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Renegotiating the Public Interest EDF's Alpine Hydropower Constructions and Industrial Film (1940s–1960s)

Fabian Zimmer

Résumé – Renégocier l'intérêt public. Les constructions hydroélectriques alpines de l'EDF et le cinéma industriel (1940–1960)

Cet article contextualise les films produits ou commandé dans l'après-guerre par l'Électricité de France sur la construction des centrales hydroélectriques dans les Alpes françaises. L'EDF en tant qu'entreprise étatique d'exploitation et de distribution d'énergie s'appuyait pour ce faire sur un mandat implicite d'agir dans l'intérêt de la nation et donc de pouvoir passer outre les intérêts de la population locale. À l'aide d'une sélection de films concernant deux grands projets de barrages et la submersion de villages de montagne (Tignes et Serre-Ponçon), il est montré l'usage qui est fait de ce moyen de communication d'entreprise pour renégocier cette prétention. Tout en reconnaissant, dès les années 1950, les répercussions négatives de ses projets sur le paysage, les moyens de subsistance et les émotions de la population concernée, l'EDF ne s'engage pas vers une planification plus participative.

Introduction: EDF, hydropower and the public interest

After the Second World War, French energy infrastructure lay in ruins. Transmission lines were broken, workforce for the coal mines of northern France was missing and exceptionally cold and dry winters limited hydropower production while raising the need for fuels and causing frequent rationing.\(^1\) Against this background, the goals set by the Monnet Plan of 1946 for the reconstruction of the French economy gave high priority to the reconstruction of the French electricity system and relied heavily on the expansion of hydroelectricity production.\(^2\) It was Electricité de France (EDF), the new State

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company founded through the «nationalisation» of electric utilities in the same year, that became responsible for equipping the nation's mountain regions with hydroelectric infrastructure, most notably in the French Alps.³ Within its first ten years, EDF more than tripled the capacity for hydropower production in a massive construction boom that lasted into the early 1970s, spanning the period of the *Trente Glorieuses*, the French post-war economic boom.⁴

While France is known today as «Europe's Nuclear Macho» and histories of technology in France have highlighted the close entanglement of nuclear energy with national identity, in the post-war decades before the advent of nuclear energy public imagination very much saw France as a hydroelectric nation.⁵ In 1973, when EDF's public relations department conducted its first surveys on the image of the company, the over 2000 interviewees saw hydroelectricity as France's most characteristic source of energy. A majority held the opinion that it was the energy source that would give «the country a maximum of national independence in the energy sector», and an overwhelming percentage of 69 percent thought that hydroelectricity supplied the bulk of French electricity production, on which the editors of the survey commented with surprise: «The production of electrical energy is strongly associated with the image of the dam. The French – of all categories – are deeply mistaken about the fact that oil supplies most of it.»⁶ As French historian Virginie Bodon has noted, the post-war era was marked by a strong «mythology» of hydroelectric dams, which fed into the enthusiasm of the Trente Glorieuses.7

At the heart of this «mythology» was the conception that EDF, as a State company, had an almost unquestioned mandate to act for the common good of the nation. This is very clearly expressed in the body of sources on which I focus in this paper: the industrial films produced or commissioned by EDF between the mid-1940s and the mid-1960s to document the construction of hydroelectric dams.8 The films I analyse and contextualize in the following pages are associated with two major alpine dam projects, both of which involved the submersion and resettlement of local communities, thus challenging EDF's mandate to act in the interest of the public good: the Tignes dam and the Serre-Ponçon dam. Scholarship on conflicts of use has frequently pointed out that claims to be acting in the interest of «the public» are a central resource in these conflicts.9 As I demonstrate in my analysis, EDF had to renegotiate the idea of public interest in their films well before the 1970s, the period commonly associated with more reflexive and participatory approaches to technology and planning.¹⁰ EDF, the often feared and decried technocratic giant, began to experiment with new narratives during the 1950s, hesitantly acknowledging the repercussions of their alpine projects on landscape, livelihoods and the emotions of the affected populations – without however moving towards more participatory planning practices.¹¹

Film and PR at EDF

Film played a vital role in the post-war reconstruction of Europe, as a burgeoning historiography of «useful cinema» has shown recently. As box office admissions peaked during the 1950s, both State policies and companies took an increasing interest in documentary, educational and industrial films. EDF does not buck this trend, as is evidenced by the extensive film archive held by the company. In the first three years of its existence EDF's Press Service spent 16 to 17 million Francs on film production alone, and the company clearly had the ambition to bring their films to a large public by introducing them into the pre-programme of cinemas nationwide. A list of films produced and commissioned by EDF's Construction Department accordingly labelled the films on a scale ranging from «very technical», «technical», «semi-technical», to «semi-public», «public», «very public», up to «extremely public».

Yet, these early film productions did not «seem to fulfil a precise goal», according to an internal report from 1950, which also documents that the central film service had been dissolved the year before and that film production was left to the various divisions of the company in the following years. Thus, in terms of advertising, PR or film production, as historian Yves Bouvier aptly puts it, EDF «did not develop a real communication policy until the mid-1950s».

