

Alpine Landschaften im Wandel:



Infrastruktur, Kultur und Klima

Programme

Research workshops – Thursday, 12 May 2022

ETH Zürich, Zentrum – Alumni Pavillon (MM C 78.1)

09:00 – 11:00

Landscape and Ideologies

Guest critic: Prof. Dr. Christian Schmid, ETH Zürich

Danaé Leitenberg

Contested and Silenced Futures: Infrastructural Growth and Exclusive Democracy in the Swiss Alps. Alpine Aufhebungen.

Michael Schmölz

Martina Motta

The Alps and Infrastructure: The forest as an Element of Conflict.

11:30 – 13:00

Social and Cultural Aspects of Hydroelectricity

Guest critic: Prof. Dr. Emmanuel Reynard, UNIL

Moussa Belkacem

Reconstruction as Compensation : A Comparative Study of Two Contemporary and Precursor Alpine Cases – Tignes and Curon.

Sebastian De Pretto

Connecting the Alpine Damscape: Transnational Networks of Reservoir Construction at the Lac d'Emosson and the Lago di Zoccolo, 1953-1974:

Elena Longhin

Alpine Transition Infrastructures and Challenges in the Warming Climate Regime.

14:30 – 16:00

Memories of and Imaginaries for Exhausted Landscapes

Guest critic: Metaxia Markaki, ETH Zürich

Gianluca Lanfranchi

Deindustrialized Alps: The future of Alpine's Industrial Ruins between Local and Global Imaginaries.

Jean Chamel

Collapsing Landscapes: Rearrangements of Sensitive, Ritualized and Aesthetic Relationships with the High Alpine Mountains.

Francesca Mazza

The impacts of Tourism Infrastructures on the Alta Valtellina Alpine Landscape: Exploiting Global Events to Trigger Sustainable Strategies of Local Development.

16:30 – 18:00

Infrastructure, between Technology and Aesthetics

Guest critic: Aisling O'Carroll, The Bartlett School of Architecture

Doris Hallama

Lawinenverbauung zwischen Technologie und Ästhetik.

Sarem Sunderland

The Construction of a Hydroelectric Landscape: Spatial projects for Lake Sihl (1897-1937).

Maddalena Napolitani

Painting the Alpine Landscape between Earth Sciences and National Identity in the 19th Century: the case of the French painter Claude Hugard (1816-1885).

Research workshops – Friday, 13 May 2022

ETH Zürich, Zentrum – Alumni Pavillon (MM C 78.1)

08:30 – 10:30

Tourist Infrastructure and the Perception of a Nation

Guest Critic: Dr. Falma Fshazi, ETH Zürich

Isabelle Fehlmann

«Borders Separate, Roads Connect»: Alpine Roads as Cultural-Historical Reference for Land and Landscape.

Chase Galis

Water Features: Electric Light and Technological Tourism at the Giessbach Falls.

Alice Riegler

International Efforts for Alpine landscape Conservation: The British Opposition to the Matterhorn Railway Project 1900–1960.

Caterina Franco

Des stations de ski en site vierge? A Cross-border History of the interactions between Tourist Infrastructure Projects and High-altitude Environments, in the French and Swiss Alps (1960–1970).

10:45 – 12:15

Landscape as Archive

Guest Critic: Gilles Monney, University of Basel

Nicole de Lalouvière

Enduring Resilience through Periods of material and Technical Change.

Marco Ferrari

Conflict Ecologies: New Heritage Imaginaries for the WWI Mountain Forts.

Rune Frandsen

Secondary Infrastructure Exposed: the Temporary Settlements of La Grande Dixence (1950–1962).

Keynote and round table discussions – Friday, 13 May 2022

ETH Zürich, Zentrum – HG D 7.1

13:45 – 13:55

Introductory words: Karin Salm (DE)

13:55 – 14:45

Keynote speech (DE): Die Alpenlandschaft hat Wandelbarkeit aber niemals Vergänglichkeit

Markus Ritter, Ecologist

Thomas Kissling, Architect

14:45 – 16:15

Round table discussion 1: Images in Dialogue [EN]

Aisling O'Carroll, The Bartlett School of Architecture

Elisabeth Joris, unabhängige Historikerin

Etienne Wismer, Förderverein Emil Zbinden & Universität Bern (theexotic.ch)

Moderation: Seraina Renz, ETH Zürich & Bibliotheca Hertziana Max-Planck-Institut für Kunstgeschichte

16:45 – 18:15

Runder Tisch 2: Neue Bilder als spekulative Antizipation [DE]

