ISSN: 2029-7955 / eISSN: 2029-7947

VILNIUS TECH
Vilnius Gediminas Technical University

JOURNAL of ARCHITECTURE & URBANISM

2026
Volume 50
Issue 2
Pages 117–126
https://doi.org/10.3846/jau.2026.21017

THE LANDSCAPE IN CLAUDE PARENT'S NUCLEAR POWER PLANTS

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Article History:
- received 17 April 2024
- accepted 9 July 2026

Abstract. Nuclear power plants constitute a type of energy infrastructure that began to colonize the landscape following the oil crisis. The year 1974 marked a turning point in the conception of these large-scale engineering works. Until then, their design and siting strategies were driven by technical considerations determined by teams of engineers dedicated to ensuring their operability and safety. With the emergence of growing social awareness regarding environmental protection and the degradation of natural landscapes, corporations within the nuclear sector, such as Électricité de France, promoted research on landscape as a complement to the technical dimension, entrusting architects such as Claude Parent. In the current context, the climate crisis has once again placed nuclear power plants at the centre of political and energy debates. This article not only seeks to shed light on the largely overlooked research conducted by the French architect through an exploration and contextualization of his work but also aims to address more broadly the evolution of conceptions of the landscape associated with these installations.

Keywords: Claude Parent, nuclear power plant, architecture, landscape, productive landscape, energy production.

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1. Introduction

Since the late nineteenth century, the infrastructure built for electricity generation has been closely associated with the formation and transformation of the landscape.[1] Early power stations, based on direct current technology, shaped the peripheral landscapes of major cities. Throughout the twentieth century, however, the development of alternating current systems enabled the construction of larger generating facilities in rural areas, increasingly removed from densely populated centers. Regardless of the technology, these infrastructures exert a strong visual impact because of their monumental scale, with some structures reaching heights of up to 180 meters, altering their surroundings. During the early development of electrical infrastructure, little attention was paid to its relationship with the landscape. In *The Landscape of Power* (Crowe, 1958), the British landscape architect Sylvia Crowe anticipated the need to move beyond purely engineering considerations. As President of the Institute of Landscape Architects, she argued that the design of electricity-generating infrastructure should be informed by a deeper understanding of its relationship with the landscape, advocating a holistic approach (Crowe, 1958).

Among all forms of energy infrastructure, commercial nuclear power plants became particularly significant in the aftermath of the 1973 oil crisis, which marked a global shift toward reducing dependence on fossil fuels. Designed for civilian electricity production, these facilities surpassed conventional power stations both in scale and symbolism, posing unprecedented challenges to their integration within natural landscapes. Because of their cooling requirements, they were typically located near rivers, lakes, or coastlines, settings often valued for their environmental and scenic qualities (Högselius & Evens, 2025). As the construction of these plants expanded into such landscapes, public opposition grew despite their role in electricity generation. This resistance stemmed not only from the military legacy associated with nuclear technology, but also from an emerging environmental consciousness that regarded the landscape as a collective asset worthy of preservation. Although the relationship between nuclear power and landscape has received increasing scholarly attention, the specific role of architecture in shaping these environments remains largely overlooked. Existing research has primarily examined technological (International Atomic Energy Agency, 1967), political (Hecht, 2014a), and identity-related dimensions (Hecht, 2015), as

[1] Electricity generation involves infrastructures and landscape transformations that extend far beyond the power plants. In *Reading the Changing Energy Landscape*, Martin Pasqualetti argues that energy landscapes encompass the entire chain of energy production, including coal mining, the clearing of forests for firewood, and, in the case of nuclear energy, the sites where uranium is extracted and enriched (Pasqualetti, 2012).

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well as nuclear accidents (Bradford, 2012), environmental concerns (United States Atomic Energy Commission, 1969), territorial transformation (Foster, 2022), collective memory (Keating & Storm, 2023), cultural frameworks (Carpenter, 2016), heritage conservation (Alberti et al., 2019), and the future of nuclear sites (Dovydaitytė, 2022). While these studies provide essential perspectives for understanding nuclear energy, they rarely examine how architecture has actively contributed to the production and formalization of this new landscape (Figure 1).