This might explain why the vast literature on EDF and its history has largely overlooked both the company's early PR work and its film archive. Virginie Bodon-Dolso has argued, for instance, that EDF appointed a permanent and central PR service only in the early 1970s. 19 Indeed, a «Central Service for Public Relations» (Service central des relations publiques – SCRP) was formed only in 1965 and restructured in 1971 and 1977.20 Nevertheless, EDF did possess a number of services in the post-war years involved in PR and film production, whose duties were then gradually adopted by the SCRP. Shortly after EDF's foundation the company had installed the aforementioned «Press Service» (Service de presse), which also incorporated the company's film service. The Press Service was superseded already in 1949 by a new «Liaison and Communication Mission» (Mission de liaison et d'information) as a result of political struggles in EDF's management departments.²¹ In parallel to the Mission, EDF also maintained a Service création diffusion from at least 1956 on, which edited the in-house magazine Contacts électriques, first issued in the same year, and other publications. Advertising and customer service in turn were taken care of by APEL (Société pour le développement des applications de l'électricité – Society for the development of electricity applications) which was affiliated with EDF since nationalization of electric services and which went under the new acronym SODEL after 1954. Moreover, the various company departments (especially construction and distribution) employed personnel charged with publicity-relevant tasks.²²

Considering the sometimes conflicting structures underpinning EDF's PR work as well as the lack of a unified communication strategy, EDF's early films are a valuable historical source. Even if their actual impact is unclear, they reflect an ambition to present EDF to the general public as a modernizing force and they are thus embedded in contemporary discourse and the imagery of technological modernity in France – both the «mythology» of hydropower and its contestation.

Renegotiating public interest

Many of the early films produced by EDF have to be interpreted against the background of nationalization, which had been a highly political affair, contested between those in favour and those against State management of electric utilities.²³ These films demonstrated how the new State company served the public interest by deploying what historian Robert Frost has called «a strategy of proof by production, showing the nation that nationalization was an indisputable success.»²⁴ This can be clearly illustrated by examining one of the first films produced by EDF around 1950: Barrages futurs (Future dams), a «public» film according to the taxonomy cited above. 25 This film applied a rhetoric of modernization that is very well known among historians of technology. Produced to showcase EDF's hydropower constructions in the context of the Monnet plan, the film staged these efforts as a battle of man against nature. It brought into play what David Nye has called the «technological sublime», focussing on gigantism of machinery, highlighting the enormous size of the projects and using religiously loaded imagery and rhetoric, all coupled with a large dose of patriotism.²⁶ To demonstrate this it is sufficient to quote the final passage of Barrages futurs, where the speaker declared, accompanied by a triumphant orchestra: «Since 1947, 285 km of tunnels have been drilled. 23 million m³ of earthwork have been excavated. Four and a half million m³ of concrete have been poured. Across all construction sites 40 000 workers have been engaged in this prodigious activity. Thus the work of Electricité de France continues, enabling the use of the vast resource of hydraulic energy that is one of the great riches of France.»

In this nationalist rhetoric, which dominated EDF's early film production, there was no place for local concerns. In spring 1950, when a film production company sent a letter asking for permission to shoot footage for a feature-length film on a dam construction site, the Liaison and Communication Mission initially responded in a friendly manner and held out the prospect that permission and assistance could be granted, provided that the planned film was of «real general interest». Subsequent letters however tell us that the production company could not fulfil this expectation: «The director of this company visited us and gave us the broad outlines of the script he envisages. Unfortunately, in his mind, it is about insisting on the sentimental effects of the construction work on the dispossessed population, and we did openly tell our visitor that at least this part of his programme did not seem appropriate to us.» ²⁸

With this letter, the correspondence ends abruptly; the folder in which it is archived is labelled «Cimetière» (cemetery).

Tignes: Invisibilizing and Othering Alpine Peasants

The Tignes dam and the controversy surrounding it offer a perfect example of EDF's rejection of the «sentimental effects of the construction work on the dispossessed population». Tignes was the first major construction site that EDF tackled after nationalization and it would become the company's first encounter with public opinion. At 181 metres, the dam in the high valley of Tignes was projected to be the highest one in France and was designed to produce hydropower and regulate the flow of the Isère river. Its completion, however, involved the submersion of the village of Tignes and several farms in the valley. The Tignards resisted EDF's plans with various forms of protest, ranging from petitions and delegations to Paris to a lawsuit against EDF and to acts of sabotage and arson at the construction site. None of these protests managed to alter the original scheme. In March 1952 the bottom outlet of the dam was closed and the inhabitants, with whom no agreement for resettlement had been reached, were evacuated from the valley. Yet, from 1946, the Tignards could count on the attention even of the national press, who closely followed the affair.²⁹

Even though the public protests and media attention did not force EDF to reformulate their original plans, the company could not go on without somehow referring to the incident in their public communications, including film productions. Two interrelated rhetorical strategies to renegotiate the terms of public interest and to exclude the Tignards from what constituted «the public» according to EDF can be identified in the films produced by the company between 1946 and 1953: a strategy of *invisibilization* and a strategy of *othering*.