Aita Flury, Architektin

Paul Messerli, em. Universität Bern

Günther Vogt, ETH Zürich

Rolf Weingartner, em. Universität Bern

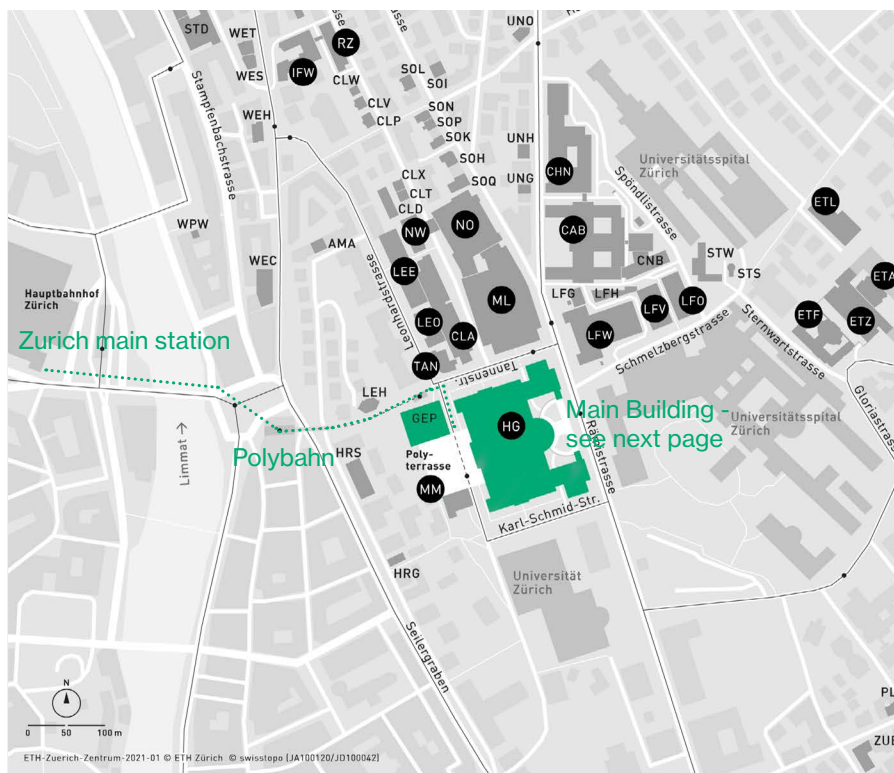
Moderation: Karin Salm

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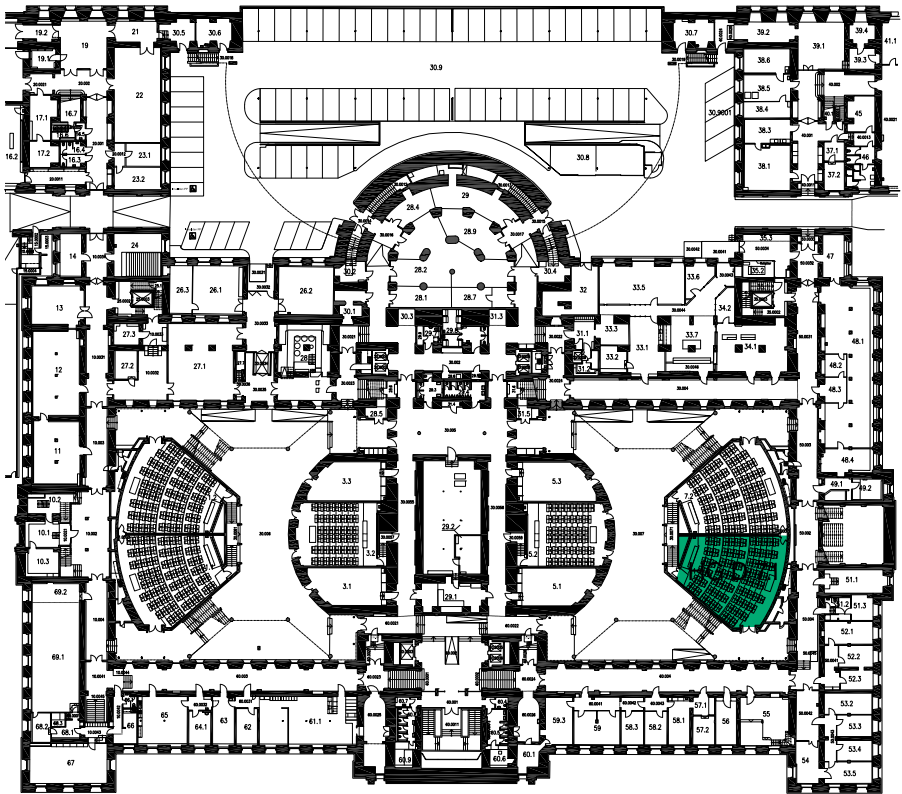
Schlusswort + Apéro riche

locations

Research workshops
Alumni Pavillon - MM C 78.1
Polyterrasse



Keynote speech and round table discussions
HG D 7.1
Main building, floor D



Round table 1

Images in Dialogue [EN]

The roundtable aims at inventing and discussing contemporary and past imaginaries of the Alpine landscape from different perspectives. It looks through the eyes of an artist from the 50s who painted alpine industrial infrastructures, the lens of a contemporary photographer, with the tools of a designer, and the method of a historian dealing with female workers.

Aisling O'Carroll, The Bartlett School of Architecture

Elisabeth Joris, unabhängige Historikerin

Etienne Wismer, Förderverein Emil Zbinden & Universität Bern (theexotic.ch)

Moderation:

Seraina Renz, ETH Zürich & Bibliotheca Hertziana Max-Planck-Institut für Kunstgeschichte

Runder Tisch 2

Neue Bilder als spekulative Antizipation [DE]

Die Alpen verändern sich in beschleunigter Form. Gleichzeitig hemmt die Fokussierung auf Partikularinteressen die Entwicklung und verstellt den Blick auf das grosse Ganze. Wie sehen zukünftige Bilder der Alpen aus, die es vermögen, über die Schaffung neuer Bedeutungen eine Gemeinschaft zum kollektiven Handeln im Raum zu verführen?

Aita Flury, Architektin

Paul Messerli, em. Universität Bern

Günther Vogt, ETH Zürich

Rolf Weingartner, em. Universität Bern

Moderation:

Karin Salm

Research workshops

Alumni Pavillon **MM C 78.1**

The aim of the research workshops is to gather perspectives from young researchers and foster exchange on the transformations of Alpine landscapes. They will also fuel the round table discussions held on the second afternoon. Contributions to the workshops tackle this topic in relation to industrialisation, infrastructure construction, climate change, or the cultural adaptations they require. For each workshop, three (to four) participants will give a 15-minute presentation each. This will be followed by an open discussion, moderated by a guest critic. You will find a line-up with themes in this document

Ziel der Forschungsworkshops ist es, Perspektiven von jungen Forschenden zu sammeln und den Austausch über die Transformationen alpiner Landschaften zu fördern. Beiträge zu den Workshops behandeln dieses Thema in Bezug auf Industrialisierung, Infrastrukturbau, Klimawandel oder den damit einhergehenden kulturellen Wandel. Für jeden Workshop halten drei (bis vier) Teilnehmende jeweils einen 15-minütigen Vortrag. Daran schließt sich eine offene Diskussion an, die von einer Gastkritikerin oder einem Gastkritiker moderiert wird. Hier finden Sie eine Auflistung der Workshopteilnehmenden und ihrer Themen.