In 1976, the Swiss historian Henri Stierlin opened the debate on who should be considered responsible for the design and siting of nuclear power plants. Were only engineers and technical specialists involved, or did architects, artists, and landscape architects also contribute to the process? (Stierlin, 1976). Half century after Stierlin's formulation, the construction of nuclear power plants composes a new stratum of the landscape shaped by multidisciplinary teams comprising highly skilled engineers and technicians, alongside architects to a lesser extent. This dimension has similarly received limited attention within architectural scholarship. A small number of architects, such as Fredrik Krohn, Davide Di Capua, Jacinthe Pesci, Carlos Gonzalvo or Sophie von Einsiedel have addressed the architecture of these plants, yet often from a partial perspective that treats landscape transformation in a fragmented manner (Krohn, 2012; Di Capua, 2012; Pesci, 2015; Gonzalvo, 2025a; von Einsiedel et al., 2025).

The most exhaustive research on this topic was carried out by Claude Parent (1923–2016), often referred to as the "nuclear power plant architect" (Le Ngoc, 2021). A disciple of Le Corbusier, Parent refers to this type of architecture as "Architecture paysage," highlighting the inherent relationship between architecture and landscape (Parent, n.d.). His work placed the landscape at the forefront of studies commissioned by Électricité de France (EDF): "If the nuclear era is to deliver the benefits expected by society, architecture must reflect this choice with the serenity and conviction of its actions facing the landscape" (Parent, 1976). In this regard, he was the first architect to theorize about the landscape of nuclear power plants in a country such as France, which, in the aftermath of the oil crisis, embraced the *tout nucléaire* and planned the construction of 80 nuclear reactors by 1985 and 170 by the year 2000, fulfilling 70% of the nation's energy demand (Topçu, 2007).

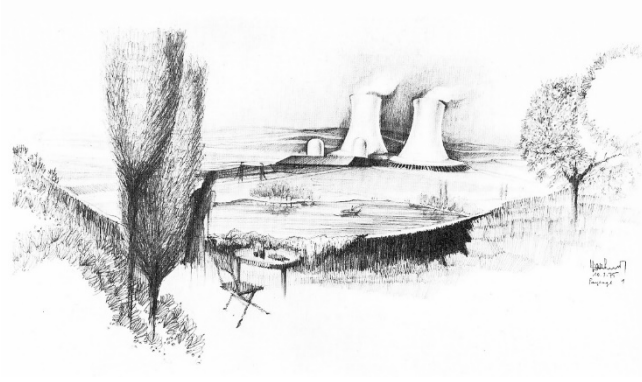


Figure 1. *Un nouvel état du paysage. Paysage 1*, Claude Parent (1975, March 10) (source: Parent, 1978)

In its most elementary definition, the term "landscape," devoid of qualifiers such as "natural," "urban," "industrial," or "nuclear," encompasses "an area perceived by people whose character is the result of the action and interaction of natural and/or human factors" (Council of Europe, 2000). This definition explicitly introduces the perception of people as a necessary criterion for inclusion within the landscape. Parent's work precisely offers a critical opportunity to confront two opposing perspectives that raise fundamental questions regarding the notion of "perception" in the study of large engineering projects. These perspectives emerged within the broader geopolitical context of the Cold War and were embodied by two nuclear powers.

The first approach, developed in the United States, sought to minimize the visibility of nuclear facilities, justified under the pretext of protecting nature. This model aimed to seamlessly blend constructions into their surroundings, tending to disappear through camouflage strategies. According to the definition provided above, can these plants be considered part of the landscape even if they are not easily perceptible? Does the definition of landscape for nuclear power plants warrant expansion encompass such concealed elements? Parent's position constituted an explicit critique of this concealment model. Rather than conceiving nuclear power plants as elements to be hidden, he understood them as valuable landmarks of the nuclear era: large-scale constructions capable of transforming the landscape and contributing to the national identity.