Indeed, most films about the construction of Tignes produced and commissioned by EDF were of a technical nature and approached the delicate Tignes affair by rendering invisible the fate of Tignes or by casting it in a narrative of active forgetting. A striking example of this invisibilization can be found in *Barrages futurs*, produced at the height of the conflict over Tignes around 1950. The film presented the future development of the dam and the reservoir until its planned completion in 1952 in a trick sequence. With gradual fades the animation showed how the water in the valley basin would rise. Between two frames, the village simply disappeared in the expanding reservoir, while the narrator announced the key data of the construction progress, again accompanied by proud fanfares (see figure at the beginning of the paper).

Other films did not take this drastic shortcut, but nevertheless cast the history of Tignes in a narrative of oblivion. Such is the case with the short film *Pas*torale interrompue (Interrupted Pastoral) commissioned by EDF in early 1951.30 Originally conceived as part of the advertising campaign for the 1952 public sector bond, EDF apparently held back the film until at least 1953 so that it would not be «screened in theatres too soon after the impounding of the Tignes dam.»³¹ The film's main narrative portraying the old village and the construction works was framed by a sequence that followed a shepherd and his flock. Ascending to the summer pastures, they discovered «a new landscape», «a lake - that didn't exist a year ago». In its closing sequence the film then portrayed life along this new lake and returned to the opening shepherding scene, while the speaker commented: «Next to the calm waters, life comes back to its old right. And on the flowery slopes the flocks rise again. [...] The pastoral is no longer interrupted.» The new landscape of the reservoir was cast as one that did not carry any trace of the valley's history. The beauty of the lake and the pastoral scene became tokens of the Tignes affair being successfully forgotten.³²

The most striking feature of *Pastorale Interrompue*, however, was its portrayal of everyday life in the old village in the film's main part. No other film on the construction of Tignes devoted as much attention to the old village and its inhabitants – which might be one of the reasons why the film was only screened after the impounding of the reservoir. It portrayed Tignes in winter. The church tower and the cemetery were shown in several views. Ringing bells could be heard, and the speaker indicated: «Life flowed along here, quiet and monotonous. The future resembled the past.» A long and quiet camera pan then revealed the interior of one of the houses in Tignes. It first showed a family eating a meagre meal at a table, moved on to the wood-burning stove, to three cows sharing the space with the family, and finally a bed. «In the houses, at the table with the family gathered around,» the narrator commented, «people conjured up memories, because after six months of snow they didn't have much new to

say to each other. Even the cows were bored and longed for their pastures.» This depiction of life at Tignes was clearly designed to emphasize the old-fashioned and backward aspects of the village. The Tignards appeared as remnants of the past, living a life hardly better than their cattle's. They clearly stood on the other, the «wrong», side of the dividing line between modernity and tradition.³³

This depiction of the Tignards amounted to nothing less than historical falsification. The film showed the Tignards as EDF wanted them to be. In stark contrast to the actual events mentioned above – the arsons, blockades, protest letters, press reports, lawsuit, etc. – the film's commentator expressed surprise at the «calm face» of the village «when you knew what history it was going through.» The Tignards appeared in *Pastorale interrompue* not as historical agents, but as passive spectators of a drama that unfolded without their intervention. Quite explicitly the commentator characterized them as such in the final section of the film: «Months passed – the great works the village had witnessed became a reality.» It was only with the damming of the new lake that the Tignards, «ceasing to be spectators», abandoned the valley of Tignes to the rising waters – the village «had to accept its destiny», as the speaker explained. This was the only role that the Tignards were allowed to play in EDF's staging of the construction of the Tignes dam, essentially reinterpreting the victimization of the village as a valuable sacrifice for the public good.

Nothing about this representation was unconventional. Rather, it fitted seamlessly into a discourse on the fate of the village that had already been established before the foundation of EDF. Historical research on Tignes has found that the regional and national press paid a lot of attention to the concerns of the Tignards, but nevertheless presented them as backward and already belonging to the past.³⁴ The «modern» aspects of everyday life and economy in the high valley of Tignes, such as the legal dispute brought by the Tignards, seasonal labour migration or the efforts to establish a winter sports centre in Tignes, remained largely invisible in this discourse.³⁵ Accordingly, the construction of the Tignes dam was interpreted in public discourse as a «clash of two worlds» between quasi-primitive peasants and the ruthless technology of modern engineers.³⁶ This coincided perfectly with EDF's view. Thus, the Tignards were portrayed, not in an actual confrontation with the points of contention and the problems of hydropower development, but as antagonists in the drama of progress.³⁷ The conflict over Tignes was not understood by contemporaries as a conflict over the use of resources, but was interpreted on a «pseudo-cultural level», as Anne Dalmasso has put it.38