#1 Landscape and Ideologies

Guest critic:
Prof. Dr. Christian Schmid,
ETH Zürich

Dr. Danaé Leitenberg

Max Planck Institute for Social Anthropology, Halle

Contested and Silenced Futures: Infrastructural Growth and Exclusive Democracy in the Swiss Alps

Alpine landscapes have shaped the Swiss nation-state building processes and the development of tourism for more than three centuries. In the Swiss Bernese Highlands, where I conducted 13 months of ethnographic fieldwork between 2017 and 2020, the Alpine environment was described by locals as a social and economic “capital”, shaping heritage and belonging, as well as the only possibility to make a future through tourism development. Contrasting with idyllic imaginaries often associated with the Alps, in this paper I analyze the conflicts that arose around the planning of the “project of the century”, a new cableway megaproject recently inaugurated in the valley of Grindelwald. By following different local actors, I show that their reactions in favor of or against the new cableway revealed different visions of the future and what to do with this “capital”. Supporters contended that innovation was a necessary sacrifice to make for touristic regions in order to stay “in time” with the market. Opponents saw the project as part of an endless capitalist growth, threatening their heritage and ways of life. In this tensed context, I examine what strategies and discourses were mobilized by different actors and their unequal positionings in the local, national and transnational touristic economy. Avoiding the binary discourses and simplifying media talk that surrounded the cableway discord, I propose to address the debates around “the project of the century” as manifestations of a (Swiss) culture of democratic debate and participation. I argue that the local and national ideals of democracy and the common good are based on the exclusion of large segments of the population such as migrant hospitality workers, who have lived and worked in the Swiss and the Alpine economy for centuries but have been unable to voice their opinions on the future.

The Alps and the Construction Site. The Forest as a Conflict Element from 18th Century to Present Days

Studying the Alpine forests focusing on the construction sites' techniques of extraction, logistics chains and territorial modifications, show how much the events of architecture are intertwined with the physical environment and its exploitation.

The research compares two different conflictual construction sites over the years in the same place, the Upper Susa valleys in the Western Alps.

With the Kingdom of Sardinia's major urban development and the great wars period marked by an enormous demand of beams, poles and bundles for the fortified squares, 18th century Piedmont forests were characterized by a big wood consumption . In order the forest to be optimized in its uses, a new legislation was enacted in 1729 that was going to undermine the local communities' long-standing use rights on the forests and the Alpine environment. From the examination of the historical sources, we have widespread evidence that the requirements of the construction site, followed upstream to the woods, become a frequent reason for conflict.

Today, the forests of the same territories are still the subject of contention. The No Tav movement has been fighting the Turin-Lyon high-speed train with popular assemblies, large demonstrations and popular occupations since the 1990s. They oppose the progress of construction sites that are highly harmful to the environment, the distortion of the landscape, and the health of the citizens who live in the area. The deforestation has now reached alarming levels. Due the about 5000 trees cut down joined with the nefarious works related to construction of the infrastructure, 12 million tons of carbon dioxide have been emitted into the atmosphere.

Through the forest perspective, the construction site reveals it acts on a more complex geographical, environmental and socio-political scale. We can trace a continuity between past and present in the Alpine context, where the 18th century Western Alps worked as a pivotal environment for the natural resources exploitation we still witness.

Alpine Aufhebungen

Folgende Gedanken schlagen die Brücke zwischen dem Thema des Symposiums und meinem Dissertationsvorhaben *Recht auf Landschaft – Zum Gebrauch des Raums in randalpinen, urbanen Landschaften*. Hier untersuche ich aus drei Perspektiven – a) hermeneutisch im Studium räumlicher Diskurse, Programme und Konventionen zu alpinen und peripheren Räumen; b) transduktiv in der Auseinandersetzung mit der Lefebvreschen Theorie zur Produktion des Raumes, zu einem Recht auf Stadt und zur vollständigen Urbanisierung des Raumes und c) qualitativ-empirisch in spekulativen, teilnehmenden Beobachtungen und Mappings zu konkreten Raumstrukturen und Momenten des Gebrauchs in randalpinen Landschaften – welche sozialräumlichen Qualitäten (Differenz, Unmittelbarkeit, Offenheit, Werkhaftigkeit, Überproduktivität, ...) die Forderung nach einem Recht auf Landschaft adressieren muss, um diese letztendlich gesellschaftlich verhandelbar offenzulegen.

Dabei sind solche Raumstrukturen von Interesse, an denen das Getrennte, das Widersprüchliche, das Konfliktvolle aufeinandertrifft und sich im dialektischen Sinne zu etwas Neuem aufhebt (Aufhebungen): alt-neu, global-lokal, privat-öffentlich, Stadt-Land, Autobahn-Moor, Pfad-Acker, Energie-Freizeit, Naturschutz - ...

Im Vortrag will ich diskutieren, wie Aspekte der Veränderung von alpinen Landschaften, des raum-zeitlichen Prozesses von Industrialisierung und Urbanisierung jenseits ihrer negativen Konnotation als Störung eines vermeintlich zu erhaltenden Status Quo oder reduziert auf den Begriff der Verstädterung mithilfe Lefebvres Theorie zwar kritisch und doch sinnstiftend gelesen werden können. Im Prozess umfassender Urbanisierung, bis hinein in entlegene Räume, erkennt Lefebvre neben und in dem ihm immanenten Konfliktpotenzial auch die Chance bestehende, homogenisierende und fragmentierende Paradigmen im gesellschaftlichen Umgang mit unserer Umwelt zu überwinden. Lefebvre konzipiert

die Urbanisierung als Bewegung hin zur Utopie einer urbanen Gesellschaft, die in ihrer konkreten Praxis wieder differentielle Räume produziere.

