



# Fessenheim: A Nuclear Power Plant for Peace

By Florence Fröhlig

## Abstract

This paper explores the construction of a nuclear power facility at Fessenheim, Alsace, and its role in the remaking of French-German post-war relations and the consolidation of the post-war peacebuilding process. The siting and materiality of nuclear energy technology, I argue, was a key component of the top-down peace-building strategy that guided reconciliation processes at the national and regional levels. This study analyses archival documents, newspapers articles, interviews with Alsatian antinuclear activists and amateur films in order to reconstruct how the site for a joint nuclear power plant at Fessenheim was chosen and how it affected cross-border interactions. Although the planning of a French-German nuclear facility at Fessenheim embodied the appeasement that characterised post-war relations at a governmental level between the two nations, its construction had limited impact on the regional reconciliation processes. However, the site of the nuclear plant became central for reconciliation in ways that industry planners did not foresee: opposition to the nuclearization of the Upper Rhine Valley became the driving force for the cross-border reconciliation process. This grassroots mobilisation against the presence of nuclear technology formed the nexus for transcending the legacy of World War II through cooperation toward a common, anti-nuclear future.

**Keywords:** Nuclear power plants, peacebuilding, post-war nuclearization, grassroots mobilisation, World War II legacy, cross-border reconciliation.

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## In the Aftermath of World War II

It is emblematic that a nuclear power plant was sited in Alsace, in the commune of Fessenheim near the borders with Switzerland and Germany. This French region in the Upper Rhine Valley witnessed centuries of continuous territorial disputes between France and Germany.<sup>1</sup> During World War II and after France's capitulation in 1940, Germany annexed the Alsace region. Cross-border relations in the region became particularly complex at this time, since Alsatian men (with French citizenship) enlisted in or were forcibly conscripted into the German army starting in August 1942 (Fröhlig 2013). A significant proportion of these young men perished on the Eastern Front in the service of their occupiers.

France has long elided these circumstances of the war's legacy, which complicated the rehabilitation of the Alsatian forced conscripts after they returned to France after the war. In the region, the local perception was that the inhabitants had been subjected to a suffering "without cause" and that the pain and death of their sons, fathers, uncles and fellow citizens had been in vain. In addition to the physical and psychological suffering inherent to all wars (injury, loss of relatives and friends, witnessing atrocities, captivity), in the aftermath of the war, the Alsace community was denied recognition of their experiences and suffering. Because the former soldiers were not recognised as victims (of the Nazis), their feelings of anger and frustration were difficult or impossible to articulate. Individual and collective memories of the war were marked with stigma (Fröhlig 2013, Vogler 1994), and survivors opted to remain silent, leading to what the sociologist Jeffrey Alexander has called a *cultural trauma*:

Cultural trauma occurs when members of a collectivity feel that they have been subjected to a horrendous event that leaves indelible marks upon their group consciousness, marking their memories forever and changing their future identity in fundamental and irrevocable ways' (Alexander 2004: 1).

Against this background, how was it that in this region still heavily marked by the legacy of World War II, by the 1960s, France and Germany were already jointly planning a shared nuclear power plant? Was the project of constructing a transnational nuclear facility at Fessenheim an attempt to materialise the French-German diplomatic rapprochement? Was the plan to build a French-German nuclear power plant at Fessenheim, an expression by France of a peacebuilding strategy to improve relations between the two countries? Was the siting of a transnational nuclear power plant in Fessenheim meant to ameliorate international, transnational and transboundary relations and provide stable expectations of peaceful changes? And if the shared nuclear facility at Fessenheim

was a materialisation of appeasement in post-war French-German governmental relations, what impact did its construction have on cross-border reconciliation processes? The subsequent mobilisation against the construction of the nuclear power plant at Fessenheim, and other similar industrial initiatives in the region, involved people from both sides of the Rhine. Would grassroots opposition help transcend the legacy of World War II? Would the siting of a nuclear power plant—through the agency of both its proponents and its opponents—turn cross-border animosity into solidarity?

In line with Kaijser & Meyer, I reserve the term ‘international’ for relations between state actors and international organisations (such as the European Atomic Energy Community, or Euratom), while I use ‘transnational’ when referring to relations between non-state actors across state boundaries. The terms ‘transboundary’ and ‘cross-border’ address issues regarding shared borders between two or more neighbouring countries that involve “different kinds of actors, at different geographical and political scales” (Kaijser & Meyer 2018:10).

The anti-nuclear mobilisation along the Rhine Valley has had a prominent impact on other environmental and social movements in the world (Pohl 2019, Le Renard 2018, Oberlé 2016, Tompkins 2016, Milder 2012, Tauer 2012). The historians Tompkins and Milder have examined the growth and development of antinuclear protests against the construction of nuclear power plants along the Rhine Valley in the 1960s and 1970s and the influence of these protests on public opinion about nuclear energy (Tompkins 2016, Milder 2012). Tompkins argues that the strength of this anti-nuclear movement lies in its transnational dimension and trans-local character. Milder deepens this aspect by examining the relevance of the common Alemanic dialect spoken in the region<sup>2</sup> and the role that “imagined communities” played in the mobilisation. The historian Nathalie Pohl (2019), for her part, focuses more specifically on the Badische-Alsatian citizens’ antinuclear initiative in the Upper Rhine region and traces forms of cooperation and protest within that organisation. German Studies scholar Cécile Oberlé also engages with the French-German cross-border antinuclear mobilisations, comparing the current round of mobilisation for the closure of two nuclear power plants situated on the French side of the border: Cattenom and Fessenheim. The relative strength of these cross-border mobilisations depends not only on differences in the socio-economic background of the areas where the respective nuclear power plants were sited (rural vs. industrial) but on the presence or absence of a strong shared regional culture and identity within the cross-border area. This confirms the arguments of Pohl, Milder and Tompkins concerning the prominent role that a perceived common identity plays in cross-border mobilisations.

