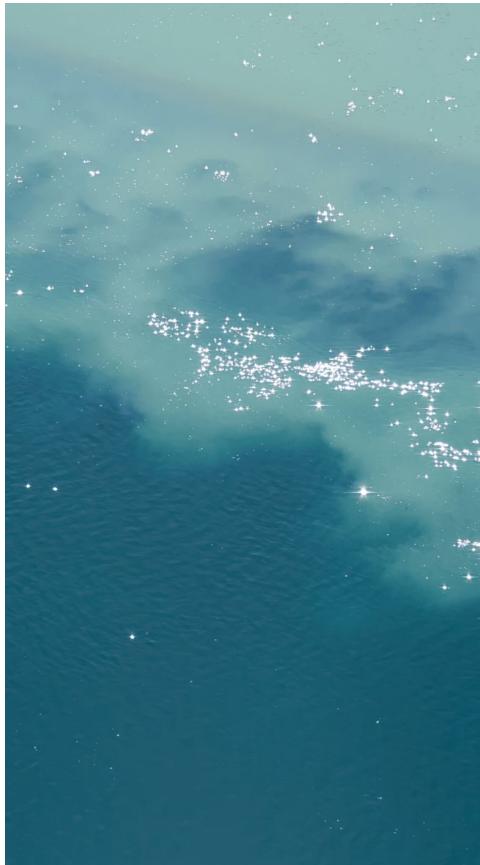
Not to mention the beauty of the cloud like formation on their border.



Mesmerized by the movement of water and the reflections.

Reflections

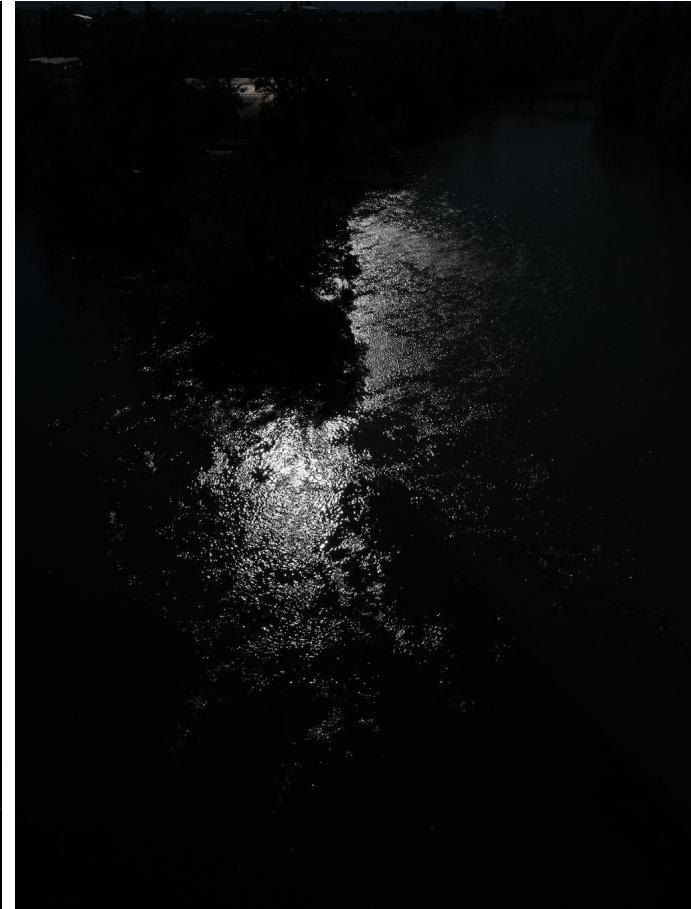
Shimmering sunlight on the Rhone. Looks like a dark sky night with stars or fireflies since the sparkles appear and disappear and reappear.



Same day. Looks magical.

Fingerprint

What are the unique fingerprints of rivers? They are constantly changing form and depending on the flow, wind and sun, the surface will appear differently. It is also in relation to an individual's point of view as the sun travels with oneself.



Seujet Dam

A long-exposure of the closest dam to the confluence. The capture of the movement looks like one of water's most elusive forms, steam.



Night Time (Portal)



Night Time (Portal)



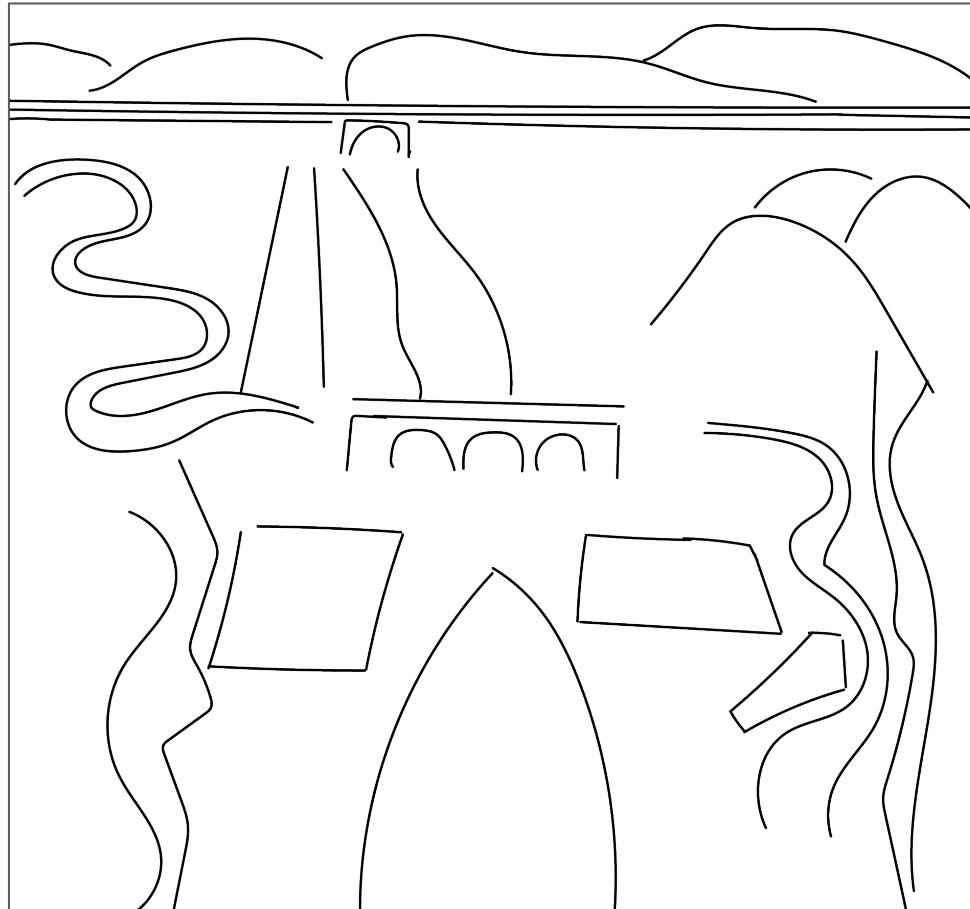
Night Time (Portal)



