Landscapes of Care: Photography, Film, Modern Architecture and Landscape Heritage



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The Infrastructural Sublime. The Spectacle of Dams as a Catalyst for Environmental Consciousness

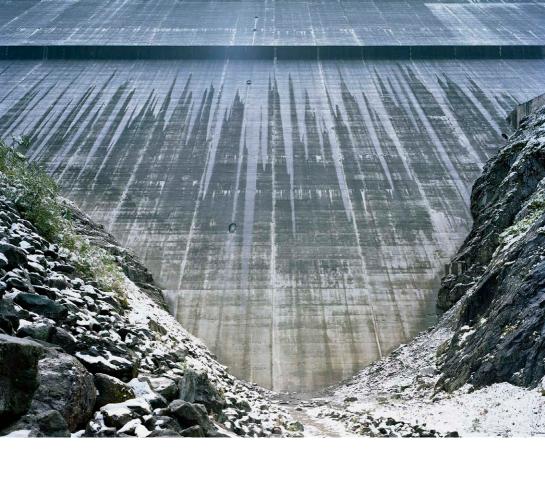
Lars Rolfsted Mortensen

Abstract:

Dams in the Swiss Alps are at once engineering marvels, dramatic man-made artefacts, crucial nodes in far-reaching infrastructural systems, and destructive interventions in alpine ecosystems. The essay explores the contradictory nature of dams in the Swiss Alps through the author's photographs and the experience of the infrastructural sublime. By focusing on the coming together of rockface and cast concrete shell within the images, the dams appear as distinct naturecultures interwoven with the flows and forces of the alpine landscape. Using the sublime as a lens to describe the aesthetic experience, the essay proposes the possibility of gaining environmental consciousness and humility of the vast impact of dams, through the encounter of the infrastructural sublime.

Key words: infrastructure, sublime aesthetics, photography, landscape, dams

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The Infrastructural Sublime. The Spectacle of Dams as a Catalyst for Environmental Consciousness

Two thirds of Swiss electricity come from hydroelectric powerplants¹ making them crucial to long-term carbon neutrality. With 220 dams, no other region in the world is as densely populated with the steep concrete artefacts as the Swiss Alps. As a human intervention to prevent flooding and control irrigation, dams date back at least 5000 years,² but the vast majority have been constructed after 1950 and they form significant, lasting components of the landscape. Dams are at once destructive interventions in alpine ecosystems, crucial nodes in infrastructural energy networks, and remarkable human achievements constituting future heritage inseparable from the landscape they inhabit. The photographs present the dams with a focus on the dramatic intersection between rockface and cast concrete shell. Methodically indebted to the oeuvre of Bernd & Hilla Becher.3 the construction of the images follows distinct compositional figures e.g., the frontal depiction of the concrete shell deliberately leaving out the top ridge to allow the structure to become open-ended, and the opposed diptychs taken from each side of the shell to emphasize the coming together of geological formation and human artefact. Employing the image category proposed in Hans-Georg Gadamer's phenomenological aesthetics, the images must be considered autonomous to the depicted as they form new presentations of the dams that allow new interpretations to surface.⁴ This translation from embodied experience to photographic image holds the potential to change our perception of infrastructures and their impact on the landscapes we inhabit.⁵

^{1&}quot;Energy – Facts & Figures," Federal Department of Foreign Affairs, accessed March 27th 2023,

https://www.eda.admin.ch/aboutswitzerland/en/home/wirtschaft/energie/energie---fakten-und-zahlen.html

² Stefan Schmutz and Otto Moog, "Dams: Ecological Impacts and Management", in Riverine Ecosystem Management —

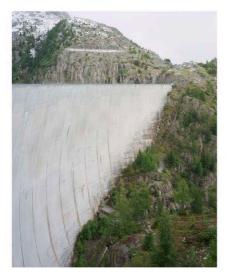
Science for Governing Towards a Sustainable Future, eds. Stefan Schmutz and Jan Sendzimier, (Cham: Springer, 2018) 111

³ Susanne Lange, Bernd and Hilla Becher: Life and Work (Cambridge, Mass: MIT Press, 2006), 79-83

⁴ Hans-Georg Gadamer, Sandhed og metode: grundtræk af en filosofisk hermeneutik, trans. Arne Jørgensen (Århus: Academica, 2004 [1960]), 136-142

⁵ Dag Petersson and Walter Niedermayr, "Photographic Space", in *Representational Machines: Photography and the Production of Space*, eds Anna Dahlgren, Dag Petersson and Nina Lager Vestberg (Aarhus: Aarhus University Press, 2013) 108–110







As a visual strategy, the compositions allow for a close examination of the characteristics pertaining to both mountain and dam—the jarring granite and the geometrically precise concrete surface. The scale of the dams is initially difficult to decipher. However, a closer examination of fixtures, doors, and handrails hints at just how tiny the human body is compared to the artefacts moulded into the landscape. *The infrastructural sublime* appears within these phenomena: the immense scale and the geometric clarity with which the dams sweep into the rockface inspire a classical awe and apprehension distinctive of both a Burkean⁶ and Kantean⁷ sublime experience. As engineering marvels, the dams express an almost divine material mastery amidst the vertical landscape. They become vital monuments within the vast infrastructural networks of contemporary society, and their engineered unnaturalness complies with Nye's term the *technological sublime*.⁸