For her part, the historian Sandra Tauer (2012) addresses French-German bilateral cooperation on the topic of energy policies and shows how each

country's geopolitical approaches (towards the United States or oil-producing Arab countries), as well as their political governance (centralism and federalism), frustrated their attempts to find a common energy strategy after the first oil crisis in 1973 and to coordinate their nuclear policies (for instance, in the exchange of information in case of a radiation accident on the French-German border). The social researcher Claire Le Renard, for her part, examines transnational and transboundary interactions triggered by the locating of the Superphénix fast breeder nuclear reactors (FBR) at Creys-Malville along the French-German-Italian border and institutional responses to cross-border controversies related to the siting of an industrial-scale FBR prototype. The reactor's reliance on plutonium-based fuel made it especially controversial, since plutonium was associated with nuclear weapons. This FBR was nevertheless publicly supported by the Euratom research programs of the European Communities as a project 'of progress and modernity, and of constructing European unity through transnational technological projects' (Le Renard 2018: 108).

This article does not attempt to add new elements to the well-documented historiography of antinuclear movements in the region; rather, I offer new insight into the historical context that led to the implementation of a transnational nuclear power plant at Fessenheim in the 1960s on the borderline with Germany and Switzerland.

One challenge after the war was to stabilise and rebuild societies in order to create a sustainable peace. How to go about building a durable peace is, however, a contested issue. Some scholars promote political, economic and institutional solutions for peacebuilding, while others argue "that peace begins first in psychosocial emotions and cognitions" (Charbonneau & Parent 2012: 3). Peacebuilding is a multidimensional dynamic, and debates are often framed between top-down/state-centric strategies (elites) and bottom-up (grassroots) dynamics. I see the two approaches as embedded in different levels of analysis—individual, community, national or international—depending on the process at stake. Furthermore, the two approaches are complementary in restoring what the Israeli philosopher Avishai Margalit called *thick and thin relations* after a conflict: e.g., the relations connecting those with a shared past in general (relations to "the near and dear") and relations connecting those who are strangers to or remote from each other (Margalit 2002: 7). Peacebuilding is therefore considered here beyond the immediate post-conflict intervention and reconstruction phases, and is seen as a process for transforming social relations, attitudes, behaviour and structures "in order to cultivate an 'infrastructure for peacebuilding' oriented towards the building of positive relationships" (Charbonneau & Parent 2012: 5-6).

In the first part I address the construction of joint nuclear power plants in this region as top-down peacebuilding projects. I present the international and

transnational politics that enabled the planning of a French-German nuclear power plant at Fessenheim and examine whether this top-down peacebuilding project affected national political collectives and cross-border communities. In a second part, I outline the antinuclear mobilisation against the implementation of nuclear facilities in the Upper Rhine region in general and at Fessenheim more particularly to show how the reaction against the nuclearization of the Upper Rhine Valley became the driving force for the cross-border reconciliation process. My analysis of the planning of the nuclear power plant at Fessenheim in the 1960s and 1970s draws from inter-ministerial correspondence, rapports, meeting protocols and ministerial notes housed at the French foreign affairs archives at La Courneuve and at the archives of the Ministry of Economic and Financial Affairs at Savigny-le-Temple. The second part is based on articles published in the French national newspaper *Le Monde* and in the regional newspapers *Dernières Nouvelles d'Alsace* and *l'Alsace* during the 1960s and 1970s. My analysis is complemented by oral histories from Jean-Jacques Rettig, André Hatz and Lucien Jenny, spokesmen for different Alsatian antinuclear interest organisations, collected during in-depth interviews conducted in 2017, and from amateur films made by the antinuclear activist Solange Fernex.



Elise Alloin, postal card, Fessenheim project, 2020.

## Nuclear Power Plants as the Materialisation of Top-down Reconciliation Politics

In the aftermath of World War II, atomic energy that had been used for destructive ends during the war was turned, stepwise, into something positive. Nuclear-fuelled technology was expected to bring forth prosperity and provide huge amounts of cheap energy to reconstruct a devastated Europe and to spur progress through its use in medicine and biology (Augustine 2018: 21). But when the USSR tested its own nuclear weapon in August 1949, fears about the proliferation of nuclear arms emerged. Worries about a nuclear World War III, in a world feeling the impact of the bombing of Hiroshima and Nagasaki, gave rise to the Cold War period. In this context, the proliferation of nuclear arms was to be discouraged. One step in that direction was taken by U.S. President Dwight Eisenhower in his speech “Atoms for Peace”, delivered on 8 December 1953 before the United Nations Assembly. In it, he advocated for the use of nuclear technology for peaceful purposes (Hamblin 2006).