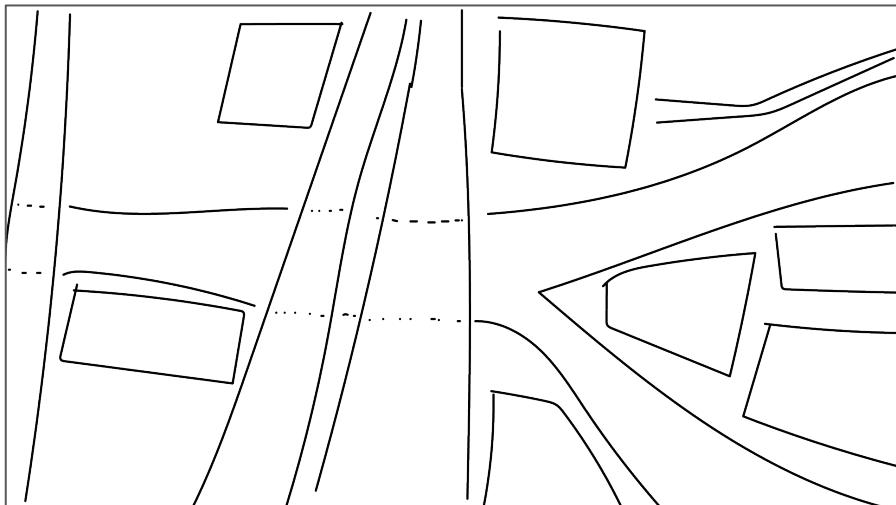
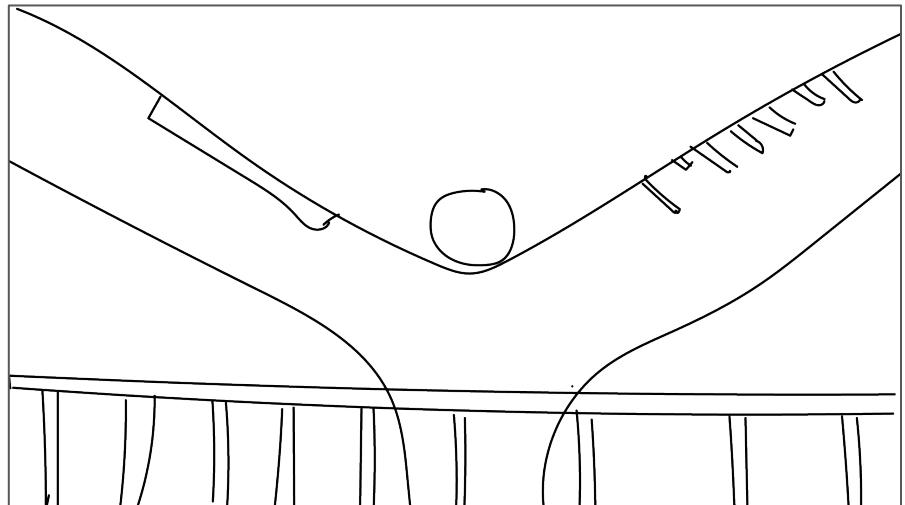
Night Time (Portal)