Mithilfe dieser Perspektive können alpine Landschaften vor dem Hintergrund der oben problematisierten Veränderungen „im Zuge der Industrie, des Infrastrukturbaus, des Klimawandels“ in ihrem Werden hin zu einer „alternativen Vorstellung ihrer Zukunft“ über das Potential ihrer dialektischen Aufhebungen sozialräumlich analysiert und entworfen werden.

#2 Social and Cultural Aspects of Hydroelectricity

**Guest critic:
Prof. Dr. Emmanuel Reynard,
Université de Lausanne**

Moussa Belkacem

Université Gustave Eiffel - École doctorale ville, transports et territoires

Reconstruction as Compensation : A Comparative Study of two Contemporary and Precursor Alpine cases – Tignes and Curon.

Tignes in France and Curon in Italy are two Alpine villages with a similar fate : In the early 1950s they were both faced with the necessity of their intentional destruction due to the construction of a dam: Chevril and Resia. Not only contemporary, their process seems synchronous (1920s - first projects; 1940s - authorisations; 50s-52s - destructions).

These two villages, based mainly on livestock breeding, were important centres in their valley (450 and 670 inhabitants), and benefited from a dynamic development linked to tourism. Both suffered from the operator's non-transparent negotiation methods and communication attacks (aimed in particular at devaluing them). In response, both resisted physically and through political means, and ultimately submitted to state coercion. Villages have been dynamited and graves exhumed and moved. Although the haste and unpreparedness were obvious, in both cases, reconstruction elsewhere emerged as a compensation solution (for the first time in both countries). In both cases, the design choices were oriented towards an archetypal architecture (neo-Savoyard or Tyrolean).

But on the other hand, the topographical specificities have largely contributed to differentiate these two cases: the nature of the infrastructures (arch or gravity dam) and their heights, and therefore the nature of the lakes and the landscapes created. Thus, Tignes, at the bottom of the valley, disappears and reappears every ten years, whereas Curon, at the edge of the lake, has a permanent bell tower above water, which is staged and whose image is widely exploited.

The comparative study of these two cases allows us to analyse the role of the reconstruction project in the resolution of conflicts as a tool for negotiation. They raise the question of the management of these forced displacements and their compensations, or even more, of the repair of landscapes and lives.

Dr. Sebastian De Pretto
Institute “Kulturen der Alpen”, Altdorf

Connecting the Alpine Damscape: Transnational Networks of Reservoir Construction in Italy and Switzerland, 1950-1974

The Alpine landscape underwent dramatic transformations during the Anthropocene era. The human impact on the Alpine biosphere is particularly visible in hydraulic construction that started in the late 19th century and peaked in the 1940s and 1950s. In countless valleys, barrages tell the story of how political and economic elites have appropriated the ecological resources of these mountains to supply industrial and economic energy demands. My postdoc project “A transnational history of reservoir construction in the Alps from 1870 to 1974” explores how hydropower was exploited in the Alps since the late 19th century by investigating transnational networks that fostered the spread of such infrastructures as well as local conflicts that emerged in the tapped catchment areas.

Within this transnational and socio-ecological framework, the project's case studies focus on the consequences of constructing reservoirs for the communities that lived or farmed in those valleys that were flooded by artificial lakes. The affected communities were rarely in the position to decide without direct or indirect pressure from political and economic elites, whether they agree to give away their land. Consequently, dam building often led to expropriations and displacements. This paper investigates the fates that Alpine communities had to endure due to waterpower extraction. To this end, the agents and networks involved in evictions will be analyzed on a local, national, and transnational scale by focusing on case studies from Italy and Switzerland. How remote communities, state authorities, private companies, environmental movements, or scientific experts planned, financed, and negotiated their projects across borders will thus become evident. In this context, the paper will also discuss how evictions were managed and justified by different stakeholders. The ways actor-networks operated and interacted with each other within federal and central state systems, will be shown along storage lakes in South Tyrol (1950-64) and the canton of Valais (1953-74).

Alpine Transition: Infrastructures and Challenges in the Warming Climate Regime

Across the alpine territory, various forms of appropriation developed progressively for a long time, gradually claiming their spaces and wedging into an intensively competitive use of the mountains. With the Alps *longue durée* palimpsest intertwining, all the different uses find themselves in a paradoxical competition. Through overt or less overt ways, human activities and economic interests have assembled and entangled, with both tangible and symbolic consequences. These dynamics construct today the complexity of the Alpine region, facing more rapidly and markedly the results of the ongoing climate regime.

The contribution addresses these dynamics through the analysis of the infrastructure of water accumulation and exhaustion developed across the Italian north-eastern alpine territories. By shifting urbanism focus into large 'operationalized landscapes', the contribution would explore the interplay of the multiplicity of processes of rationalization of the territory with the ongoing ecological transformation of the alpine area. Raising a series of questions stemming from the materiality of water, in the specific case of the Veneto region, the contribution attempts to question the socio-ecological dynamics that the machinic condition of the mountain environment entails across the larger territory. It focuses on the conflicting dynamics entangled across the mountain-plain landscape and exposes the current challenges the Eastern Alps basin is facing towards the current warming condition. In the midst of the ongoing multiplicity of crises, the contribution argues for a widening need to describe the machinic territory as a way through which to define future coexisting strategies to inhabit the territory. In doing so, it proposes a series of cartographical analyses of the Alpine region in order to reframe its bio-political status and role, beyond borders and jurisdictions. From multi-scalar cartographic operations of analysis and reconstruction of the alpine territory, it argues for an analysis which is constitutive of cities and their more-than-urban geographies, in order to address both the specificity of conflicts at the local scale and the larger web of political, economic, and environmental processes in the broader one.