The issue of nuclear weapons’ proliferation was at stake on the European continent as well. However, in the post-war period, many European countries devastated by the war wanted to develop their nuclear industries for civil use to meet increased demands for energy. But if France began its nuclearisation process directly after World War II, Germany had to wait until 1954 to pursue civilian uses of nuclear energy. Beginning in 1945, the Repealing of Nazi Laws passed by the Allied Council for post-world War II Germany severely limited West German sovereignty, particularly regarding armaments and nuclear development. The authorised use of fissile material was strictly restricted to research (cyclotrons and small reactors) until August 1954, when West Germany, through different international agreements, regained the freedom to develop nuclear energy for civilian purposes (Mallard 2009: 147). In the post-war context, France, a country humiliated by its capitulation and its occupation by Nazi Germany, had to find a new way to restore its geopolitical position as a world leader and to satisfy the country’s acute and growing need for energy. Scientists lobbying resulted in the choice of “technical prowess” through the production of atomic energy to enhance France geopolitical radiance (Mallard 2006). As Gabrielle Hecht (2009: 2) has brought to the fore, the word *rayonnement*, carries a special punch in French, since it refers both to brilliance or radiance and to radiation.

Geopolitical radiance informed France’s foreign politics and policies regarding projects to consolidate peace and put an end to any ideas of *revanchisme*. In parallel with the constitution of the Council of Europe in 1949 as a vehicle to uphold human rights, democracy and European law, one of the first measures that French Foreign Minister Robert Schuman proposed in 1950 was the creation of a common market for coal and steel. Hence, Europe’s energy supplies were a crucial

issue in the devastated post-war countries. Besides offering a free market for energy among the six founder countries (West Germany, Belgium, France, Italy, Luxembourg and the Netherlands), the European Coal and Steel Community, which came into force on July 1952, was also a preventive measure that sought to consolidate peace within the European territory through control of heavy industrial production. After the Suez Crisis in 1956, a proposal was made to extend the powers of the European Steel and Coal Community to other fuel sources, such as gas, electricity and atomic energy. However, French political economist and one of the founding fathers of the European Union, Jean Monnet, advocated for the constitution of a separate atomic energy agency, because he was convinced that atomic energy had great potential for industrial development and that it was essential to promote applied research for its civilian use. The European Atomic Energy Community (Euratom) was created in 1957 in order to promote and support a European civilian nuclear industry expected to resolve Europe's energy deficit and its dependence on oil-producing nations. Euratom was an important political achievement for France, but the scope of the treaty on Europe's nuclear development was limited by political change in France in 1958, and it resulted in only a few instances of transnational cooperation and joint French-German nuclear projects (See Foasso 2012, Mallard 2009 and Krige 2008).<sup>3</sup>

However, French-German cooperation in the field of energy was consolidated with the Treaty of Elysée signed on the 22 January 1963 by President Charles de Gaulle and Chancellor Konrad Adenauer at the Élysée Palace in Paris. This formal bilateral treaty aimed to consolidate ties between the two countries in terms of security and diplomacy and to provide for close cooperation between France and West Germany in the areas of foreign affairs, defence, education, and youth, as well as in the area of atomic and special affairs (DeFrance & Pfeil 2013). Among other outcomes, the treaty resulted in the establishment of the Franco-German Youth Office and the founding in 1967 of the Laue-Langevin Institute, an international scientific facility for research using neutrons, located within the Polygon Scientific in Grenoble, France. The treaty sought to counterbalance American influence in West Europe and to restore Europe's independence in economic and military matters, at a time when Washington wanted to impose a multilateral force controlled by NATO (Miard-Delacroix 2018: 10).

Bilateral cooperation regarding atomic and scientific research aimed to facilitate relations between German and French public organisations and private companies in order to support the implementation of joint nuclear facilities designed with gas-graphite-natural uranium reactors (SAIEF B-0067903/1-N64-57 DFC/D). This technology, developed by French engineers, was seen as a "French reactor system", "la filière nucléaire française" and was hoped would avoid French reliance upon foreign technologies (SAIEF B-0067903/1 - 64-32 DFC/D).

German policymakers, however, were not convinced of this technology (Lamiral 1988), through which plutonium could be extracted and used in nuclear weapons. This technology represented “French uniqueness” and subsequently became an expression of national identity. This confirms Kaijser and Meyer’s argument that the pursuit of nuclear energy on a national basis was the result of international cooperation in science, technology, business and politics, even though it was framed “in terms of technological nationalism, ideals of energy independence and nationally conceived energy policies and networks” (Kaijser & Meyer 2018: 6).

Some months after the ratification of the Élysée Treaty, in October 1963, the French Atomic Energy Commission (Commissariat à l’Énergie Atomique, C.E.A) and the German company Siemens communicated their commitment to collaboration in the domain of nuclear energy through the joint construction of a gas-graphite nuclear facility in the French-German cross-border area along the Rhine River. Their agreement was formalised in December 1963 during the visit of the French Minister of Scientific Research and Atomic and Spatial Affairs, Gaston Palewski to his German counterpart, Hans Lens in Bonn. A year later, Palewski commented that this French-German project constituted ‘a milestone in the collaboration between France and Germany in the nuclear field’ (SAIEF B-0067903/1 Lettre 64-5610).