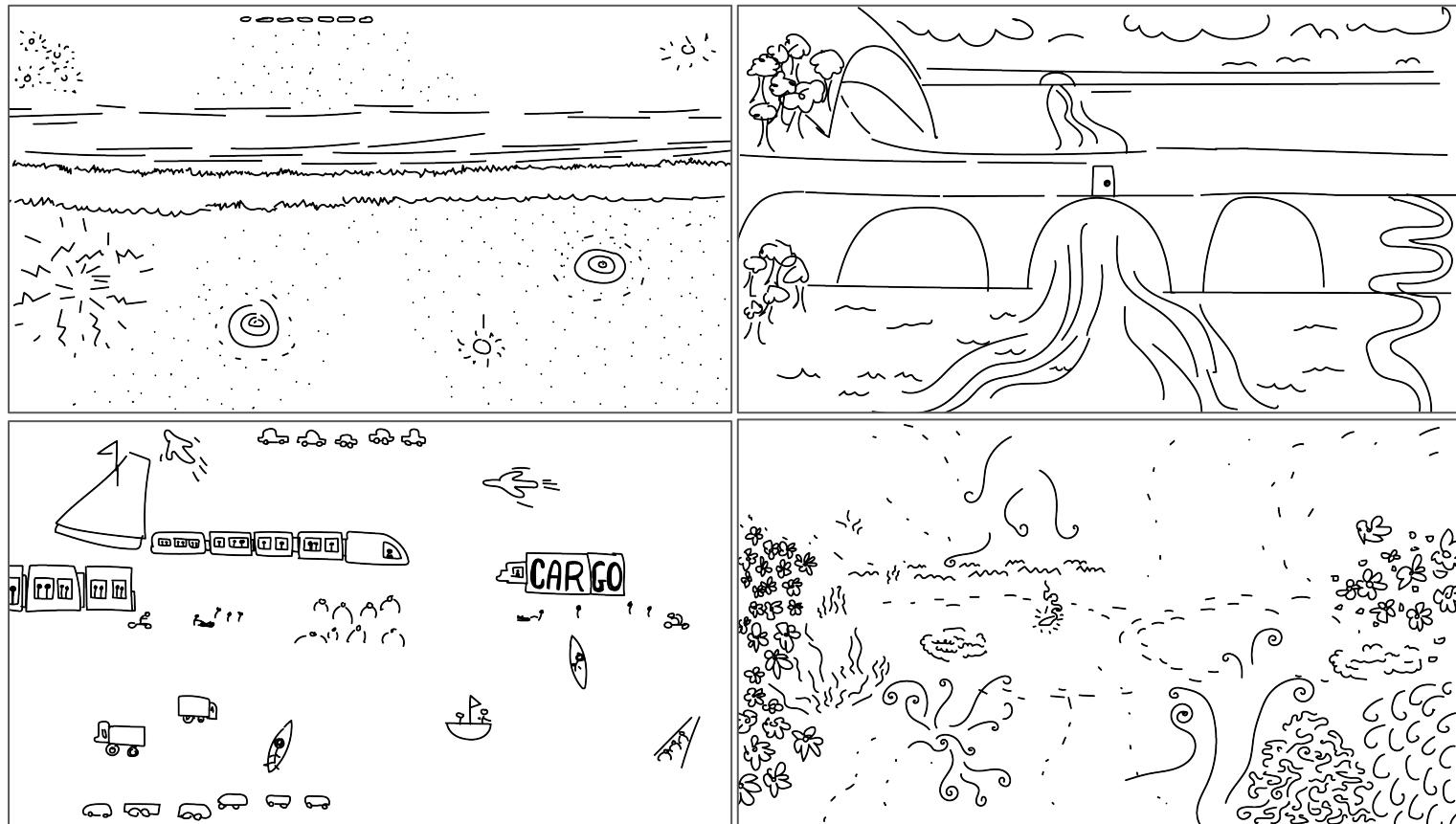
Mapping

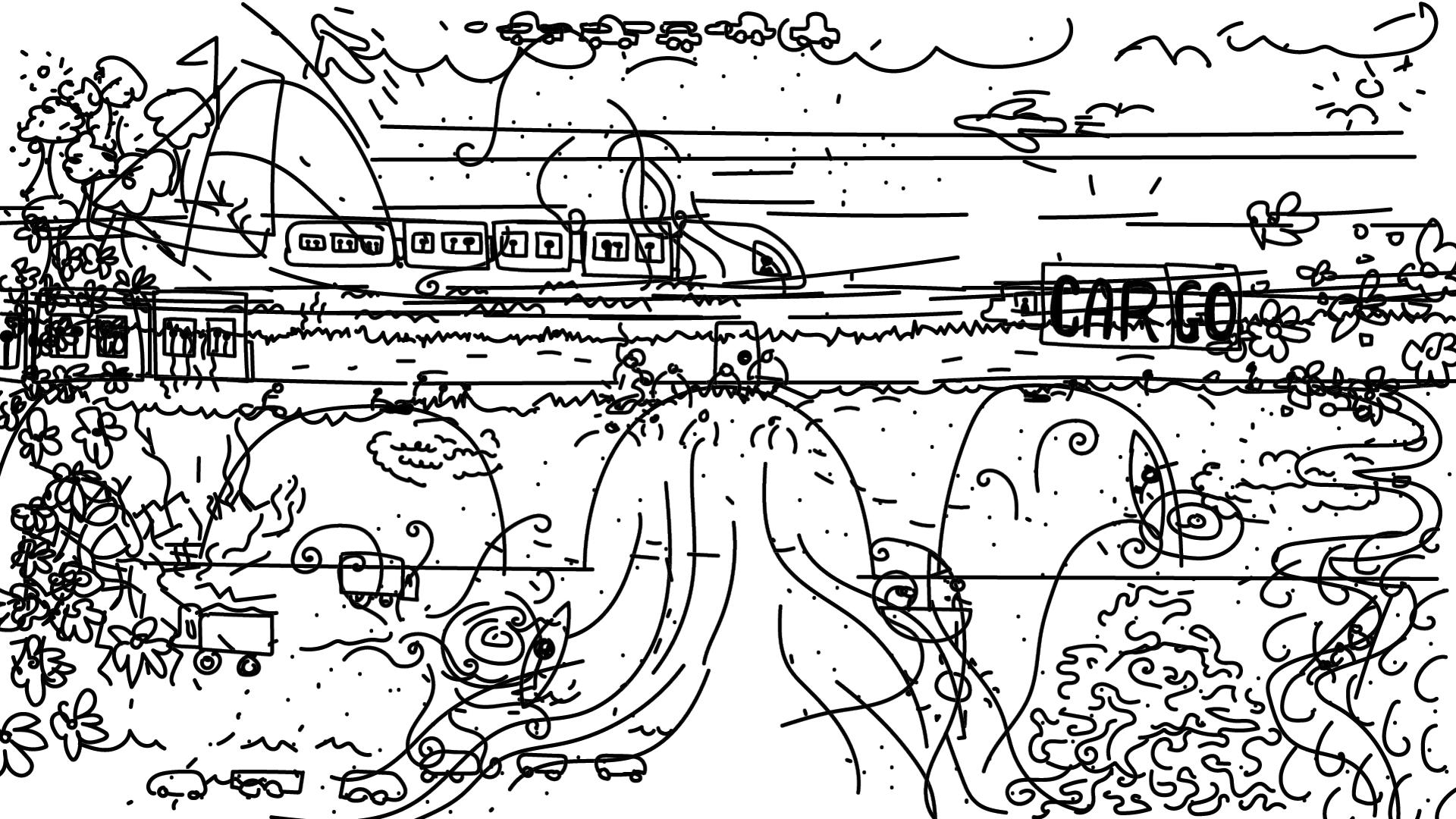


Mapping



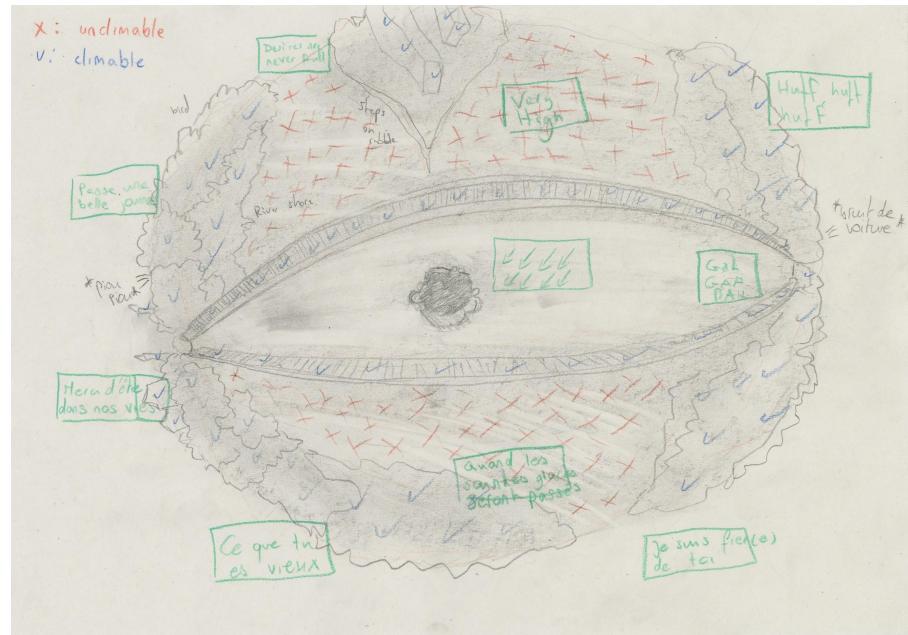
Mapping





CARGO

Mapping



X : undimable

V : climable

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PARE-
GOUFS

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Mais d'ailleurs
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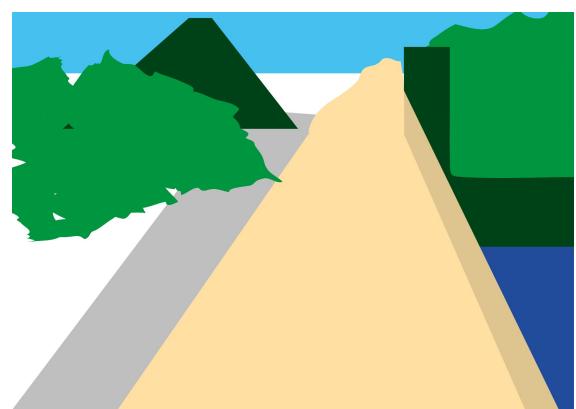
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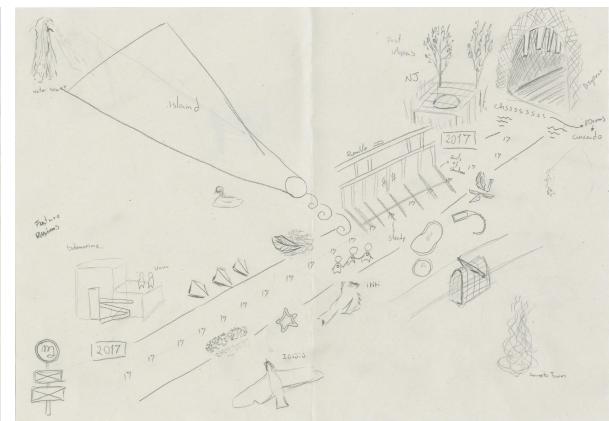
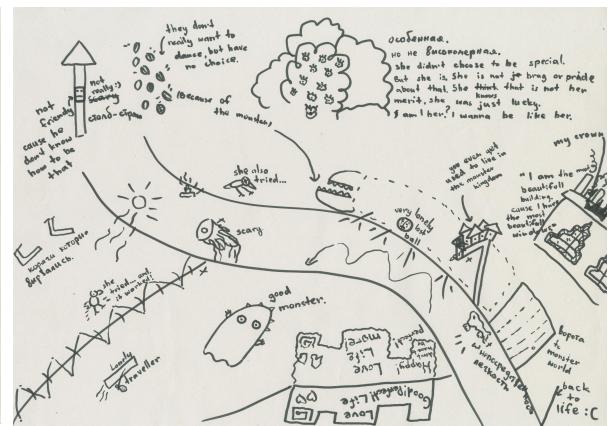
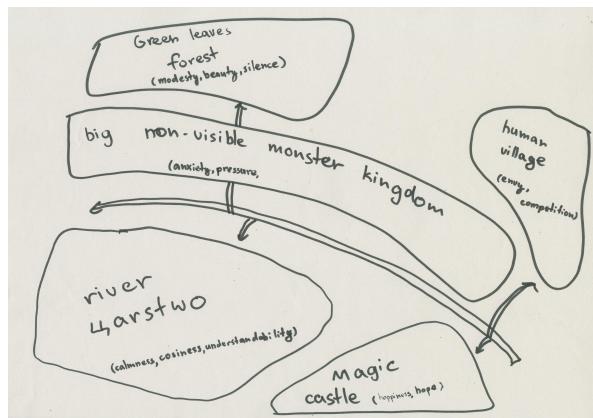
lorsqu'
les
glaçons
se font
passer

Ce que tu
es vieux

Mapping



Mapping



Gauging Stations



Gauging Station 2606 | Rhône - Genève, Halle de l'Ile
[View hydrological data](#)



Gauging Station 2170 | Arve - Genève, Bout du Monde
[View hydrological data](#)

Gauging Measurements

Can get notified daily about measurements. If it's in the morning, it could be a way to be woken up by the river via notification.

[Learn More](#)



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Office for the Environment FOEN

SMS subscriptions:
description of services

The user can be automatically informed by subscription on the course of vital measurement values. Each user can subscribe to many gauged values of both subscription services at will. The data provided do not differ from those requested manually.

Key

Service:	H, P, PEGL	for gauge height
	Q, ABFLUSS	for runoff
	T, TEMP	for temperature

Code: Four-digit FOEN station numbers

«Standard»
subscription service

Basic function for subscription start-up (fixed duration)

START entering type of parameter and code

Example: START T 2020 Send to number 237.

The user gets a receipt as well as instructions on how to cancel the service.
Each day at 9 a.m., the user receives the latest available parameters of the service desired from the station involved.

Added function at start of subscription
(time can be adjusted)

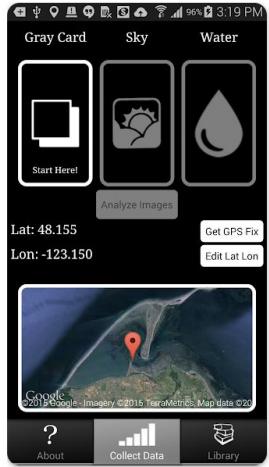
START entering type of parameter, code, and time

Time: hh:mm, h:mm, hh.mm, h.mm

Example: START T 2020 07:50 Send to number 237.

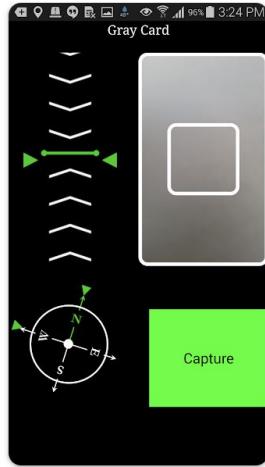
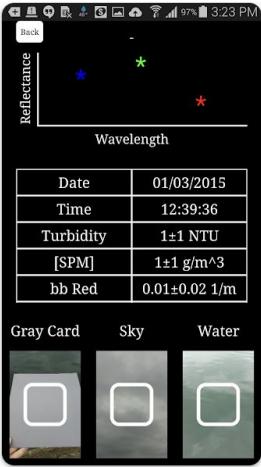
The user can choose the transmission period at will.