#3 Memories of and Imaginaries for Exhausted Landscapes

**Guest critic:
Metaxia Markaki,
ETH Zürich**

Deindustrialized Alps. The Future of Alpine's Industrial Ruins between Local and Global Imaginaries

This contribute looks at the patrimonialization processes of both physical and symbolic ruins left behind by the abandonment of Alpine's industrial activities (Modica, 2019; Migliorati, 2021). Thinking of deindustrialization as “very local” cultural trauma (Alexander, 2004), this analysis seeks to determine how Alpine communities remember industrial past in the transitional present, and whether, and to what extent, defining regional industrial heritage (physical and/or cultural) connects to important community identity. This analysis also interrogates how Alpine communities “use” that symbols to conceive their own future.

Looking to “deindustrialization” as a cultural process, and so strictly related to the identity of a community (Berger, 2017) that experienced it, socio-cultural roles of a brownfield are expressed by its symbolic embodiment with the social space where it arises. As last studies in this field suggest, brownfields keep on shaping the local identity even after the shutdown of the activities transforming it into a *lieux de memoire* (Halbwachs, 1941). What is left is a non-material heritage – in terms of memories; social practices; feelings – immanent to the physical one; a “structure of feelings” (High, 2013) that persists in different forms even if forced to be reshaped in a present of transition, and still necessary to orient and/or preserve local identity in an uncertain, post-industrial future.

The clashes between the bucolic imaginary that surrounds Alps, and the Alpine identity could be a hustle to an eventual transformative project and/or the necessary stimulus to rethink the peripheric status of the Alps in their relationships with the city-centers. In general, the aim is to understand what the future of ex-Alpine industrial communities will be, among 1) abandonment, 2) (eco)museification and 3) requalification (or reuse) projects that often forget to valorize local specificities and needs, redesigning spaces that absolve – instead – to global necessities. Empirically, some case study will be taken in account.

Dr. Jean Chamel

Rachel Carson Center for Environment and Society, LMU, Munich
Institut de Géographie et Durabilité, Université de Lausanne

Collapsing Landscapes: Rearrangements of Sensitive, Ritualized and Aesthetic Relationships with the High Alpine Mountains

As a result of global warming, glaciers retreat is accelerating and rocks collapses are multiplying in the high mountains. This geological collapse is disrupting the Alpine landscape and leading to another collapse, that of the perception of these mountains. At the same time, other forms of relationship to them, such as the recent funeral ceremonies for vanishing glaciers, are emerging. Socio-cultural transformations, which concern the imaginary, emotions, aesthetics, and sensitive and ritualised practices in the face of these collapses, are in process. People who share a sensitive and affective relationship with the mountains of the Mont Blanc range and the Valais Alps: guides, crystal diggers, glaciologists, mountaineers, huts keepers, photographers, artists, etc. express feelings of loss and sadness, but also develop new forms of interrelationships with the mountains and with specific places/beings as ways to overcome their “mourning”.

The first observations of concrete situations of interactions, such as (micro-) rituals, with specific entities like glaciers and the documentation of the changing aesthetic perceptions of a mountain which is disintegrating show that the reactions are not uniform: while some persons are touched by what is lost, draw direct links with a perspective of societal collapse and emphasize the negative consequences of climate and landscape changes, others tend to focus more on adaptation, in terms of practice but also of perception and relationship. The modernist divide between the humans and their environment can then give place to other entanglements with the mountains, with for instance more direct relationships that can be related to animism. Time scales is also a crucial issue, with huge differences of perspectives when timeframes are considered at geological, humanity or individual levels.

The impacts of tourism infrastructures on the Alta Valtellina Alpine Landscape: Exploiting global events to trigger sustainable strategies of local development

Since the second half of the 20th century, Alta Valtellina, like the whole Alpine macro-region, has experienced the rise of mass tourism as the main driving force of the mountain economy, thanks to the economic boom and the attractiveness of winter sports. This process has led to the construction of tourism infrastructures, such as ski stations, accommodation facilities, vacation homes with huge environmental impacts, land consumption and the transformation of the alpine landscape. This touristification process has affected traditional local economies linked to the mountain landscape, producing the conflict between the local and global dimension.

This gap is recognizable in the Alta Valtellina landscape where the anthropic action producing decontextualized infrastructures overlaps with the conscious human intervention visible in the terraced landscapes, in the shape of historical paths connecting valley floors with mountain sides and in the border between woods and pastures.

In this context, the Winter Olympics 2026 assume a strategic relevance, since the Alta Valtellina area has been chosen as one of the main locations. The global scale of the event potentially pushes the conflict with the local dimension to the extreme by enhancing the role of winter sports, increasing international tourism flows and favouring urbanization processes. However, if the Olympic challenge is included in a broader strategic vision it can be considered an opportunity to promote different development scenarios. This perspective is based on the ability to exploit the event as a catalyst for different projects aimed at the valorisation of the landscape and local economies in order to trigger a long-term development, and not only ensuring the construction of sports infrastructures necessary to gain the short-term success. This means to promote alternative forms of tourism based on the active fruition of the territory and the creation of local production chains, in a perspective of sustainable rebalancing of winter sports tourism. These projects are related to local resources, but at the same time able to transcend the local dimension taking advantage of the global event to be placed within a broader vision of sustainable development.

#4 Infrastructure, between Technology and Aesthetics

**Guest critic:
Aisling O'Carroll,
The Bartlett School of Architecture**

Lawinenverbauung zwischen Technologie und Ästhetik

Mein Beitrag stellt eine Studie vor, die sich mit einem häufig vernachlässigten Teil alpiner Infrastruktur in Österreich beschäftigt – nämlich jenen Maßnahmen und großflächigen Verbauungen zum Schutz vor Lawinen. Gegenstand der Untersuchung sind die Bearbeitungen der Landschaft im Sinne der „Versicherheitlichung“, die sich nicht ausschließlich auf die pragmatische Herstellung von nutzbaren Räumen beziehen, sondern auch auf die durch Bilder geleistete, letztlich fiktionale Produktion einer landschaftlichen Imagebildung, die mit dem Narrativ von Sicherheit auch die Fiktion von „Natur“ beinhaltet. Instrumentelle und operative Bilder, vorwiegend aus Ingenieurdisziplinen, Bilder aus der Tourismuswerbung und künstlerische Auseinandersetzungen mit diesen Architekturen stehen dabei in einem spannungsreichen Verhältnis. Die Arbeit zeigt, dass und wie Sicherheitsarchitekturen kommuniziert werden und in welcher Weise der Sicherheitsdiskurs die Gestaltung wie die Ästhetisierung der alpinen Landschaft prägt.