The site eventually chosen for this French-German nuclear power plant was on property already owned by EDF (Électricité de France), the French nationalised electric utility company. It was situated in the commune of Fessenheim in the Haut-Rhin, the Upper Rhine portion of Alsace in north-eastern France, 1.5 kilometres from the German border and 40 kilometres from the Swiss border. The commune sits along the edge of a canal diverted from the Rhine River that extends from the Kembs Dam upstream to the Vogelgrun factory downstream. The factors taken into consideration in the choice of site were, of course, proximity to a cooling system, the Rhine River, as well as the existence of infrastructure. A hydroelectric plant had already been commissioned in 1956 near Fessenheim, which meant an existing power distribution grid. Furthermore, the housing that had been used for hydroelectric plant construction workers and employees was now available for the nuclear plant construction crew. This also meant infrastructure was already in place to transport heavy construction equipment to the construction site, from bulldozers to excavators, dump trucks and other machinery.

At the time, the Upper Rhine Valley was considered a region with high industrial potential, and Swiss, German and French policymakers envisioned it as a huge industrial hub (Oberlé 2016:197). The Rhine Valley between Basel and Frankfurt was to become the main European economic axis as home to chemical factories, oil refineries, mechanical engineering firms and steel manufacturers (Pohl 2019: 62). Twenty nuclear reactors were planned between Basel and

Karlsruhe to supply this hub with cheap and abundant electrical energy. As a matter of fact, the reconstruction and re-industrialisation of Europe after World War II depended heavily on having a sufficient energy supply. Both France and Germany chose the Rhine basin to launch the construction of the first nuclear power plants because of its perceived peripherality, rural environment and economic underdevelopment (Pohl 2019: 61–64, Meyer 2014: 154, Milder 2012: 2).<sup>4</sup> The region was still heavily agricultural at that time and specialised in tobacco and grapes, thanks to its special climatic conditions. Consequently, the region was viewed as needing a jump-start to development through the construction of nuclear facilities.

Already in October 1964, that is, one year after the agreement was concluded between the CEA and Siemens—the French and German electric companies, EDF, and the Rheinisch Westfälisches Elektrizitätswerk A.G., respectively, have issued a contract to a consortium between the German Siemens and the French Groupement Atomique Alsacienne-Atlantique in order to implement the French-German project at Fessenheim (Lamiral 1988: 75, 81). However, the consortium's bid for the construction of the nuclear power plant in Fessenheim was too high to satisfy the German partners, who were already sceptical about the profitability of the gas-graphite reactor systems. Hence, the cost of constructing nuclear power plants like the one planned at Fessenheim was higher than that of fossil-fuelled power plants and certain types of American nuclear power plants (SAIEF B-0067903/1-N64-57 DFC/D). Consequently, the German partners not convinced by the French commitment to gas-graphite reactors—decided to withdraw from the joint venture by the summer of 1965 (Lamiral 1988: 82).

The Fessenheim gas-graphite project was eventually awarded to a French partnership between CEA and EDF and officially launched by the Government Inner Cabinet on December 7, 1967, by the president of the French Republic, Charles de Gaulle: “A power plant will be built in Fessenheim with two twin reactors using natural uranium fuel commissioned one year apart” (SAIEF 1A-0000045/1 Relevé de décision).<sup>5</sup> However, the gas-graphite reactor system was already abandoned in 1969 after two years of a “war of the systems” between gas-graphite reactors and light water reactors, LWRs (Vichney 1968, Hecht 2009). Finally, the decision to use light water reactor technology, which had already been commercialised in the United States by Westinghouse, was formalised by EDF during a press statement on September 25, 1970 (Vichney 1970). Nuclear power plants are very expensive to build, and EDF, following Euratom recommendations to build consortia of different companies from several countries within ‘the community’ (AMAE - FRMAEE\_MN\_12QO 334), invited the German and Swiss power companies to take a financial stake. It was the German company ENBW (Energy Baden Württemberg AB) and a Swiss consortium<sup>6</sup> which got involved.

Electricity was to be distributed in proportion to each party's investment stake: EDF at 67.5%, ENBW at 17.5%, and the Swiss consortium at 15%.

The Fessenheim nuclear plant that was commissioned in 1977 thus entailed transnational financial cooperation, but the initial intent of building a French-German nuclear plant was abandoned due to economic concerns, at least officially. If the construction of a nuclear facility at Fessenheim emerged within a framework of French-German rapprochement, in the end it materialised in the form of transboundary financial cooperation and not technological cooperation. For example, German and Swiss engineers were not invited to work at the Fessenheim plant, as was the case in Creys-Malville at the Superphénix plant on the Rhone River, near the border with Switzerland and Italy (Le Renard 2018: 123). Moreover, the labour force at nuclear power plants is so specialised that in the 1970s it did not involve regionally recruited workers but rather necessitated an influx of French-speaking specialised engineers and nuclear plant workers from the interior of France on the west side of Vosges Mountains.<sup>7</sup> Thus, the construction of this nuclear facility had limited impact on cross-border reconciliation processes, although it did embody the appeasement of post-war French-German governmental relations.

### **Cross-border Grassroots Reactions to the Construction of Nuclear Power Plants**

Opposition to the construction of nuclear power plants along the Rhine was not very widespread at first. However, it soon grew to the point that it became a model for organising other environmental and social movements (Pohl 2019, Tauer 2012). The antinuclear movements in this transnational region emerged in parallel to the extensive plans for industrialisation of the Upper Rhine Valley.<sup>8</sup> From the beginning, opposition to industrialisation came mainly from an intellectual elite based in bigger cities far from the local communities. When they approached local communities, elitist antinuclear activists came into confrontation with the state-led pronuclear agenda that promised an economic boom for the region. According to Milder, at the time there was also very little information on atomic energy production and the risks associated with it, and so the region's inhabitants had little reason to oppose reactor construction or to question government and industry discourse about the absolute safety of reactor technologies (Milder 2012: 32).