Mobile Applications



HydroColor App

[View App](#)



Meine Pegel App

[View App](#)

Measuring Devices - DIY



Hydrophones



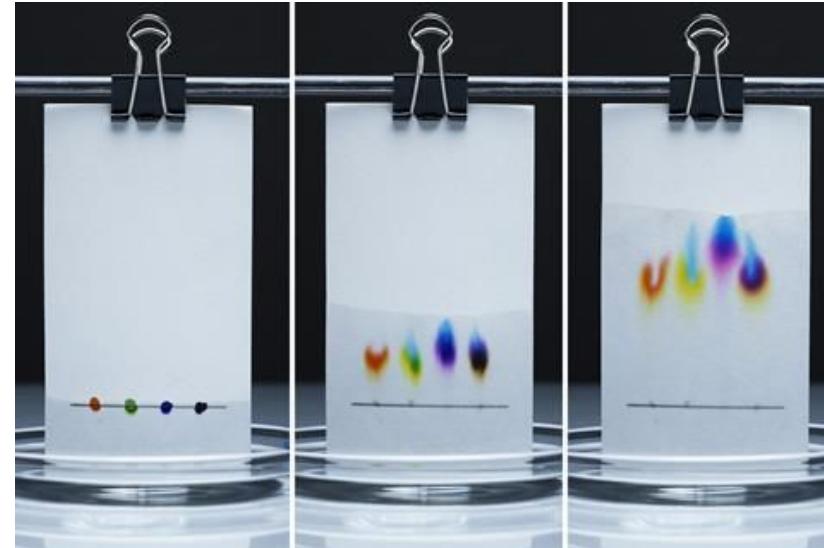
Sechhi Disk



Raspberry Pi Camera



Filter Paper



Chromatography Paper

Opening of Cliff Trails



Une passerelle à ciel ouvert court désormais le long des falaises à Saint-Jean (image de synthèse)

Inaugural event to celebrate the opening of the footbridge on May 15. Would be interesting to see the turnout.

<https://www.radiolac.ch/actualite/geneve/le-sentier-des-falaises-est-rouvert-aux-promeneurs/>

Tech List

TECH	LOCATION	SOURCE/PROVIDERS
Train and Railway	Along the viaduct	SBB & CEVA
Gauging Station (Rhone)	Rhône - Genève, Halle de l'Ile	FOEN (Federal Office for the Environmental)
Gauging Station (Arve)	Arve - Genève, Bout du Monde	FOEN (Federal Office for the Environmental)
Meine Pegel - Mobile App	Device	FOEN
Satellites	Space	Swiss Topo (Federal Office of Topography) Google Bing
Social Media	Online	Flickr Instagram Reddit

References

A collection of projects, events, museums, and readings that align with my interests and sparks my curiosity.

Project References

RHODANIE URBAINE	Research by design		Project-based visions		FR EN
Challenges Inventory Visions Comparisons Communications Actors	Sion	Geneva	Givors	Avignon	
	+ INFOS				

Rhodanie Urbaine

Laboratory of Architecture and Sustainable Technologies (LAST) of the École polytechnique fédérale de Lausanne (EPFL)

1990–1996

Architectural and urban research project led to assess and strategically develop neighbourhoods along the Rhône river. One point of interest is the La Jonction.

<https://rhodanieurbaine.ch/en/>

Project References



Captain Planet and the Planeteers

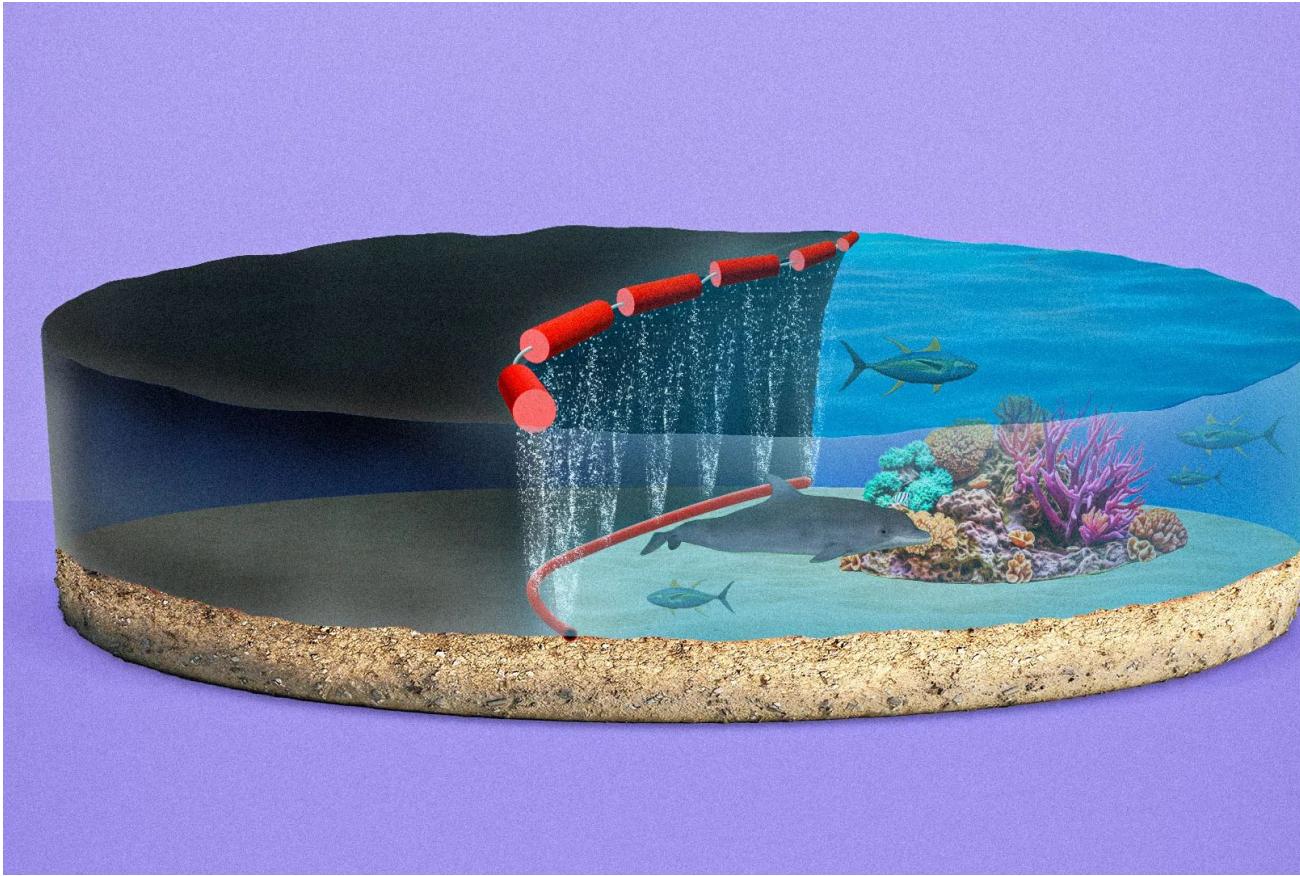
Ted Turner, Barbara Pyle

1990–1996

A cartoon where a group of teenagers unite from around the world to fight personified environmental villains.