Das von einer langen Tradition geprägte Idealbild der Alpen als einer unberührten Naturlandschaft – über Jahrzehnte Garant einer funktionierenden Tourismuswirtschaft – droht durch die zunehmende touristische Nutzung gepaart mit Klimaerwärmung und die damit einhergehende Ausweitung der Infrastruktur sowie Sicherheitstechnik an Glaubwürdigkeit zu verlieren und den verschiedenen Erwartungen nicht mehr zu entsprechen. Die steigenden Anforderungen an die Sicherheitstechnik, deren Planungen und Kommunikation einerseits sowie andererseits die Notwendigkeit der Tourismuswirtschaft ein neues Narrativ zu entwickeln, bildeten den Ausgangspunkt den alpinen Raum als Sicherheitsraum zu betrachten.

Die Ausführungen zeigen, dass die Geschichte der Darstellungen von Landschaft und Sicherheit in verschiedene Bild-Bereiche hinein- und weit in die bildhistorische Vergangenheit des Landes zurückreicht. Seit den 1990er-Jahren aber kann im künstlerischen Fotografiediskurs eine substantielle Bildproduktion zum Thema der technisierten und damit einhergehend gesicherten Landschaft

im Alpenraum festgestellt werden, die im Kunstkontext zu einem Topos der versicherheitlichten Landschaft führt. Davor waren Sicherheitsmaßnahmen zum Schutz vor Naturgefahren in der Öffentlichkeit fast ausschließlich über technische Fachpublikationen und Informationsbroschüren vermittelt worden. Nun erreicht deren Vermittlung eine größere Adressat*innenschaft.

The Construction of a Hydroelectric Landscape: Spatial Projects for Lake Sihl (1897-1937)

In the history of rivers in Switzerland, the emergence of hydroelectricity from 1870 to 1970 made the reservoir a new and major landscape figure. However, research works on hydropower have typically focused on dams and power plants, leaving reservoirs in the background, as a passive element. This dissertation confronts this status quo by questioning the landscape of urbanised reservoirs as a project, with Lake Sihl in Switzerland as a paradigmatic case.

What I propose for this workshop session is to examine the spatial projects carried out for Lake Sihl, as an early laboratory for hydroelectric landscapes in Switzerland. Several spatial topics were raised during the planning of the reservoir, beyond the basic infrastructural components. Some were obvious and pragmatic: a resettlement scheme and a new road network. Others were less explicit: a planting scheme and regulations to limit water fluctuations. Finally, other issues were raised after the impoundment of the lake: sites of water leisure, private lakeside developments, and landscape protection plans. By reviewing these different works, the research traces the human efforts and the negotiations it took with other human and non-human actors to grapple with the spatiality of a hydroelectric infrastructure.

Drawing from this analysis, I argue three points: (1) There was an actual design for the landscape of this urban reservoir, but rather than one large spatial project, it played out through a set of diffuse and seemingly unrelated projects, partly proactive and partly retroactive. (2) The fluctuation of water is an understated, critical issue. It embodies the conflict between the extractivist infrastructure and its naturalisation, but also offers potential spatial qualities that are specific to hydroelectric reservoirs. (3) These spatial projects are the scale of local communities' agency against, in contrast to the larger scales of the infrastructure. It is where they appropriate this hydroelectric landscape, by re-inventing it, not only as the site of an infrastructure but also as a place of life.

Dr. Maddalena Napolitani
École Normale Supérieure, Paris

Painting the Alpine Landscape between Earth sciences and national identity in the 19th century: the Case of the French Painter Claude Hugard (1816-1885)

The aim of this contribution, between art history and the history of science, is to study the relation between the aesthetic, political and scientific issues embodied in alpine landscape's paintings during the second half of the 19th century. In fact, this key period is marked by major advances in earth sciences and political upheaval, especially in France. It's by this time that the Alps begin to be studied and apprehended both as site of great scientific interest and as a natural and political border.

To analyze these images, and the different layers of meaning that they embody, the chosen case-study is the Savoyard painter Claude Hugard, and especially the alpine landscape paintings realized for the mineralogy museum of the Parisian École des Mines (Mining School) during the 1850s.

Trained in Geneva by the Romantic painters Diday and Calame, Hugard worked in both Paris and Savoy at the time of its annexation to France in 1860. He shows a clear preference for alpine landscapes as well as an interest in earth sciences, as witnessed by his close collaboration with scientists and mining engineers, and the École des Mines' paintings reunite the quest for scientific objectivity and his romantic vision of landscape.

Indeed, if the paintings had to express technical achievements and sciences' progress (that will eventually led to the opening of the Frejus' tunnel in 1871), Hugard was also profoundly attached to his origins and the territory that he wished to make known in Paris, and this is not insignificant within this delicate moment of nationalistic vindication of the French Savoy.

Hugard's work, even if unstudied, is symptomatic of a broader and new way in which the Alps are represented, and their new images appear as composite and stratified structures shaped by different actors, and also are precious documents witnessing of the landscapes' changes.

#5 Tourist Infrastructure and the Perception of a Nation

**Guest critic:
Dr. Falma Fshazi,
ETH Zürich**

“Borders Separate, Roads Connect”: Alpine Roads as Cultural-Historical Reference for Land and Landscape

«Borders separate, roads connect,» claimed Bavaria's representative at the 7th International Road Congress in Munich in 1934. In the interwar period, looking across the border was essential for determining Switzerland's position in the international road network. At that time, Switzerland's alpine travel destinations were considered a historically legitimized location factor; in contrast, the technical expansion of the roads was future-oriented toward international automobile tourism, which was valued as economically essential. For this purpose, the progressive circles of tourism as well as road construction representatives invoked the fear of being bypassed as a narrative on the political stage, i.e., the fear that Switzerland would be left behind if it did not keep up with the expansion of the roads of neighboring alpine countries.