Starting in the early 1970s, elitist antinuclear activists received backing from certain critical scientists who began to question government assurances about nuclear power's unquestionable safety. This scientific disagreement planted the seeds of doubts in the minds of locals, who became increasingly concerned

with heat emissions from the reactors. At last, the argument that convinced some members of the local population from both sides of the Rhine to join the antinuclear movement was this issue of atmospheric heat emissions and not the dangers of radioactivity (Pohl 2019: 76, Milder 2012: 48). Hence, in these wine-growing regions centred on viticulture, the most-feared risk was that a nuclear power plant might alter the local weather and thereby damage the region's crops and threaten the local economy.

At the local level, civilian nuclear energy was presented as a threat imposed on the local communities by centralised powers. The region was presented symbolically as the *Dreyeckland* (The land of the three corners)—that is, the territory where France, West Germany and Switzerland meet. In this region bounded by three mountains—the Belchen summit in the Black Forest, the Grand Ballon in the Vosges and the Belchenflue summit of the Jura Mountains (see also Pohl 2019: 337) a common Alemannic dialect is spoken. This shared dialect also became a means for locals to distance themselves from decision-making centres in Stuttgart and Paris. The use of the common dialect, as Milder (2012) put to the fore, played a determinant role in the anti-nuclear movement, facilitated cross-border communication and created a feeling of togetherness.

At the beginning of the mobilisation, antinuclear activists understood that they had limited tools to affect national-level nuclear energy policies, and so they turned their energies toward undermining it at the local level instead (interview with André Hatz). In France, before nuclear facilities could be implemented, a public utility survey (*enquêtes d'utilité publique*, EUP) had to be conducted. Nevertheless, the construction of the first reactor at Fessenheim began before administrative authorisation was granted. The fact that this legal procedure was a mere formality, angered locals, who felt mocked and disregarded. A feeling shared and mentioned by all the interviewed spokesmen. The processes involved in choosing sites for nuclear power plants reveal the top-down, centralised nature of French policymaking, as well as Germany's federalist political structure. Yet in both cases, decisions were imposed from the centre onto the periphery. The lack of respect for local concerns and the opacity of decision-making propelled the population on both sides of the Rhine to cooperate in opposition and to take, as Milder put it, "common action outside the closed circuits of national politics" (Milder 2012: 115).

Shortly after the announcement of the implementation of a nuclear power plant at Fessenheim in the *Dernières Nouvelles d'Alsace* on July 17, 1970, opposition forces got organised and a special interest organisation, the Committee to Protect Fessenheim and the Rhine Valley (Comité pour la Sauvegarde de Fessenheim et de la Plaine du Rhin, CSFR) was founded (Pohl 2019: 71). The CSFR initiated the first significant anti-nuclear demonstration in France, which took place on 12

April 1971. In it, 1,500 persons marched against the construction of the nuclear reactors at Fessenheim (Anonymous 1971). A second demonstration against the nuclear plant construction was organised on 7 May 1972. The demonstration brought together 6,000 people, according to the organisers, and 3,500 according to the police. Some 400 German antinuclear activists took part in the protest, though many German demonstrators were stopped at the border and prevented from entering France (Anonymous 1972).

The antinuclear opposition was not confined to Fessenheim, however, and protests against nuclear and chemical plant construction intensified on both side of the Rhine during the 1970s. In total, twenty nuclear reactors were foreseen to be commissioned along the Upper Rhine: eight in France at Gerstheim and Fessenheim, eight in Germany at Wyhl and Breisach, and four in Switzerland at Kaiseraugst and Beznau.

The antinuclear mobilisations of the 1970s were carried out by many different groups in France, Germany and Switzerland. These groups were organised on a national level, with French antinuclear organisations including the Friends of the Earth (Les Amis de la terre) and Survive (Survivre, later renamed Survive and Live) and their German counterparts the Federal Association of Environmentalist Citizens' Initiatives (Bundesverband Bürgerinitiativen Umweltschutz, BBU) and, on a local level with antinuclear committees such as the CSFR, Rhine Valley SOS (SOS Plaine du Rhin), Marckolsheim Information Group for the Protection of the Environment (Groupement d'information pour la Sauvegarde de l'Environnement de Marckolsheim, GISEM) and the Citizens' Initiatives (Badisch Bürgerinitiativen) of Wyhl, Weisweil, Forchheim, Endingen, Sasbach, Riegel and Emmendingen, which had been initiated by the local mobilisation in protest of nuclear plants construction projects in the region.

The breakthrough for the antinuclear movement in the region occurred in connection with the mobilisation against the construction of a chemical bleaching plant at Marckolsheim (Alsace) and a project that planned to build a nuclear plant in Wyhl (Baden-Württemberg). After a massive march to Wyhl held on August 25, 1974, representatives of 21 citizens' initiatives<sup>9</sup> met at the Fischerinsel Restaurant in Weisweil and decided to create an umbrella organisation, the Baden-Alsatian Citizens' Initiatives (Badisch-Elsässische Bürgerinitiativen). This umbrella organisation had a major impact on the success of the antinuclear movement in the region (interview with Jean-Jacques Rettig).