<https://captainplanetfoundation.org/about/our-story/captain-planet-the-planeteers-legacy/>

Project References



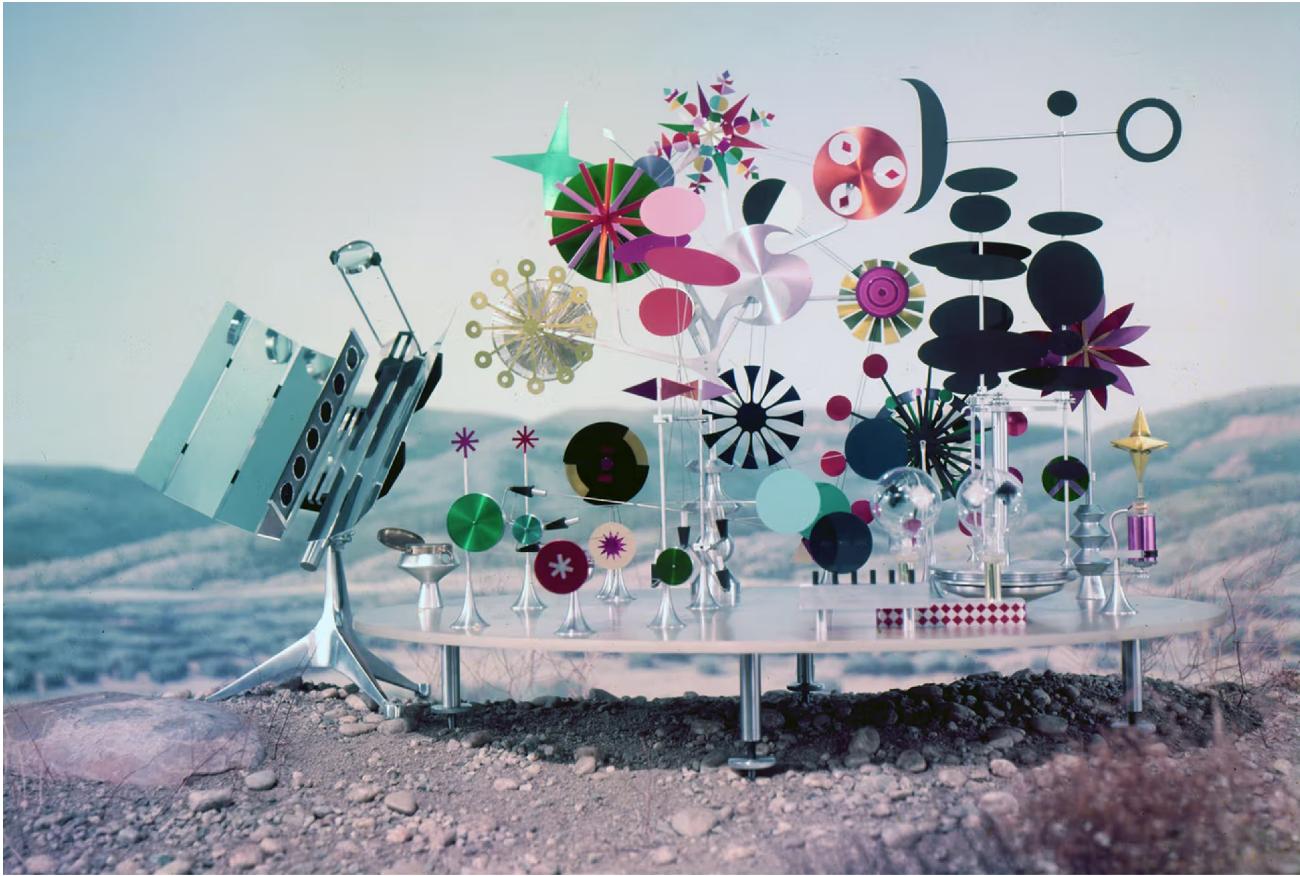
Bubble Curtains

Ted Turner, Barbara Pyle

1990–1996

A cartoon where a group of teenagers unite from around the world to fight personified environmental villains.

<https://captainplanetfoundation.org/about/our-story/captain-planet-the-planet-eers-legacy/>