For the development of this paper, the documentation produced by the French architect since the mid-1970s has been examined. Firstly, hand-drawn perspectives depicting the transformation of the landscape have been analyzed. These works are currently hosted in French archival collections, including *CITÉ Centre d'archives d'architecture contemporaine*, *FRAC Centre-Val de Loire*, *Centre Pompidou – Musée National d'Art Moderne*, as well as the architect's familiar archive. In addition, articles and interviews published in various French and Swiss media were critically studied (Parent, n.d., 1976; 1989; 1991; 2007; Parent & Bouvier, 2005). Finally, the three monographs produced by Parent in collaboration with EDF were explored (Parent, 1978, 1983, 2014). Based on these sources, this paper seeks to reinforce the notion introduced by Sylvia Crowe two decades earlier regarding the importance of landscape in understanding and assessing the architecture of power plants. At the same time, this study contributes to a deeper examination of Parent's research and explore the conception of landscape in these engineering works, within a context in which the climate crisis has once again place nuclear energy at the center of political, social, and energy debates.

2. Background. Camouflage strategies

Parent's work in France cannot be understood without reference to the United States, the country that stood at the forefront of nuclear technology development. Since 1946, the Atomic Energy Commission (AEC), as the federal agency responsible for this field, established the criteria used to determine suitable sites for nuclear power plants. During the 1950s and 1960s, these criteria were predominantly technical in nature, including the availability of water bodies, geological conditions, seismic activity, proximity to the electrical grid, and population density in the surroundings (David & Robb, 1967). At the second international conference held in Vienna in 1967, which focused on the siting strategies, *Containment and Siting of Nuclear Power Plants*, issues related to landscape transformation or even visual impact were still not addressed, at least not explicitly. Under the criteria established by the AEC, the largest structures were discreetly concealed within sparsely populated rural areas, often located in areas of high scenic and natural values (Parent, n.d.; Rastello, 2008).

This natural landscape, conceived as a territory distant from human presence and often offered as an "object of contemplation" (Corboz, 1983), gained significance in the United States culture through the pioneering work initiated by photographers of the *Government Survey*, who documented striking scenic views far removed from urban environments (Petrich, 1979). John Szarkowski, curator of the 1963 MoMA exhibition, *The Photographer and the American Landscape*, argued that the intention of these photographers was not to philosophize about the beauty of the landscape, but rather to describe it in an "objective" manner (Szarkowski, 1963).[2] One year later, the publication of Leo Marx's *The Machine in the Garden* (Marx, 1964) reinforced this conception of the natural landscape as a key component of national identity.[3] However, the idyllic landscape described by these authors was progressively transformed, first by the arrival of the railroad and certain infrastructures, and more recently by the construction of the first nuclear power plants. This new program, both in its physical scale and its symbolic charge, could be compared to that of geographical landmarks (Crowe, 1958).

Due to the high visual impact of nuclear power plants, efforts were made to implement strategies that would blend them with nature to mitigate their visual alteration (Gray et al., 1979). In the United Kingdom, for instance, the work initiated by Sylvia Crowe sought to reduce visual impact using landscape elements such as earthworks and woodlands (Crowe, 1958). Her writings recurrently employed terms such as "harmony" and "integration" to describe these interventions, whose aim was to minimize the perception of the installations. By the late 1960s, there were even considerations in the United States of burying nuclear power plants (Blake et al., 1973).[4] Faced with this challenge, design firms were compelled to devise alternative strategies to mitigate visual impact. These included the use of colors resembling natural hues such as green, blue, or white, and the integration of natural elements into the design, same as Crowe. As Buchanan (1976) noted, "Aesthetic impacts can be reduced by selecting sites where existing topography and forests can be utilized for screening station structures from nearby scenic, historical, or recreational resources. Restoration of natural vegetation, creative landscaping, and the integrating of structures with the environment can mitigate adverse visual impacts". As a result, the problem of siting nuclear power plants tended to be simplified, being reduced to a predominantly visual issue, specifically, to the manipulation of perception as identified in the earlier definition of "landscape".