6 Edmund Burke, A Philosophical Inquiry into the Origin of our Ideas of the Sublime and the Beautiful (Cambridge: Cambridge University Press, 2014 [1756])

 $7\ Immanuel\ Kant,\ \textit{Critique of Judgement},\ trans.\ Werner\ S.\ Pluhar\ (Indianapolis:\ Hackett,\ 1987\ [1790])$

 $8\ David\ E.\ Nye, "Technological"\ in\ Seven\ Sublimes\ (Cambridge:\ MIT\ Press,\ 2022)$

[Fig. 3]
Lars Rolfsted Mortensen, Emosson Diptych from the series "Infra/Super/Structure", 2017, 2 inkjet prints of 100 x 80cm





However, it is essential to overcome the dichotomy of natural and constructed world to comprehend the dams and their conflicting agency within the landscape. Rockface and dam may first appear as a joining of two distinctly different phenomena. But the structural interdependency of the two, and the dam's raison d'être to block and tap the flow of glacial water bodies make them coalesce into one solid, aggregate body of rock—a man—made prosthesis transforming the geologically given. The dam and its networks of tunnels, turbines, spillway canals, transformers etc. cannot be understood solely as a solitary mesh of human artefacts, but only as a composite, interwoven and interdependent *natureculture*,⁹ where the constant exchange of flows and forces with the surroundings is constitutive of the dam itself. This allows for the acknowledgement of the continuous alterations of the landscape i.e., the alpine river flows prior to dam construction and the gradual expansion of hydropower stations in the Swiss Alps involving the flooding of pastures and settlements.¹⁰

9 Donna J. Haraway, Staying with the Trouble—Making Kin in the Chthulucene (Durham: Duke University Press, 2016) 13 10 Sabine Eggmann, "Vom Stausee Verdrängt – vom Stausee Geschenkt, Technikgeschichte aus kulturwissenschaftlicher Perspektive" in Lebenskunst – Erkundungen zu Biographie, Lebenswelt und Erinnerung, eds. Konrad J. Kuhn, Katrin Sontag, Walter Leimgruber (Köln: Böhlau Verlag GmbH, 2017)

[Fig. 4]
Lars Rolfsted Mortensen, Grimsel Diptych from the series "Infra/Super/Structure", 2017, 2 inkjet prints of 100 x 80cm

Returning to the sublime experience, a revised cognitive progression can be proposed: *apprehension* followed—not by a Kantian comprehension in *sensus communis*¹¹—but by a different, factual comprehension of the ecological and infrastructural reach of the depicted structure one is confronted with. Comprehending the potentiality of dams, their *slow violence*¹² of profound damage to ecosystems¹³ and the immense catastrophe a collapse would entail,¹⁴ can throw the spectator back to the initial, Burkean terror precisely through the enlightenment of comprehension. Such a cognitive progression corresponds to Brady's *environmental sublime*,¹⁵ founded upon humility and knowledge about the human condition as inextricably spun into the earth's ecosystems.¹⁶ Such sublime experience may bring in its wake the inclination to investigate, care for and work to heal the landscapes and ecosystems so heavily altered by human activity. Taking the prefix *infra* into account, an *infrastructural sublime* may precisely delineate the aesthetic potentiality to unearth new knowledge and environmental consciousness within the often–unseen structures that form the undergirding of contemporary society.¹⁷

11 Immanuel Kant, op.cit. 159-160

12 Rob Nixon, "Unimagined Communities: Megadams, Monumental Modernity, and Developmental Refugees" in *Slow Violence and the Environmentalism of the Poor* (Cambridge: Harvard University Press, 2011)

13 "Dams are among the most damaging human activities in river basins, deeply modifying the physiography of watersheds" Stefan Schmutz and Otto Moog, 2018 op.cit. 113

14 "Le scenario du pire", Les Archives de la RTS, accessed June 29th 2023,

https://www.rts.ch/archives/tv/divers/documentaires/7461670-le-scenario-du-pire.html

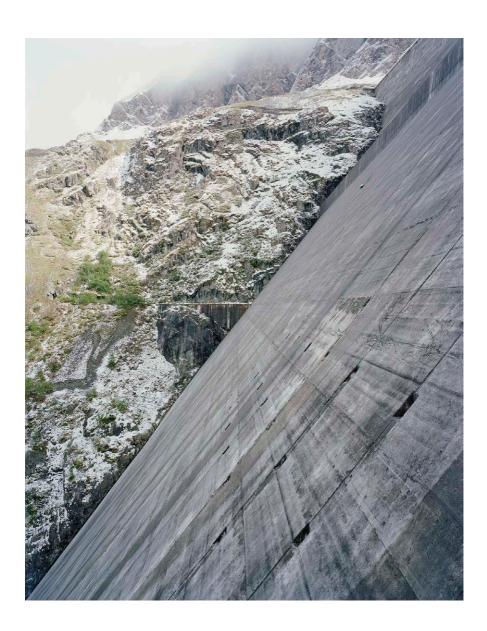
15 Emily Brady, The Sublime in Modern Philosophy—Aesthetics, Ethics, and Nature (Cambridge: Cambridge University Press, 2013), 183

16 Ibid., 195-201

17 Brian Larkin, "The Politics and Poetics of Infrastructure". Annu. Rev. Anthropol. No. 42 (2013) 328

[Fig. 5]

Lars Rolfsted Mortensen, Dixence II from the series "Infra/Super/Structure", 2017, 128 x 160cm inkjet print



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