The Tignes incident became a model for the subsequent conflicts that EDF faced between hydro exploitation and local interests. In 1947, EDF began planning a dam on the upper reaches of the Durance in the Provençal Alps. The Serre-Ponçon dam was to form a lake 15 kilometres long, making it the largest reservoir in France. In addition to generating hydroelectric power, it would serve to regulate floods and provide a steady flow for the run-of-river power plants on the lower reaches of the Durance, as well as irrigate agricultural land and, on top of that, supply Marseille with drinking water. This dam also involved the flooding of several villages: Savines and Ubaye and some smaller hamlets, a total of about 1200 inhabitants, with several thousand hectares of land, and a textile and cellulose factory. 14 kilometres of railway tracks and about 60 kilometres of roads had to be relocated to secure the transport network.³⁹

Already during the planning phase, therefore, EDF was concerned with preventing «another Tignes». 40 As soon as the negotiations for land sales began, EDF stationed a representative of the legal department in Savines, tasked with «ensuring all the connections necessary with the town hall and the residents of Savines to achieve mutual information». 41 In 1957, EDF also set up a «General information bulletin for equipment managers» (Bulletin d'information générale des cadres de l'équipement), which regularly informed executives at the construction sites about the «impacts of development», among other issues.⁴² The strategy was successful, at least judging from the fact that the construction of the Serre-Poncon dam went ahead without major protests. It is true that several associations for affected people were formed in Savines and in Ubaye after EDF submitted its request for a building permit in 1951. However, they did not oppose the construction per se, but concentrated mainly on demanding adequate compensation and a transport connection that would be convenient for the villages by the future lake. 43 In contrast to the conflict over Tignes, media attention with regard to Ubaye and Savines was largely absent.44

While several films documenting the construction of Serre-Ponçon continued the tradition of rendering the local population invisible, the development towards a more conciliatory approach is also mirrored in a number of EDF's films. The most notable among these is the feature film *L'eau vive* (Wild Water). This film, released in the summer of 1958, was directed by François Villiers, who had already been responsible for several documentary films about the hydro-development of the Rhône, and it was based on a screenplay by Alain Allioux and the well-known Provençal writer Jean Giono. L'eau vive was commissioned by EDF, who supported the film financially and reserved the final

say on the script, which was to be devoted to depicting in detail the construction work on the river.⁴⁷ Its main narrative, however, was introduced by the voice of Jean Giono, who added a truly Provençal touch to the film: «From the Alps to Avignon, the Durance never sleeps in her riverbed. [...] Today she is in the grip of people who speak an apocalyptic language. It is no longer a question of submitting to her fantasies, but of making her enter the factory, to demand from her not her beauty but her work. All along this Durance there live human families. For these families the endeavour poses and will pose many problems.»

This acknowledgement of the «human problems» brought about by the construction of a dam was in contrast with EDF's above-mentioned dismissal of a film addressing «the sentimental effects of the construction work on the dispossessed population». Hence, Virginie Bodon has interpreted *L'eau vive* as a «seduction operation» intended to win over the local population in the course of negotiations for resettlement and compensation.⁴⁸ The local press and television followed the filming with great interest.⁴⁹ When it finally came to the silver screen, the film was successful far beyond the local audience in Haute-Provence. Almost three and a half million people saw it in cinemas; it was among the ten best-attended films of 1958 in France.⁵⁰

Yet, although in this film EDF acknowledged the problems inherent in the hydroelectric modernization of France, the construction of hydroelectric dams was still portraved as an inescapable fate. Certainly, L'eau vive placed the problems of the affected population at the centre of its narrative. However, the real trigger of the plot was not the resettlement and the encroachment on nature and the livelihood of the local residents, but rather the considerable amount of compensation that the film's heroine Hortense was to inherit, which ignited envy and resentment in her extended family. In the film, therefore, it was the local population that appeared in a negative light and not hydropower development. 51 The hydroelectric development of the Durance unfolded in the background of the plot as a non-negotiable fate. This fatalism is repeatedly expressed by the film characters, who face the submersion of the valley with an acquiescent shrug of the shoulders. Already in the exposition, Simon, the wise and modest shepherd, calms down the upset old villager Joséphine, who has just learned of the planned resettlement: «Well, that's progress, my poor girl.» «I don't give a damn about their progress, if that's the case.» «It's always been like that.» And at the film's climax, when the family holds Hortense confined in her inherited house in Ubaye, which gradually sinks into the rising waters of the reservoir, her niece, the meanest character in the film, tries to excuse herself by saying, «It's not us who make the water rise!»