The common umbrella organisation facilitated coordination of the mobilisation in this transboundary area during the 1970s, and especially the occupation of several construction sites, including Kaiseraugst in 1974–1975 (in Switzerland) and Gerstheim in 1977 (in France). The occupation of construction sites turned out to be a space where German, Alsatian and Swiss protesters could meet and interact.

The most impressive example of transregional antinuclear cooperation is linked to the 1975 protest against the construction of a nuclear power plant in the town of Wyhl. When the first construction workers arrived at the Wyhl plant construction site in February 1975, antinuclear activists from both sides of the Rhine were waiting for them. Local authorities quickly repressed the protests, which led to a huge demonstration on 23 February attended by 28,000 people, and an 8-month occupation of the construction site.

The mobilisation against constructions of nuclear power plant in the Upper Rhine region was successful, and the eight reactors planned for Wyhl and Breisach were fought off; meanwhile, in Switzerland the project to build two new nuclear reactors at Kaiseraugst was abandoned in 1975, although the two reactors at Beznau built in 1969-1971 continued in operation. In France, construction of a nuclear plant at Gerstheim was abandoned, but the construction of Fessenheim I and II could not be prevented. However, the facts that Blocks III and IV at Fessenheim were ultimately not built (interview with Jean-Jacques Rettig, interview with André Hatz, Pohl 2019: 416) and that no other civilian nuclear reactors were built in Alsace prove the success of the anti-nuclear mobilisation. It reveals further the dynamics of public opinion in the 1970s and its significant impact on political decision-making (Müller & Thurner 2017).

The grassroots mobilisation not only brought together French, German and Swiss from both sides of the Rhine but also united people from different social backgrounds and with diverse motivations (Fonds Fernex 0131FI0002 and Fernex 0131FI0013). As we can see in the amateur films of antinuclear activist Solange Fernex, the protests included rural-dwellers and urbanites, intellectuals and farmers, locals and outsiders: advocates of nonviolence (especially those from Christian backgrounds), left-wing radicals, and environmentalists associated with a growing counterculture.<sup>10</sup> Even if local protesters preferred to regard their protests as non-political, the anti-nuclear mobilisation brought together many different groups with different motivations around a common cause:

These struggles could succeed thanks to the people who took their future into their own hands, but also thanks to the social and cultural mixing: local people, farmers, winegrowers...and chemists, physicists... scientists from Freiburg... So, some intellectuals and some local people...young and old...that was a representation of all of society. And when confronted with that, a politician who tries to manipulate them faces difficulties. (interview with Jean-Jacques Rettig)

Antinuclear activists from both sides of the Rhine felt that the sites for the nuclear reactors in this transboundary area were chosen to minimise the scope of the

protests and to fragment the antinuclear resistance. That is why they tried, on the contrary, “to take advantage of the border” (interview with André Hatz) which had long separated the inhabitants in different nation-states.<sup>11</sup> However, the border was not only physical but also mental. Historically, inhabitants from Alsace in France had a difficult relationship with their German neighbours, despite their common Alemannic language. Former Alsatian men who were forced to join the German Army were still reluctant to maintain contacts with Germany even in the 1970s. Their reluctance was strengthened by their sense that the general population of France viewed them as collaborators and traitors. In order to dissipate all suspicions and dissociate Alsatian culture from Nazi Germany, these French veterans and their families distanced themselves from their German neighbours. This reaction converged with the French policy of eradicating the Alemannic language, repressing its use in schools and for administrative matters. The Alsatian population was expected to suppress their Alemannic identity and embrace a French one. In this context, German and French inhabitants of both sides of the Rhine had a delicate relationship. But the mobilisation against the construction of nuclear power plants along the Rhine offered the opportunity for Alsatian protesters to re-establish close ties with their German neighbours and to enhance cross-border relationships. They understood from the beginning that they needed to cooperate with their German counterparts if they wanted to prevent the construction of these nuclear power plants. The antinuclear mobilisation turned out to offer them a space for bridging regional and social differences. As one of my interviewees highlighted, the border proved to be a factor of cohesion:

I understood very quickly and was convinced that...if we could manage to prevent anything, it was in a transboundary manner.... Because a border – it’s an area of conflict, and a zone of political and social separation as well.... It’s a zone that governments try to close, to lock up.... In Marckolsheim, the border became an advantage...because it worked as an eye-opener and boosted cohesion. Furthermore, the advantage is that government structures on the right and the left side of this border are different. And the people are different as well, even if we in Alsace are in-between.... It took 6 years for Caesar to rule over Gallia because the Gauls could never come to an agreement...often there are overly long discussions. In Germany, there are some discussions, but people quickly rally behind an idea.... With Hitler we have seen what it led to, but...related to the nuclear issue, it becomes a positive aspect. (interview with André Hatz)

As this quote expresses, cohesion could not be taken for granted, since some prejudices about the habitus of the people from one side of the Rhine versus the other were flourishing, with the Germans being disciplined and the French being chattering. Beyond these supposed behavioural tendencies, though, antinuclear protesters quickly found out that national categories should be downplayed, and local roots valorised. The region framed as the Dreieckland was often portrayed as having the same experience of being subject to centralism:

There is a saying...after the Basel Fair, the *Booster Messe*, the watchmakers' fair... A Swiss, a German and a Frenchman had a drink, and the German said, 'ah, it is so silly, all three of us are turning our back to each other, because you, French people are looking towards Paris, I, as a German, am looking towards Bonn, and you, at Basel, are looking to Bern.' And the Swiss added, 'You are right, but you know, *der Feinde, der muss mann in die Augen geschauen*, you have to face your foe, you have to look your adversary in the eyes.... We can turn our back to each other, it is not worrisome because we are not going to harm each other.' (interview with Lucien Jenny)