In 1974, the AEC published the first study aimed at qualitatively assessing the transformation of natural environments in which new nuclear power plants were being built: *A Technique for Environmental Decision Making Using Quantified Social and Aesthetic Values*. This manual introduced new criteria for evaluating site's suitability to place a nuclear power plant, focusing on aesthetic considerations, such as the color palette, climate, vegetation, topography, recreational areas, and viewpoints. These factors provided a greater degree of precision in measuring the transformation of the landscape, with the objective, according to André Corboz, of "instrumentalizing science in pursuit of an increasingly effective control" (Corboz, 1983). The landscape architects Jones & Jones collaborated in the development of this study. Grant (1938–2021) and Ilze Jones (b. 1938) stated that, through the incorporation of these factors, the AEC "had the idea that architects or landscape architects could quantify aesthetics to prove that nuclear power plants would be a positive addition to the landscape because of their elegant forms" (Jones, 2007). Previously, the site quality and camouflage strategies had a subjective dimension. The challenge of this manual, akin to the one undertaken by the *Government Survey* photographers, lay in objectively determining the criteria for evaluating the resulting quality of transforming natural settings, thus reducing individual bias.[5]

This siting manual should be understood within the broader framework of the *National Environmental Policy Act* of 1970, through which President Richard M. Nixon

[2] This record, coupled with the writings of figures like Ralph Waldo Emerson, Henry David Thoreau, Edgar Allan Poe, or Walt Whitman, as well as the contributions of Andrew Jackson Downing and Frederick Law Olmsted, offered a picturesque vision of the beauty of natural landscape amidst an era marked by technological progress.

[3] "The pastoral ideal has been used to define the meaning of America ever since the age of discovery, and it has not yet lost its hold upon the native imagination" (Marx, 1964).

[4] Early technical studies, however, demonstrated that such an approach was unfeasible due to its technical complexity and high economic cost. Burying these structures, as Parent later argued, would also have posed significant risks in terms of safety, operational control, and the management of radioactive waste.

[5] In 1975, Jones & Jones applied this model for the first time to assess the impact of the Trojan nuclear power plant, north of Portland, Oregon, and at Indian Point, near New York.

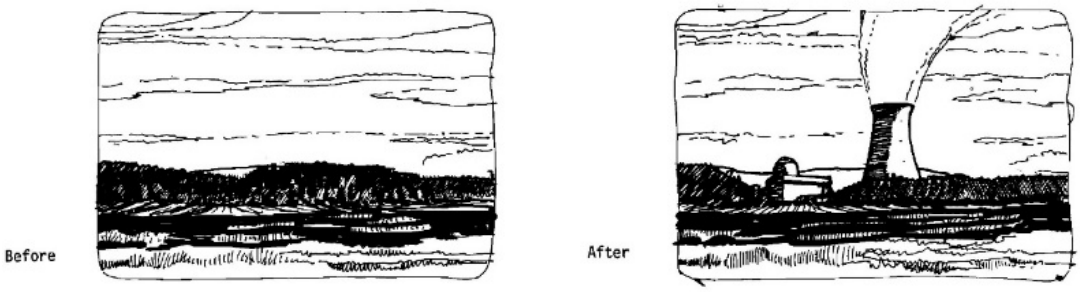


Figure 2. Alteration of the natural landscape due to the construction of Trojan NPP (source: Burnham et al., 1974)

expressed growing national concern over environmental degradation. The Act established the natural environment as a shared public asset requiring protection (Reinhold, 2004). Following its enactment, all federal agencies, including the AEC, were required to "utilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences and environmental design arts in planning and in decision-making which may have an impact on man's environment" (Nixon, 1970). Within this context, landscape quality was primarily assessed in terms of visual impact.[6] From that point onwards, three criteria defined this approach: vividness, intactness, and unity (Gray et al., 1979).[7] Conceived as measurable parameters, these criteria sought to preserve the visual character of the landscape by minimizing land occupation, maintaining coherence between natural and built environments, and limiting visible alteration (Burnham et al., 1974; Figure 2).