Besides this industrial fatalism, EDF also offered a positive vision of the development of the Durance valley by casting the new lake of Serre-Ponçon as

a tourist destination.⁵² This must be seen in the context of a new approach to regional planning that gradually departed from the traditional French centralism.⁵³ The model that EDF and public discourse looked to when harnessing the Durance was the Tennessee Valley Authority (TVA) and the hopeful narratives of prosperity brought about by multi-purpose river development in the era of the Great Depression and the New Deal.⁵⁴ These narratives were frequently called upon in EDF's films and other PR materials, with the development of tourism as a new local industry playing a major role. For instance, *Le verrou de la vallée* (The Lock in the Valley), a short film produced for EDF by the Marseille-based company *Les Films du Soleil* in 1964, devoted a large section to the tourist use of the new lake.⁵⁵ After praising the modern roads and railway lines elegantly set in the landscape, the narrator turned to the rebuilt main town of the valley: «Let us now marvel at the sight of Savines, which, overrun with tourists and summer visitors, has been forced to turn the village square into an international car park, happy to have discovered a new industry in tourism.»

The crowning glory, however, was the Saint-Michel chapel, which after the damming of the lake stood on a tiny island in the water, accessible only on foot at low water. The speaker commented accordingly, alluding to the famous tourist attraction in Normandy: «Serre-Ponçon also boasts its Mont-Saint-Michel.»

Conclusions

Using industrial films as source material, this paper has explored a shift in how EDF renegotiated what constituted the public interest during the 1950s. The company's narrative strategies switched from negating protest and problems, rejecting the «sentimental effects of the construction work on the dispossessed population», to overtly acknowledging and projecting «human problems» on the silver screen, thus making them part of the public interest that EDF had to serve – at least by openly addressing the problematic sides of the hydroelectric modernization of France. Long before the 1970s, the period commonly associated with more reflexive and participatory approaches to technology and planning, the official narratives of dam construction thus began to include a more reflexive and ambivalent perspective on modernization.

The cases of Tignes and Serre-Ponçon that I have examined here were to set the pattern for subsequent conflicts around the construction of alpine hydropower plants. Later conflicts were perceived and narrated through the lens of these two conflicts: as the intrusion of modernity into backward areas of the Alps, with all of its «human problems» and simultaneously as a promise of

local economic development with the expansion of tourism.⁵⁶ On a legal level, however, EDF's position was further consolidated as a result of the experience gained in Tignes and Serre-Poncon. The instrument of the déclaration d'utilité publique, i.e. the right of expropriation, was strengthened with an amendment to water law in 1958 so that future infrastructure projects could be implemented more easily.⁵⁷ Thus, the acknowledgement of «human problems» in EDF's public communications should not be overestimated. It did not represent a shift towards a more participatory approach in planning, nor a PR strategy that conceived of external communication as the proverbial two-way-street. Hydropower did not become a «public technology», as Helmuth Trischler and Robert Bud recently proposed as a label for the co-shaping of technology by public opinion, during the Trente Glorieuses. 58 Protests against the dams at Tignes and Serre-Poncon, while catching the attention of national media, could not rely on any larger backing in civil society, thus limiting their influence.⁵⁹ Writing in 1976 about its strategy towards the anti-nuclear protests that were just arising, EDF's Central Service for Public Relations still described these protests as «often irrational» and stated: «The temptation to ignore the opponent was certainly great and we have sometimes succumbed to it.»60

In opening: The future of Tignes in *Barrages Futurs*.

- 1 Cf. A. Beltran, P. A. Carré, La fée et la servante. La société française face à l'électricité, XIX^e–XX^e siècle, Paris 1991, pp. 277–293.
- 2 Cf. J.-F. Picard, A. Beltran, M. Bungener, Histoire(s) de l'EDF. Comment se sont prises les décisions de 1946 à nos jours, Paris 1985, pp. 59–82.
- 3 On the nationalization cf. ibid.; R. L. Frost, Alternating Currents. Nationalized Power in France, 1946–1970, Ithaca/NY 1991; H. Morsel, «Réflexions sur la nationalisation de l'électricité», in: M. Lévi-Leboyer, H. Morsel (eds.), Histoire générale de l'électricité en France. L'interconnexion et le marché, 1919–1946, Paris 1994, pp. 1334–1354. One notable exception to nationalization is the Compagnie Nationale du Rhône (CNR), described in S. B. Pritchard, Confluence. The Nature of Technology and the Remaking of the Rhône, Cambridge 2011.
- 4 From 937 million kWh in 1946 to 2942 million kWh in 1956, according to Electricité de France, Electricité de France. 10 ans d'efforts, Paris 1956, p. 10. For a critical revision of the Trente Glorieuses-narrative cf. C. Pessis, S. Topçu, C. Bonneuil (eds.), Une autre histoire des «Trente Glorieuses». Modernisation, contestations et pollutions dans la France d'après-guerre, Paris 2013.
- 5 M. Bess, The Light-Green Society. Ecology and Technological Modernity in France, 1960–2000, Chicago 2003, p. 13. Cf. G. Hecht, The Radiance of France. Nuclear Power and National Identity After World War II, Cambridge 1998; Pessis/Topçu/Bonneuil (see note 4).
- 6 Electricité de France, *Electricité de France.* Sondages, May 1973. Archives EDF, 926123. The quotes are on p. 24 and 27. All translations from French by the author.
- 7 V. Bodon, La modernité au village. Tignes, Savines, Ubaye ... La submersion de communes ru-