These sorts of anecdotes can express regional particularities and a transboundary identity can be performed as an alternative to national belonging. The Dreieckland is, nevertheless, largely emblematic, since its unity is blemished by historical and national animosities. Hence, the emphases on cross-border cooperation was also a way to present the protest as the product of local people's agency as they overcame national resentments in order to fight together against nuclear power. The threat of civilian nuclear energy was compared to local memories of the war, notably through the poem of the Alsatian poet André Weckmann. "Rhingold" (a poem about the exploitation of the Rhine by both France and Germany, described as outside powers), the song "Die Grenz esch a Bleedsinn" (The Border Is Rubbish) by François Brumbt or the "Grenzlandballade" (Ballad of the Border) by Walter Mossmann.<sup>12</sup> This sort of cultural production written in the common Alemannic dialect "provided an anchor for the 'rebel identity' that anti-nuclear protesters fashioned for the region" (see Tompkins 2016: 95-97). In this wave, traditions of rebellion going back to the German Peasants' War of the 1500s were revitalised in order to underpin their claim of being victims of their governments in Bonn, Bern and Paris who were responsible for the nuclear plants. This sort of mythical rebellion helped to forge an Alemannic identity and overcome the agonising memories of World War II. As another Alsatian singer, François Brupt, expressed, "In the past, we were shooting at each other for the sake of our masters; today we are standing together as a new sentry on the Rhine" (Colombani 1977).

Transboundary cooperation was not a self-evident phenomenon in a region where the legacy of World War II still haunted the population. But the strength of this cooperation lay in the efforts made to overcome these difficulties and to move beyond national and cultural differences. Mobilisation against the nuclear power plants offered a space for individuals from both sides of the Rhine to work through the legacy of World War II and a space to confront the painful experiences of the war. As one interviewee observed, with tears in his eyes, when recalling a protest activity in 1974:

It was during a sit-in at Marckolsheim.... for 5 months, days and nights, people were organising. During the day it was often families and children. The permanent fixtures were the students and the unemployed...and during the night some men came...whoever. But there were young people, there were old people, and one day...I am still moved...we were talking and a guy, much older than I was ...a grape-grower...he told me: our fathers, our grandfathers, they shot each other [with a trembling and very emotional voice]...It is because of my family's experience....Yes, our fathers and grandfathers, they shot at each other, but that should never, NEVER happen again.... We won't do such stupidities anymore.... We will refuse. (interview with Jean-Jacques Rettig)

This quote illustrates very well how the mobilisation offered a space to overcome animosities linked to the war and how the legacy of World War II hovered the cross-border interaction in the 1970s and still affects people in the region 70 years after the war.

### **Concluding Discussion**

In this article I have argued that the Fessenheim nuclear power plant was initially set up as a transnational development project within the European community in order to consolidate peace in a region that had been disputed by France and Germany for centuries. The choice of site for such a transnational project in the 1960s and 1970s proved to be a political, economic and institutional strategy to develop civilian nuclear technology within Europe, transcending nation-states. The setting for this transnational nuclear facility was undeniably chosen in a top-down, technocratic decision, and its transnational interactions involved only a few experts and politicians in the discussions, negotiations, and transnational agreement.

The nation-states' ambition might even have been misinterpreted by Alsatians still haunted by painful memories from World War II in the 1960s and 1970s. Such transnational governmental cooperation might have been perceived as a way to obscure the trauma that World War II represented for the inhabitants of the Dreyeckland, divided into three nation-states with different experiences of the war. Yet, if the ambition of this transnational harnessing of the atom was to construct a common future, it also became a way of distracting attention from personal war experiences and subsequently silencing the legacy of World War II, freezing the cognitive and societal processing of war experiences.

These feelings undeniably contributed to the perception that the project was an authoritarian act imposed on the local population by central powers. Moreover, the construction of the two nuclear reactors at Fessenheim did not directly lead to increased cross-border interaction, since nuclear plants' workforces are very specialised and usually recruit from a national and not regional labour pool. Further, bringing so many French-speaking specialist engineers and nuclear plant workers into Alsace was also a way for the French government to 'Frenchify' the region. Thus, the increase of French-speaking people would weaken Alsatian regional identity and make it easier for France to dominate this border region.

In a sense, the Elysée treaty led to appeasement in the diplomatic and political ties between France and Germany and enabled the reestablishment of 'thin relations'—relations among remote people—between inhabitants of the two countries. Yet, even if this top-down peacebuilding project managed to consolidate peace and promote a European spirit, its scope was restricted to the political and state levels and had limited impact on transboundary interactions. In this sense, it was unable to affect 'thick relations' in this transboundary area. Paradoxically, it was instead the reaction against the construction of the Fessenheim plant and the others planned in the Upper Rhine Valley that became a way of arriving at reconciliation at the grassroots level. And it was these cross-border antinuclear protests, above and beyond the power of states, that opened a space for locals to work through the psychosocial and cultural wounds inflicted by war and transcend the legacy of the conflict through cooperation towards a common future. As a result, the Fessenheim nuclear power plant can be seen as a nuclear power plant 'for peace'. As anti-nuclear activist Jean-Jacques Rettig put it, 'It wasn't just De Gaulle and Adenauer who shook hands, but the grassroots as well!' In this sense, it was transboundary cooperation in the antinuclear protests, in pursuit of a common goal, that would hinder the construction of nuclear power plants along the Rhine and become a dynamic that would enable the regulation of thick relations in the Dreyeckland. Thus, as one nuclear activist said:

According to me, there is not one single area where the Franco-German friendship is as deep – that is, close to the people – as it is in the anti-nuclear struggle. You don't have any single area where there are as many...citizens acting together as you do the antinuclear opposition. And...I would say that the Franco-German friendship is deeper between antinuclear opponents than between head of states or governments. (interview with André Hatz)

As of today, when the two ageing nuclear power plant of Fessenheim have finally been shut down (the last one in June 2020), what will remain of this antinuclear transboundary cooperation and Franco-German friendship?