This predominantly visual understanding of landscape has since been superseded by broader perspectives that recognize landscape as a dynamic system shaped by ecological processes, resilience, landscape character, and the relationships between infrastructure, territory, and society (Bélanger, 2017). Although Grant Jones acknowledges the presence of local communities in his manual, they are considered primarily as observers whose exposure to nuclear facilities should be minimized rather than as active participants in the landscape. As public opposition to nuclear power plants in natural settings intensified and environmental concerns grew, design firms increasingly sought remote locations that would reduce not only the risks associated with potential accidents but also the number of potential viewers. As Burnham et al. (1974) stated, "Of all variables, the most important is viewing population, since visual impact must depend on the presence of a viewer". Behind the apparent neutrality of these sitting criteria lay an ideological and cultural conception of landscape in which concealment became a design strategy.

3. Atom totem

The year 1974 marks a turning point between two approaches to the nuclear landscape. Faced with the concerns raised by the construction of nuclear power plants in France, efforts were made to craft a narrative aimed at normalizing their usage (Parent & Bouvier, 2005). It is worth noting that this divergence cannot be explained simply by differences in public acceptance. A survey conducted in the 1990s found comparable levels of support for nuclear energy in France (51.1%) and the United States (46.7%) (Slovic et al., 1999). Rather, the two countries differed in the way they framed nuclear technology. In postwar France, nuclear energy emerged as a symbol of industrial capability, technological sovereignty, and national renewal. With limited domestic fossil fuel resources and the need to rebuild both its energy infrastructure and its national identity after the Second World War, the nuclear program became central to the country's modernization project (Hecht, 2015). As Topçu (2017) explains, the objective was to "operate the modernization of France, including by making an alliance with tradition". He continues: "Thus, it is a whole spectacle of grandiose technology that presents itself in a lyrical manner, transforming the site of Marcoule into a cathedral of the 20th century, that of Chinon into a castle of modern times, and nuclear energy into the key to greatness and national energy independence". In this context, nuclear power plants become landmarks of modernity and technological progress in a nation that, like the United States, invested in the development of this technology.

During the 1950s, Pierre Dufau was among the first architects world-wide to confront large-scale architecture through the construction of the Chinon (1957–1964). The construction of this plant marked a milestone, symbolizing the shift from thermal and hydroelectric energy to the predominant use of nuclear power. Reflecting on his intervention in this plant, renowned for both its historical significance and architectural design, Dufau remarked in his autobiography: "The water tower takes the form of a simple cylinder standing seventy-two meters tall, while the reactor is rendered as a perfect sphere. I believe this was a good idea, as these shapes have now become symbols heralding any program related to atomic energy on television" (Dufau, 1989). The structures rapidly became a

[6] "Visual impact was defined as the change in visual quality over time resulting from the introduction of a facility into a landscape setting, as viewed from the surrounding area" (Gray et al., 1979).

[7] These criteria were not exclusive to the nuclear program, but were also applied to industry, agriculture, and transportation infrastructures (United States Department of Agriculture, 1995).

recognizable symbol for the French population, frequently appearing in the media and functioning as a kind of trademark. This interpretation, however, ran counter to the position that Parent would articulate decades later, when he argued that nuclear power plants would not be "accepted" by the public unless they were first "accepted" by their site (Parent, 1976). In other words, the challenge of designing these facilities could not be reduced to a purely geometric or commercial operation but had to be addressed as a problem of relationship with the landscape.