Concerning the alpine roads as a consumer good for motorized tourists, the interplay between the modernization of traffic routes and the staging of the alpine landscape was constitutive. This was contrasted with the first ideas of tunnel passages to lift the limitation of the winter closure and strengthen Switzerland internationally as a traffic node. Whether the roads should lead into the country or cut through it shaped the discourse on the design guidelines for the alpine passages.

Roads give access to landscapes and thus decisively shape their perception. In the alpine roadscape of Switzerland, there are still lines and layers of historical structures from these times. Since these roads are still used, they serve as witnesses of the cultural-historical significance of the unity <road and landscape.>

Water Features: Electric Light and Technological Tourism at the Giessbach Falls

In an 1863 edition of the *Berner Taschenbuch*, Professor of Geography and Natural Science in Berne, Johann-Rudolf Hamberger, expressed lament regarding the nightly illumination of the Giessbach Falls in its impending transition to electric light. Hamberger, a self-taught expert in pyrotechnics, had been commissioned in 1855 by the owner of the Grandhotel Giessbach to develop the initial illumination of the waterfall, situated directly opposite the hotel's main terrace. Using a series of red and white “Bengal Lights” – a 19th century equivalent to contemporary fireworks – he produced nightly shows establishing the Giessbach as a destination worthy of international attention landing it in the pages of numerous well-respected travel guides.

Rumored to have started as early as 1862, the Grandhotel Giessbach claimed to have begun off-site experimentation with electric light to develop strategies for illuminating the falls over longer durations. Fueled by a new landscape of competition between the nearby Reichenbach Falls and the northern Rhine Falls, which had both started to produce similar shows, the Grandhotel Giessbach moved to achieve a competitive edge by fully transitioning to electric light in the summer of 1884. This technological upgrade initiated a trajectory for the Grandhotel Giessbach and surrounding property that would lead to its subsequent development and advertisement as a new kind of destination entirely – an Alpine, technological world of its own creation, complete with nightly electric lighting of the waterfall, a private gasworks, a post office, telegraph and telephone offices, a hydrotherapy spa, and artificially illuminated dining rooms. Despite its many resource-dependent amenities, the entire campus of the hotel property – consisting of more than 30 structures by 1911 – remained a remote and secluded feature of the mountainous hillside, only accessible by combined transport via boat and hydro-mechanical funicular.

This paper will examine the artificial illumination of the Giessbach Falls in the context of new forms of hybrid natural–technical tourism that emerged in the late 19th century – in this case, made most visible in the illumination of naturally-occurring water features. Additionally, it will follow the effects of the resulting electrical infrastructure required to support the amenities of the property as its scale grew through multiple expansion projects in the early 20th century – ultimately resulting in the perception that its value as a source of hydroelectric power had surpassed that of its natural and touristic qualities. This set of natural, technical, and bureaucratic forces found compromise in a series of discrete decisions regarding the future of the property – all of which were physically and structurally organized around the illumination of the Giessbach Falls, a spectacle only visible at night.

Dr. Alice Riegler
University of Trento

International efforts for Alpine Landscape Conservation. The British Opposition to the Matterhorn Railway Project 1900-1960

This contribution analyses the British discourse around alpine landscape preservation that was shaped by associations such as the English Branch of the League for the Preservation of Swiss Scenery, the Alpine Club and the British Mountaineering Council and centred on a strong opposition to the excessive spread of mountain railways, buildings and advertisements in the Alps. Despite recognising that landscape protection concerned primarily the countries involved, British organisations felt nonetheless compelled to act, not even shying away from asking the British government to intervene on their behalf. In particular, this paper analyses the debate surrounding the planned construction of a railway, first believed to be funicular, then aerial, on the Matterhorn. As its first ascent was made by Englishman Edward Whymper, the mountain arguably held a particular place in British public discourse. The Matterhorn project had opponents also in Italy and Switzerland and was ultimately realised only on a reduced scale, as a cableway not reaching the mountain's summit. Yet, in the Alps, this and other schemes were also regarded as technical achievements that were necessary to boost the tourism industry, nowhere more so than in post-war Italy. British associations were lending their support to local preservation movements but their engagement nonetheless offers an external view of Alpine landscape conservation. As they held no stake in the economic growth of the concerned areas, they were free to state their opposition to "commercialism in the High Alps" very loudly. Although careful not to slip into patronising attitudes, the desire to prevent any kind of development of the Alpine scenery, which concerned almost exclusively the upper-middle classes and their media outlets, testifies nonetheless to a somewhat colonial approach. The Victorian view of mountaineering as a form of imperial exploration/conquest ultimately seeped through a debate that centred on how and by whom the Alpine landscape was to be enjoyed.

Dr. Caterina Franco
Université de Lausanne

Des stations de ski en site vierge? **A cross-border history of the interactions between tourist infrastructure projects and high-altitude environments, in the French and Swiss Alps (1960-1970)**

The work questions the interrelations between the design of alpine high-altitude ski resorts and the natural and cultural characters of the implantation sites, on a transnational scale and through a historical perspective. The aim is to go beyond a simplistic consideration of the so-called ex-nihilo ski resorts built during the second half of the 20th century as projects conceived without any anchorage to a specific geographical context. Indeed, on one hand, the creation of new tourist infrastructure on non-urbanised land involved a large-scale modification of the multiple components of a territory; on the other, the geomorphological, natural and historical characteristics of the high mountains also had an impact on the design and evolution of such projects, as it emerges from the archival research conducted for my PhD and Post-doctoral research.