**Florence Fröhlig** is a cultural anthropologist, working as a university lecturer and researcher at the School of Contemporary and Historical Studies at Södertörn University. She is currently engaged within the research project *Atomic Heritage Goes Critical* with the social process related to the decommissioning of a nuclear power plant in Fessenheim (France). <https://atomicheritage.wordpress.com/>  
E-mail: [florence.frohlig@sh.se](mailto:florence.frohlig@sh.se)

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### Notes

<sup>1</sup>1674-1871: The Alsace region was part of Germany from 1871 to 1918 (the Franco-Prussian war caused the French to cede Alsace-Lorraine to the German Empire), then French from 1919 to 1940 (the Treaty of Versailles reverted Alsace-Lorraine to France); and German from 1940 to 1944, when Nazi Germany conquered Alsace-Moselle), and finally French again since 1945.

<sup>2</sup>The Alemannic dialect is a German dialect that is not readily intelligible to speakers of standard German, spoken in Alsace (France), Baden-Württemberg region (Germany) and the Basel region (Switzerland).

<sup>3</sup>Various collaborative projects emanated from this European cooperation, such as the Franco Belgian LWR project at Chooz, the European Joint Research Centre at Ispra and the Rapsodie fast breeder reactor at Cadarache in 1958 as well as the Franco-Swiss LWR project at Kaiseraugst in 1964.

<sup>4</sup>In parallel with the planning of nuclear power plants in southern Germany, the minister-president of Schleswig-Holstein, Gerhard Stoltenberg, planned the construction of eleven nuclear power plants along the river Elbe between Hamburg and the North Sea.

<sup>5</sup>The studies conducted by the Commission Couture (SAIEF 1A-0000045/1 - N 670 876), which was in charge of providing the government with knowledge about the various nuclear systems, showed that already by November 1967, the competitiveness of the Fessenheim nuclear power plant could not be assured due to the drop in the price of fuel, which made 'the economic profitability of the project questionable' at that time, and the commission concluded that 'despite the decisions taken and the technical studies realized hitherto regarding [the] nuclear power plant, the recourse to nuclear reactor system other than 'gas-graphite-natural uranium' should not be ruled out.

<sup>6</sup>The Swiss consortium includes the power companies EOS (Énergie Ouest Suisse), NOK (Nordstschweizerische Kraftwerke), and BKM (Bernische Kraftwerke).

<sup>7</sup>This expression refers to the linguistic distinction between Alemannic speakers on the east side of the Vosges mountains and French speakers from the west side.

<sup>8</sup>Opposition to industrialisation in Alsace had begun already in 1965, notably with the creation of the environmentalist organisation the Regional Federation for the Protection of Nature (Association Fédérative Régionale pour la Protection de la Nature, AFRPN).

<sup>9</sup>On the Baden side, these were the Bürgerinitiativen (Citizens' Initiatives) of Wuhl, Weisweil, Forchheim, Endingen, Sasbach, Riegel und Emmendingen, the Oberrheinische Komitee Oberrottweil, the Aktion Umweltschutz Emmendingen und Freiburg, and the Aktionsgemeinschaft gegen Umweltgefährdung durch Atomkraftwerke aus Freiburg, as well as the Initiativgruppe Freiburg KKW Nein. On the French side these were the Association Fédérative Régionale pour la Protection de la Nature (AFRPN), the Comité de Sauvegarde de Fessenheim et de la Plaine du Rhin (CSFR), SOS Plaine du Rhin, the Groupement d'information pour la Sauvegarde de l'Environnement de Marckolsheim (GISEM), the ANAT, Ecologie et Survie, the Club Vosgien from Colmar, and the Vosges Trotter Colmar, as well as the Association Vie Naturelle (See Pohl 2019: 189).

<sup>10</sup>The nonviolent activists, especially those from Christian backgrounds, were quite influential for mobilising the local population. They had 'means to come into contact with local population through Christian symbols', unlike the Leftists, who 'were sometimes accused of opportunistically trying to take over the anti-nuclear movement and lead it in their own direction' (Tompkins 2016: 54). Another group, the environmentalists, denounced consumerism and advocated for a life in harmony with nature, and also mobilized against nuclear energy. Left-wing radicals joined the movement because they saw the imposition of nuclear energy as a capitalistic, imperialist and authoritarian action.

<sup>11</sup>One example of the advantage of the borders was the illegal radio station Radio Verte Fessenheim, which broadcast information to antinuclear opponents starting in June 1977. The radio broadcasters were able to cross the border to Germany to escape the French police.

<sup>12</sup>The poems can be found in a booklet published by the Badisch-Elsässischen Citizen Initiative.

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