At the same time the AEC was featuring its design manual, Électricité de France (EDF) promoted the creation of the *Collège des architectes du nucléaire*, at the initiative of Jean-Claude Lebreton, chief engineer of the environmental department, who was concerned about the high impact of these facilities (Rastello, 2008). This research group, integrated into EDF's "Plan Architecture," was composed of nine architects whose aim was to design and site nuclear power plants in France (Pesci, 2015).[8] Following Dufau's experience, the partnership formed by Lebreton and Parent sought to promote a position opposed to the

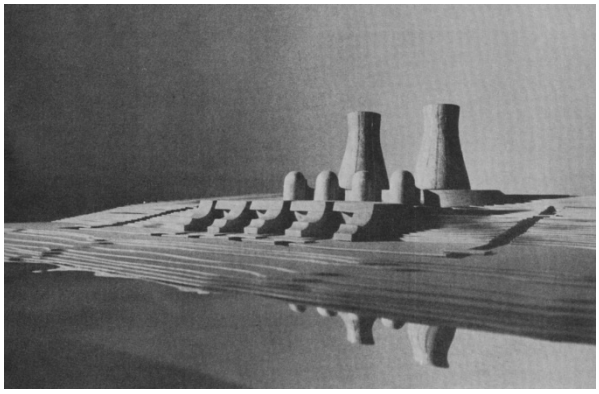


Figure 3. *Maquette d'une centrale nucléaire avec quatre tranches de 130 MW*, Claude Parent (source: Parent, 1976)



Figure 4. Perspective for Paluel Nuclear Power Plant, Jean Willerval (source: Parent, 1976)

[8] Paul Andreu, André Bourdon, Jean Dubuisson, Pierre Dufau, Michel Homberg, Jean Le Couteur, Claude Parent, Roger Taillibert, and Jean Willerval. EDF also proposed unsuccessfully collaborating with Oscar Niemeyer (Rastello, 2008).

American model, conceiving nuclear power plants as more than mere chameleons crouched within the landscape (Le Ngoc, 2021). As Parent explains, the technical teams initially started from a renewed desire to camouflage the facilities: "Instead of thinking about integration into the landscape, of designing a site with a plant, they wanted to conceal, to mask... which was even worse" (Parent & Bouvier, 2005). However, this approach revealed the limitations of a design process dominated exclusively by engineering teams. Parent argued for the need to broaden the disciplinary framework of design, advocating the incorporation of architects to reverse the situation: "Despite financial and technical constraints, [EDF] wants to empower architects to intervene at the highest level and upstream of irreversible decisions" (Parent, 1976; Figures 3–4).

This approach allowed Parent to extend a long-standing conception of landscape as a dynamic process rather than a static entity, bringing his work closer to contemporary understandings of landscape as something continuously transformed through human intervention. As he argued, "It can no longer be about preserving the *status quo*, since the "foreign" presence of the architecture in question and its dimension led to the invention of a new state of the place, a new state of affairs" (Parent, 1989). Rather than preserving an existing condition, Parent's interventions sought to establish a new equilibrium between architecture and landscape (Simonot, 2012). Through this discourse, the architect, working on behalf of EDF, sought to persuade the public that nuclear power plants should be understood not only as integral components of the landscape but also as part of the nation's heritage, contributing to its collective memory and historical continuity (Parent, 1983). As Hecht notes, "The press releases by EDF and CEA constantly employ heritage metaphors, and these are repeated verbatim by the press" (Hecht, 2014b). EDF's communications went even further, presenting nuclear power plants as monuments that, like Notre-Dame, the Arc de Triomphe, or the Eiffel Tower in earlier periods, would become enduring symbols of the nation. Within this narrative, nuclear power plants were framed as the latest chapter in France's historical and architectural legacy, reinforcing both national identity and the country's vision of technological modernity (Hecht, 2015).