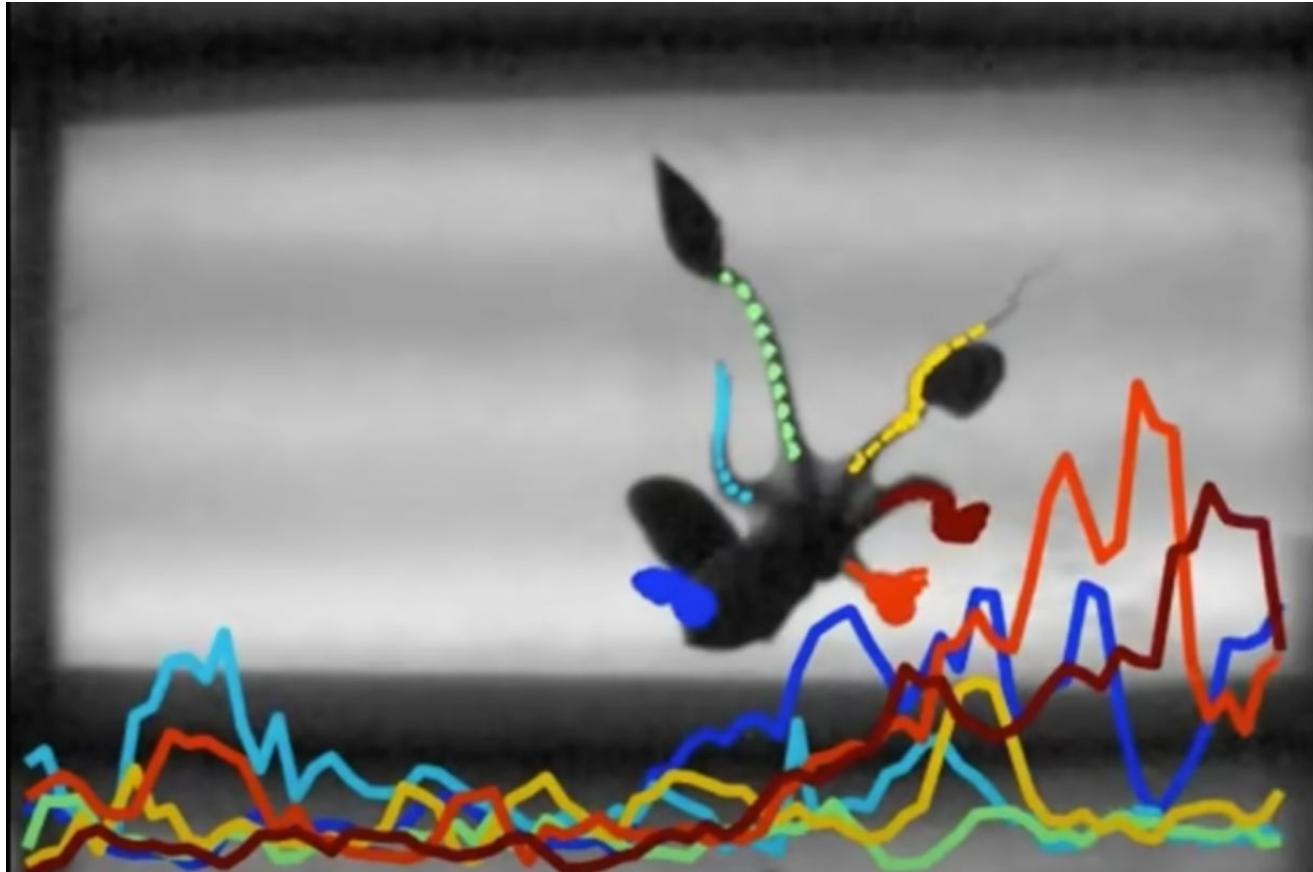
Solar Do-Nothing Machine

Charles & Ray Eames

1957

Commissioned by Aluminun Company of America for the Forecast Program. Meant to highlight the versatility of the material. Here, is a playful sculpture using the material powered by the sun.

<https://www.eamesoffice.com/the-work/solar-do-nothing-machine/>



Researchers Model How Octopus Arms Make Decisions

Dominic Sivitilli & David Gire,
University of Washington

2019

Scientists created a program to track octopus arm movements to infer that each tentacle are making decisions independently but can also be controlled by their nervous system when they are synchronized in movement.

<https://news.agu.org/press-release/researchers-model-how-octopus-arms-make-decisions/>

Project References



Space Sonifications

NASA

2021–2024

To experience space imagery in a different way, NASA has sonified their photos. Data is transmitted back to NASA and this data doesn't have to be in the form of imagery, but it can be used for sound. This process is called data sonification, by taking data points and mapping them to sound parameters.

<https://science.nasa.gov/mission/hubble/multimedia/sonifications/>

Project References



Chthuluscene

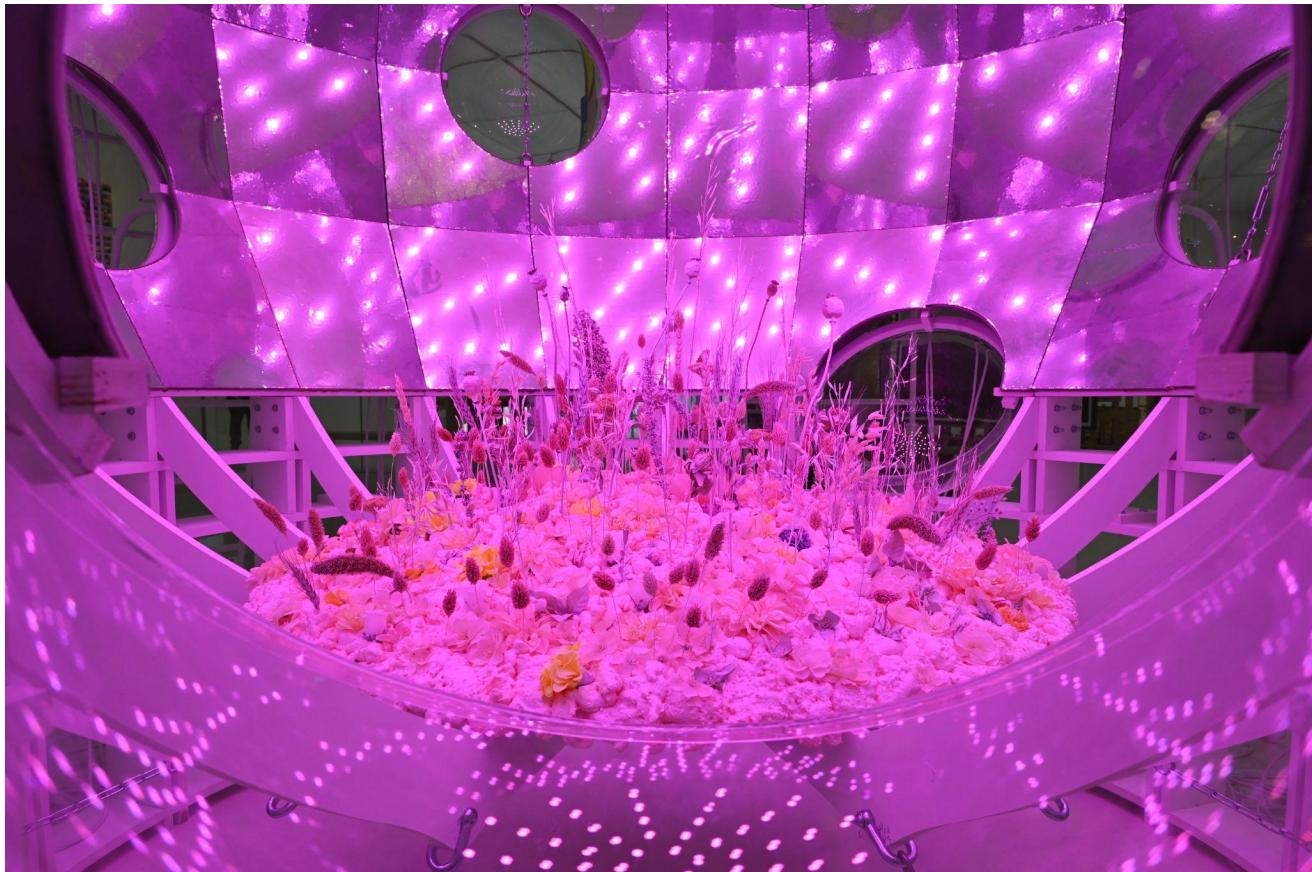
Patricio Dávila, Immyon Men, David Czarnoski, Symon Oliver, Bohdan Anderson, Maggie Chan

2015

An interactive visualization where participants partner up through their mobile devices. When they do, entities start popping up in the projected world.

<https://publicvisualizationstudio.co/projects/chthuluscene>

Project References



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Fellaria's Time Capsule

Mireia Luzárrag & Alejandro Muiño

2024

Artists posed the question “What if plants could time-travel?”. In this piece, plants are inside a spaceship and viewers can peer through circular windows.

<https://mudac.ch/en/projects/fellarias-time-capsule/>

Project References



Natural Networks

Six:Thirty x Matteo Loglio

2017

Collecting environmental data along the canals of London, UK with a custom made buoy inspired by offshore oil rig lifeboats. The data is then translated into a series of poems, giving a voice to nature.

<https://matlo.me/natural-networks>

Project References



Co_Sonic 1884 km²

Robertina Šebjanič

2021

An audio-video project about the co-existence between rivers and its inhabitants. The soundscape is AI-generated and the visuals have a digital aesthetic through the clear boundaries of boxes as frames contrasting the content.