Through an analysis of the projects for Les Menuires in Savoie (France) and for Aminona in Valais (Switzerland), during the 1960s and 1970s, this work illustrates how architects, urban planners, technicians and local communities had to deal with land uses and land property systems that preceded tourism exploitation or with new capabilities to be developed. The acquisition of land for constructing facilities and infrastructures, the confrontation with a geological asset that was often understudied, or the difficulties in finding sufficient sources for the implementation of drinking water supply systems, often generated tensions between local communities and external actors, and determined gaps between the ideal project and its feasibility. The transnational perspective opens the way to further reflexions about the transfer of the idea of the “integrated ski resort” as a model for the development of skiing activity, from 1930 until 1980 across the Alps, and also helps in clarifying the specificity of each economic, political and social context in determining the fortune of such projects.

#6 Landscape as Archive

Guest Critic:
Gilles Monney,
University of Basel

The ‘Bisses’ of Canton Valais (Switzerland): Enduring Resilience through Periods of Material and Technical Change

In Switzerland's Canton Valais, an intricate network of irrigation channels (bisses/Suonen) first constructed in the Middle Ages now forms an extensive infrastructural system. Much of the research to-date focuses on the ‘institutional genius’ of the bisses as a commons. This paper aims to illustrate how the bisses are also works of ‘infrastructural genius’: their material and technical attributes are essential to the resilience of the commons. Through a landscape history based in material culture, this paper traces the evolution of the infrastructural system over the course of the twentieth century. Initially, a period of state-financed modernization works in the 1920s saw the emergence of new materials and techniques such as dynamite and tunnel-building, reinforced concrete, underground pipes, and spray irrigation. Following the abandonment of the network due to agricultural decline in the 1950s, a period of renewal and reconstruction started in the 1980s. Since then, the irrigation channels have been integrated and hybridised within the larger network of hydro-electric dams and water supply. (1) How did modernisation works upend the core principles of bisse-building: incremental construction, renovation, and upkeep? (2) How have these principles endured, adapted, and been reinstated in the last few decades? Recurrent maintenance and care work has now been re-established as a primary concern. Indeed, state financing bodies currently require the adoption of ‘traditional’ construction techniques in renovation works, thus promoting materials and techniques that allow ease of maintenance and repair. This has resulted in the replacement of modernised segments of the channels with vernacular hydraulic artefacts (open channels made of timber, soil, stone). The current paradigm supports indigenous ecological knowledge, which this paper suggests is key to the resilience of the infrastructural system as whole.

Marco Ferrari
University of Ferrara

Conflict Ecologies: New Heritage Imaginaries for the WWI Mountain Forts

Is It possible to interpret military archeology not as a mere symbol of dominance over territories but as symbol of coexistence between species, between natural and artificial and present and future assemblies? Is it possible to see relationships where there used to be only conflict? Landscape-forts is an independent research and curatorial project started in 2019 and aimed at building a new territorial imaginary for the abandoned WWI Austro-Hungarian forts of Trentino-Alto Adige alpine region, linked to a renewed ecological vision. Drawing insights from landscape archeology, difficult heritage, emotional geography, contemporary philosophy (posthuman, multispecific approaches), natural sciences (geology, botany, biochemistry), phenomenology and feminism, the projects focuses on the post-war life span of these structures and on all those micro-facts and more-than-human beings involved in shaping their environments, contributing in turning them into unconscious ecosystems. From History, the focus shifts to the stories, from heroes to the actors, from leaders to the guests: a ruin is not a process of destruction but the process of a construction shared between humans and the other species. Establishing a parallel from queer and gender theory, the research challenges the very notion of 'natural' and 'artificial', proposing a queer approach to landscape where both dimensions fuse into a single hybrid presence. During their last one hundred years in fact, these abandoned structures became landscape and contributed to shape whole new mountains parts: concrete turns into stone, stalactites and stalagmites spring from underground parts, fungi and moss constitute new layers and everything fuses into a new coexistence. This is why these century-old mountain forts could offer the key to imagine spatial and material futures based on radical integration of species, genders and categories, turning conflict archeologies into traces of welcoming rituals. An untold story which opens up a space for possibilities and alternative assemblages to exist.

Secondary Infrastructure Exposed: the Temporary Settlements of La Grande Dixence (1950-1962)

As a response to Susan Leigh Star's call to study "boring things" and mundane aspects of infrastructure, this research project offers a reflection on the notion of *secondary infrastructure*, understood here as the infrastructure enabling the fabrication of the primary one. Through this lens, high alpine networks of hydroelectricity are seen as an illustration of the expansion of what Anna Lowenhaupt Tsing coins as the *resource frontier*, in the Swiss Alps.

The Grande Dixence complex, in the canton of Valais, is the main case study. This dam, the tallest in the world by its completion in 1962, was built in response to the rapidly increasing demand for electricity in the postwar decades. The remoteness of the constructions and the need to execute as much of the work as possible in the summer months resulted in the construction of temporary housing settlements for the workers, directly on the building sites. In stark contrast to the fixed and massive physicalities of the primary infrastructure, a new, highly volatile, and dynamic territory emerged with the coming and going of this secondary infrastructure. Progressively proliferating into every Alpine valley, it relied on the mobility of its components.

Two of them are investigated in detail: firstly, the labor, split between local workforce and guest workers, and secondly the use of prefabricated barracks, to house those bodies. The focus on these two aspects allows for updated readings of building processes of the dam, and of the working conditions. Together with a reframing of the notion of infrastructure and territory, this focus allows to conceptualize the landscape as an archive, and the study of the remnants of this construction as an act of remembrance. They ground claims to belonging to silenced voices, by offering a new reading of the Alpine Landscape.

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ETH Zürich, Zentrum

organisation:

Rune Frandsen, Claudia Gebert, Thomas Kissling, Seraina Renz, Sabine Sarwa & Sarem Sunderland.

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Grafikdesign (Konzept): **Sophie Wietlisbach**

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