In 1974, Parent assumed leadership of the research group, from which he designed fifteen nuclear power plants and building two in Cattenom (1978) and Chooz (1982). In a context marked by widespread skepticism toward the use of nuclear technology, he promoted a conciliatory discourse based on the construction of a series of everyday-life scenes in which nuclear power plants transcended the technical condition. In scenes such as *Paysage 1* (10 March 1975) or *Coexistence* (24 March 1975), these facilities were represented for the first time in coexistence with both the population. This approach proved critical of the American model, which sought to reduce the number of viewers. In Parent's drawings, the buildings deliberately contrasted with the landscape, thereby granting it a higher



Figure 5. Perspective for Cattenom Nuclear Power Plant, Claude Parent (source: Parent, 1976)

degree of vividness.[9] Far from pursuing low values, Parent employed vividness as a strategy to resolve the difficult relationship between nuclear architecture and landscape. It is necessary to note that landscape is in constant transformation with each season, time of day, or solar inclination, which renders unfeasible any attempt to camouflage a nuclear power plant based on fixed and immutable values. As Parent asserted: "There is no question of making a power plant disappear by the magic wand of architectural art, there is no question of camouflaging a power plant" (Parent, 1983).

Parent also incorporated symbolic terms to refer to nuclear power plants, such as "temples of energy" (Parent, 1978). These constructions were inscribed within the tradition of the "great works of humanity" (Parent, 1976), evoking, through their scale and symbolism, the most emblematic moments in the history of architecture. Nevertheless, the term he used most frequently was "totem" (Parent, 2014). With this designation, he introduced values that transcended their strictly technical condition, elevating them to integral components of collective life. Like the totems of ancestral cultures, these structures were erected in the natural landscape to provide it with a new point of reference (Figure 5). Totemic construction, set within nature, did not simply occupy the landscape but actively contributed to its organization. This conception reflects a long-standing French tradition in which the landscape is understood less as a fixed natural entity than as the product of its construction. As Antoine Picon has argued, French engineering culture historically conceived infrastructure as an instrument of *aménagement du territoire*, capable of organizing the landscape rather than merely adapting to it (Picon, 1992). In this context, nuclear power plants could be interpreted not as disruptions but as elements participating in the construction of the landscape. Le Corbusier's description of nature as something that "was in disorder with its lianas, its brambles, its trunks" (Corbusier, 1923) illustrates this aspiration to impose order. Szarkowski's prologue to the 1963 American landscape exhibition further illustrates the cultural specificity of this tradition: "The Romantic era discovered a wilder landscape and made it an appropriate background for the soliloquies of its poets [...] The common man, who knew nature well as a constant and often cruel adversary, was not often captivated by her charm" (Szarkowski, 1963).

Totemic architecture appears suited to providing a new order. This second approach conceives buildings as figures capable of asserting themselves within the landscape rather than dissolving into it. Nuclear power plants and landscape thus form a single unit, but unlike the notion of "unity" advocated in the Jones & Jones' manual the two entities remain clearly differentiated. Consequently, the structures become integral parts of the landscape while distinguished by the inherent characteristics of the work. Parent invoked a beautiful quote from Frank Lloyd Wright to justify his intention: "It should be achieved that each house becomes an integral part of the landscape where it is located and should reflect its harmony. If the architect's effort is successful, it is impossible to imagine this house anywhere else than where it is. It becomes an element of the landscape itself: it adds to its beauty instead of diminishing it" (Parent, 1978).

In the past, as described by Sigmund Freud, the totem constituted a figurative representation of nature, it was morphologically opposed to the taboo and functioned as a binding element for the community (Freud, 1927). According to this conception, nature itself did not provide the principles for organizing society, as it was perceived as beautiful yet disorderly, chaotic, and potentially hazardous. Parent appropriated the "totem" as a symbolic designation to reframe the perception of taboo, particularly in reference to phenomena like nuclear energy, which could be considered dangerous and forbidden in the context of the Cold War. Relating these plants to a landscape or to society is an attempt to give them a new meaning from architecture (Figure 6). As the pioneering architect to theorize about the landscape of these plants, Parent assumes their colossal scale and symbolism. His focus lies in defining a specific architectural language: "The mission consisted [...] of creating a specific language of nuclear architecture" (Parent & Bouvier, 2005). This language is aimed at experimenting with forms and colors to create contrast (Parent, 1989).