- rales au nom de l'intérêt général, 1920–1970, Grenoble 2003, p. 289.
- 8 The argument here represents a condensed version of some findings from my book *Hydroelektrische Projektionen*. Eine Emotionsgeschichte der Wasserkraft im Industriefilm, Göttingen 2022.
- 9 Cf. U. Hasenöhrl, Zivilgesellschaft und Protest. Eine Geschichte der Naturschutz- und Umweltbewegung in Bayern 1945–1980, Göttingen 2011; A. Dalmasso, «Ingénieurs et habitants autour des barrages alpins», in: S. Bonin, N. Blanc (eds.), Grand barrages et habitants. Les risques sociaux du développement, Paris/Versailles 2008, pp. 141–153; S. Chaney, «Protecting Nature and Practicing Democracy in West Germany. A Case Study From the Black Forest», in: C. Mauch, N. Stoltzfus, D. R. Weiner (eds.), Shades of Green. Environmental Activism Around the Globe, Lanham 2006, pp. 41–68.
- 10 Cf. Pessis/Topçu/Bonneuil (see note 4).
- 11 On visions and fears of a technocracy (embodied by EDF among others) in post-war France, cf. Hecht (see note 5), pp. 21–53.
- 12 C. R. Acland, H. Wasson (eds.), *Useful Cinema*, Durham/London 2011. The most notable example for this are the films commissioned for the Marshall Plan, cf. M. Fritsche, *The American Marshall Plan Film Campaign and the Europeans. A Captivated Audience?*, London/New York 2018; G. Bischof, D. Stiefel (eds.), *Images of the Marshall Plan in Europe. Films, Photographs, Exhibits, Posters*, Innsbruck 2009.
- 13 Cf. R. Odin (ed.), L'âge d'or du documentaire. Europe: anneés cinquante, Paris 1998. In France, film became a central part of national cultural policy with the foundation of the Centre national de la cinématographie in 1946. On industrial films specifically, see V. Hediger, P. Vonderau (eds.), Films That Work. In-

dustrial Film and the Productivity of Media, Amsterdam 2009.

- The current film catalogue includes over 1 000 titles and can be found here: https://archives.edf. com/documents/38261/38789/EDF_Archives_catalogue_films-20201209.pdf. Films for this paper were not watched at EDF archive, but in various locations (see notes for the respective films). The extensive, but not always reliable listing of films researched by A. Baudon, Les films techniques relatifs au génie civil, l'exemple des aménagements hydroélectriques français, Mémoire de DEA, Paris 2001 shows a peak in the production of films on dam constructions in France during the 1950s and 1960s.
- Cf. [Pour organiser rationnellement un service cinématographique-photographique ...], 14 November 1950. Archives EDF, 789965. EDF's ambition to screen films in cinemas can be traced in a few examples: Cf. F. H. Heldt, Letter to Les Films Techniques et Artistiques, 21 February 1952. Archives EDF, 789964; H. Calliez, Letter to Raymond Villadier, 23 July 1952. Archives EDF, 789964. EDF's films were also used internally as educational films, cf. R. Villadier, Letter to H. Calliez, 18 February 1953. Archives EDF, 789964. Quite frequently, attempts to distribute films in pre-programmes failed. Cf. Extrait de la note du 4 octobre 1952 de Monsieur H. Caillez, Contrôleur Général de l'Equipement, 4 October 1952. Archives EDF, 789964; E. Helisse, Letter to Electricité de France, Mission de Liaison, 15 June 1950. Archives EDF, 789964.
- 16 Direction de l'Équipement Documentation Cinématographique, *Listes des films d'équipement*, 5 Dezember 1953. Archives EDF, 789964.
- 17 [Pour organiser rationnellement ...] (see note 15).
- 18 Y. Bouvier, «Filming Electrical Consumption. EDF's Promotional Films (1946–2004)», in: N. Möllers (ed.), *Past and Present Energy Societies. How Energy Connects Politics, Technologies and Cultures*, Bielefeld 2012, pp. 109–133 (here p. 112) writes about the promotional films produced for EDF by SODEL.
- V. Bodon-Dolso, «Vers la mise en place d'une politique de communication à E.D.F. Ébauche d'analyse à travers le programme hydraulique (1946–1960)», *Bulletin d'histoire de l'électricité*, 24, 1994, pp. 5–23, (here p. 6). She repeats the argument in Bodon (see note 7), p. 104. This is also the narrative in the retrospective self-portrayal in «Le service central des relations publiques», *La vie électrique/Contacts*, 122, 1976, pp. 16–19.
- 20 Cf. P. Cardera, *Histoire de la communication externe d'Electricité de France.* (1946–1992), Mémoire de DEA, Paris 1995, pp. 53–55.
- 21 According to the memoirs of the head of the Press Service: J. Janiaud, E.D.F. et la main invisible, ou, genèse de E.D.F., Paris 1990, pp. 110–130. On these