<https://robertina.net/co-sonic-1884-km2-so-zvocje-1884-km2/>

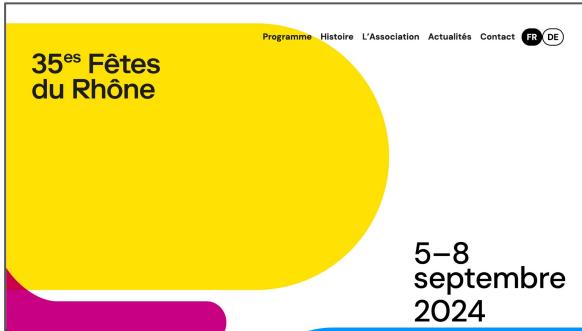
Events



Fleuron

An online conference dedicated to design, art, botany and technology.

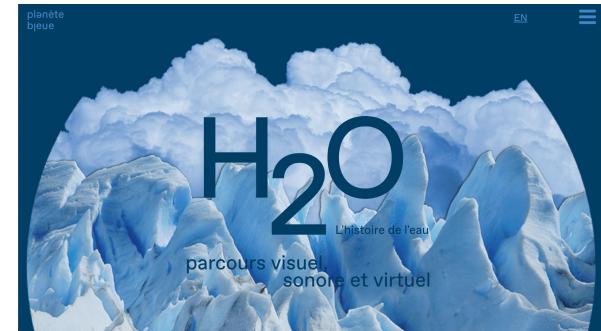
<https://fleuron.tf/>



Fêtes Du Rhône

A celebratory festival all about the Rhône.

<https://www.fetesdurhone.ch/>

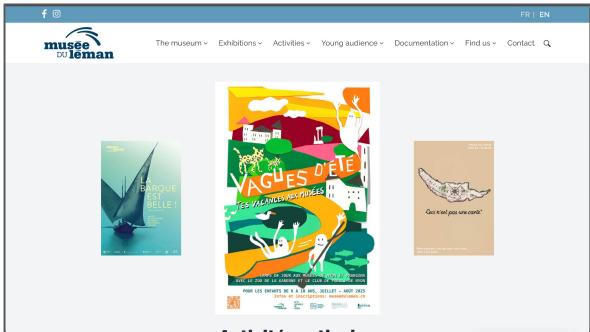


Planète Bleue

4-day event that happened in Geneva (2024) to celebrate World Water day through a series of art & design installations.

<https://planetebleue.art/>

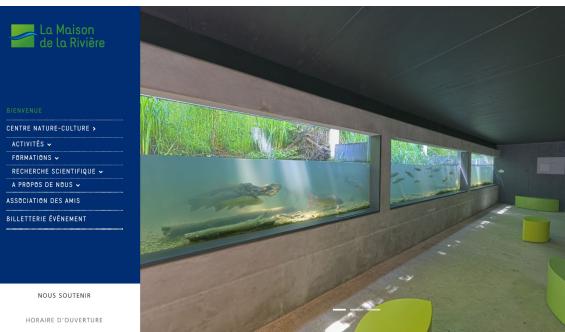
Places



The Musée du Léman website features a header with social media links and language options (FR | EN). Below the header is a large image of a poster for an exhibition titled "VAGUES D'ÉTÉ". The poster includes illustrations of a sailboat and a person, with text in French. The main menu includes "The museum", "Exhibitions", "Activities", "Young audience", "Documentation", "Find us", and "Contact". A search bar is also present.

Musée de Léman

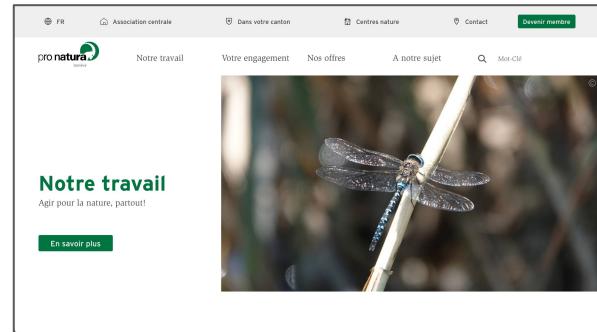
<https://museeduleman.ch>



The La Maison de la Rivière website has a blue header with the organization's logo and language options (FR | EN). The main menu includes "BIENVENUE", "CENTRE NATURE-CULTURE", "ACTIVITÉS", "FORMATIONS", "RECHERCHE SCIENTIFIQUE", "A PROPOS DE NOUS", "ASSOCIATION DES AMIS", and "BILLETTERIE ÉVÉNEMENT". Below the menu is a section for "NOUS SOUTENIR" and "HORAIRE D'OUVERTURE". The main content area shows a long aquarium tank with fish and aquatic plants, with several green circular seating areas in front of it.

La Maison de la Rivière

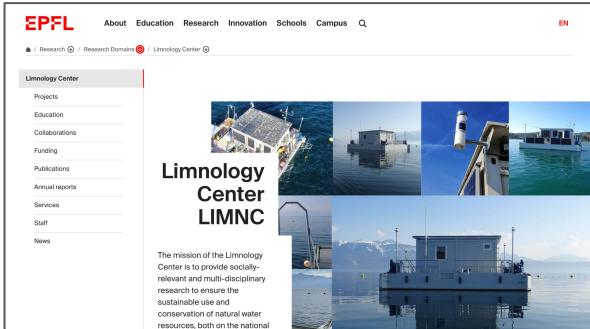
<https://www.maisondelariviere.ch>



The Pro Natura website has a header with language options (FR | EN), navigation links for "Association centrale", "Dans votre canton", "Centres nature", "Contact", and "Devenir membre". The main menu includes "Notre travail", "Votre engagement", "Nos offres", and "A notre sujet". A search bar is also present. The main content area features a large image of a dragonfly on a branch, with the text "Notre travail" and "Agir pour la nature, partout!" below it. A "En savoir plus" button is visible.

Pro Natura

<https://www.pronatura-ge.ch/fr>



The EPFL Limnology Center website features a header with links for "About", "Education", "Research", "Innovation", "Schools", "Campus", and "EN". Below the header is a breadcrumb trail: "Home / Research / Research Domains / Limnology Center". The main menu for the Limnology Center includes "Projects", "Education", "Collaborations", "Funding", "Publications", "Annual reports", "Services", "Staff", and "News". The center's name, "Limnology Center LIMNC", is prominently displayed with a grid of five images showing various research equipment and scenes on the water. A mission statement at the bottom explains the center's focus on sustainable water resource management.

Limnology Cener

<https://museeduleman.ch>

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