- struggles cf. Picard/Beltran/Bungener (see note 2), pp. 59–82.
- 22 Cf. Cardera (see note 20), pp. 52–55. Furthermore Bouvier (see note 18), p. 113 (probably referring to Cardera), has mentioned a «communication cellled by Paul Auriol, son of the President of the Fourth Republic», which I have not been able to trace in EDF's archive. Neither Cardera nor Bouvier refers to verifiable sources, but it is conceivable that the «communication cell» refers to SODEL, in whose formation Auriol was involved (according to Dragan Petkovic, Archives EDF, by email, 19 February 2020).
- **23** See note 3.
- **24** Frost (see note 3), p. 77.
- 25 Barrages Futurs: France 1949, production & cutting: Les Films Caravelle, direction: Service Cinématographique de l'Électricité de France, 16 mm, b/w, sound, 18 min. CNC-Archives Françaises du Film.
- 26 D. E. Nye, American Technological Sublime, Cambridge 1994. While Nye has argued for the technological sublime as a genuinely American phenomenon, there are good reasons for applying the concept to other national contexts, cf. D. Blackbourn, The Conquest of Nature. Water, Landscape, and the Making of Modern Germany, London 2006, pp. 195 f.; F. Zimmer, «Nature, Nation and the Dam. Narratives about the Harnessed Waterfall in Early Twentieth-Century Sweden», International Journal for History, Culture and Modernity, 7, 2019, pp. 171–208.
- 27 R. Renaud, *Letter to Henry Jacques*, 28 March 1950. Archives EDF, 789965.
- 28 Électricité de France Direction de l'Équipement, *Letter to Robert Renaud*, 3 April 1950. Archives EDF, 789965.
- 29 More detailed accounts can be found in R. L. Frost, «The Flood of «Progress». Technocrats and Peasants at Tignes (Savoy), 1946–1952», French Historical Studies 14, 1, 1985, pp. 117–140; Bodon (see note 7), pp. 149–174; D. Varaschin, Tignes. La naissance d'un géant, Arras 2001, pp. 190–212.
- 30 Cf. R. Villadier, Letter to Film Cinétest, 5 March 1951. Archives EDF, 789964. Pastorale Interrompue: France 1953, commissioner: EDF, production: Robert Courtot, Société Sirius Films, Les Films Cinétest, direction: Mildred Pease, cutting: Yannick Bellon, camera: Raymond Picon-Borel, speaker: Daniel Wronecki, music: Stéphane Goldmann, Marcelle de Lacour, Georges Schwartz, technical advisor: André Heinrich, b/w, sound, 16 min. Institut National de l'Audiovisuel (digitization).
- 31 Cf. R. Villadier, R. Renaud, Letter to Monsieur le Président Directeur Général de la Caisse Nationale de l'Énergie, 31 January 1952. Archives EDF, 789964. The quote is taken from H. Calliez, Letter to Raymond Villadier, 31 July 1953. Archives EDF, 789964. In July 1953 the distributing firm assured they would distribute the film «with one of our major films, and

- that before the end of 1954.» Cf. C. Lemasson, *Letter to Les Films Cinétest*, 29 July 1953. Archives EDF, 789964. Before that, EDF also used the film internally for schoolings. Cf. R. Villadier (see note 15).
- **32** Another film from the same period, *Rivière domptée* (Tamed river) accordingly claimed «The Isère will bury nothing but the memory of Tignes.»
- 33 On this central mechanism of othering cf. J. Fabian, *Time and the Other. How Anthropology Makes its Object*, New York 1983.
- 34 Cf. Dalmasso (see note 9), pp. 148 f.; Bodon (see note 7), pp. 269–299. Specifically on representation by the press cf. Frost (see note 29).
- 35 Cf. Bodon (see note 7). Anne Dalmasso has noted, however, that the Tignards sometimes subordinated themselves to this image, hoping to achieve greater visibility for their concerns. Cf. A. Dalmasso, «Les Alpes de Savoie. Houille blanche et vallées noires», in: C. Gouy-Gilbert, A. Dalmasso, M. Jakob (eds.), *Alpes électriques. Paysages de la houille blanche*, Renage 2011, pp. 45–53, (here p. 50).
- 36 Dalmasso (see note 9), p. 148.
- 37 Cf. A. Dalmasso, «L'ingénieur, la houille blanche et les Alpes. Une utopie modernisatrice?», *Le Monde alpin et rhôdanien. Revue régionale d'ethnologie*, 29, 1, 2001, pp. 25–38.
- 38 Dalmasso (see note 9), p. 148.
- **39** Cf. Bodon (see note 7), pp. 97–103.
- V. Bodon, Aménagement de Serre-Ponçon. Impact d'un aménagement d'intérêt national sur une région marquée par l'isolement, 1948–1975, Grenoble 1991, p. 59.
- 41 Quoted from Bodon (see note 7), pp. 138 f.
- Bodon-Dolso (see note 19), p. 14.
- 43 Cf. on Savines Bodon (see note 7), pp. 161–164; on Ubaye cf. Comité d'Action et de Défense des Intérêts de la Vallée de l'Ubaye, Déclarations présentées par le Comité tendant à obtenir de l'Electricité de France et des Pouvoirs Publics, la réparation des dommages directs et indirects portés aux intérêts économiques et moraux de la Vallée de l'Ubaye, par la construction du Barrage de Serre-Ponçon, Barcelonnette 1952.
- 44 Cf. V. Bodon, «Quand naît la question environnementale? Proposition d'analyse à partir de l'étude de l'aménagement du barrage de Serre-Ponçon», *Annales historiques de l'électricité*, 3, 2005, pp. 35–47, (here p. 43); Bodon (see note 7), pp. 296–306.
- The best example of the continued invisibilization is found in the eponymous film *Serre-Ponçon* produced in 1958. This film concentrated mainly on the technical execution of the dam, which it interpreted as a patriotic work, while characterizing the valley of the Durance as a «depopulated corner of the Alps». Although the film did show images of the old village of Savines in one sequence, the commentary refrained from making any comment on the resettlement and

- only emphasised that «roads and tracks» would have to be flooded.
- 46 L'Eau Vive: France 1958, commissioner: EDF, production: Claude Clert, Les Films Caravelle, direction: François Villiers, script: Jean Giono, Alain Allioux, cutting: Edouard Berne, camera: Paul Soulignac, music: Guy Béart, scenery: Pierre Thévenet, cast: Pascale Audret, Andrée Debar, Germaine Kerjean, Milly Mathis, Charles Blavette, Pierre Moncorbier, and more, speaker: Jean Giono, 35 mm, colour, sound, 96 min. DVD-edition «Les Films du Collectionneur». The script was also adapted and published the same year as a novel. Cf. J. Giono, A. Allioux, Hortense ou l'eau vive, Paris 1958.
- **47** Cf. Bodon (see note 7), pp. 136 f.
- 48 *Ibid.*, p. 136. Bodon (p. 293) notes this also involved the participation of the local population in the film. This seems to have been an indirect participation only as the actor Charles Blavette, who played the shepherd Simon, describes in his autobiography: A «shepherd in Coudoux (near Aix-en-Provence)» had provided him and the main actress Pascale Audret with 300 sheep and taught them how to lead the flock. Cf. C. Blavette, *Ma Provence en Cuisine*, Paris 1961, p. 249.
- 49 Cf. Bodon (see note 7), p. 137; A. Beltran, «Jean Giono, Hortense et la Durance», 2017, cf. https://www.planete-energies.com/fr/medias/cinema-litterature-et-energie/jean-giono-hortense-et-la-durance (accessed 28. May 2020).
- **50** Cf. Centre National de la Cinématographie, 1958. Toutes les données chiffrées / le Box-office, Paris 2014, p. 14.
- 51 As Bodon (see note 7), pp. 302 f. has also pointed out.
- 52 The term «industrial fatalism» refers to U. Beck, Gegengifte. Die organisierte Unverantwortlichkeit, Frankfurt a. M. 1988.
- For a critical discussion and contextualization of one of the core texts of the debate cf. B. Marchand, «La haine de la ville. «Paris et le désert français» de Jean-François Gravier», *L'information géographique*, 65, 3, 2001, pp. 234–253.
- On the TVA as model for regional development cf. D. Ekbladh, «'Mr. TVA'. Grass-Roots Development, David Lilienthal, and the Rise and Fall of the Tennessee Valley Authority as a Symbol for U.S. Overseas Development, 1933–1973», *Diplomatic History*, 26, 3, 2002, pp. 335–374.
- 55 Le verrou de la vallée: France 1964, production: Les Films du Soleil, direction: Jean Hubinet, camera: François Delalande, Paul Martellière, Jean-Pierre Gaudin, Jacques Hubinet, speaker: Constant Vautravers, 35 mm, colour, sound, 12 min., https://vimeo.com/201000847 (digitization, accessed 13 May 2021).
- 56 Such is the case with the Sainte-Croix dam and the resettlement of Les Salles on the Verdon river,

- for instance. Cf. A. Latz, Il était une fois un village ... Étude psychosociale des conséquences de la transformation d'un environnement (Étude réalisé sur le village de Salles-en-Provence), Brussels 1979.
- 57 Cf. J.-B. Durand, Aspects juridiques de la création et de l'exploitation des barrages, Toulouse 1974, pp. 92–97.
- **58** H. Trischler, R. Bud, «Public Technology. Nuclear Energy in Europe», *History and Technology*, 34, 3–4, 2019, pp. 187–212.
- 59 Cf. V. Chansigaud, Les Français et la nature. Pourquoi si peu d'amour?, Arles 2017, pp. 135–146. On a more general level this argument can also be found in J. C. Scott, Seeing Like a State. How Certain Schemes to Improve the Human Condition Have Failed, New Haven 1998, p. 89.
- 60 La vie électrique/Contacts (see note 19), p. 18.

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