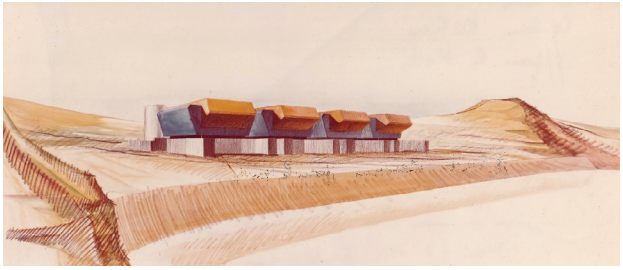


Figure 6. *Les Hottes*, Claude Parent (source: Courtesy of Claude Parent Archives)

[9] The concept of "vividness" was articulated by Jones & Jones as: "the memorability of the visual impression received from the viewscape or its elements. Vividness relates to the level of distinction or prominence resulting from contrast or mutual accentuation of diverse viewscape elements" (Burnham, 1974).

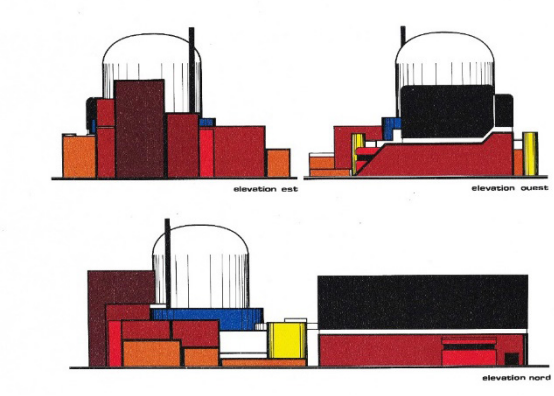


Figure 7. *La couleur pour favoriser*, Claude Parent and Alexandra Cot (source: Courtesy of Claude Parent Archives)

In 2007, Claude Parent reflected on his experience designing this program in France, arguing that their deliberate contrast with nature enabled architecture to create a new layer of the landscape: "Our tradition in the Western world is to compel architecture, no matter how singular and unusual it may be, to harmonize with the landscape respecting its scale, even if it strives for the sharpest and most violent contrast. Thus, architecture manages through a clever alchemy to create the new stratum of the site" (Parent, 2007). This statement echoes an idea he had expressed two years earlier in an interview with the Swiss historian Yves Bouvier: "The nuclear power plant creates the site" (Parent & Bouvier, 2005). With their monumental structures, nuclear power plants rise above the landscape as powerful landmarks, while the surroundings, in turn, gains meaning through their presence. Rather than simply occupying a site, these engineering works redefine it, creating what Parent described as a new stratum of the landscape. From this perspective, nuclear power plants become not merely trademarks, as suggested by Dufau, but landmarks: highly recognizable structures that can be identified from great distances.

However, the relationship with the landscape is not one-directional. It is not only the architecture of the plant that shapes the quality and identity of the landscape. The landscape also plays an active role in defining architecture. As Gonzalvo argues, this is a reciprocal process in which landscape serves both as the destination of the design and as the starting point from which the French nuclear power plants were conceived (Gonzalvo, 2025b). During the first six months of collaboration with the national electricity corporation, Parent explored, through models, collages, and perspectives, solutions to give form to the largest structures of nuclear power plants, such as reactors and turbine halls.[10] Parent conceptualized four models as sculptures, each imbued with a distinct geometry and specific elements that link it to a particular type of site, whether flat terrain, coastal areas, cliff, dunes, wooded regions, or rugged topography (Pesci, 2015; Parent, 1976). To complement these prototypes, EDF incorporated color specialists into the design teams, notably Alexandra Cot (Hug, n.d.). Far from seeking natural tones, color was conceived as a resource capable of reinforcing the character of the engineering work, endowing it with vitality and enhancing its insertion into the site through contrast (Parent, 1978). Following the logic of the totem, Parent and Cot applied vivid colors such as red, blue, yellow, black, and white, to set the constructions against the various elements of the natural landscape: the dominant green of forests, the pale blue of the sky, the white fog, or the brown tones of the earth (Figure 7).

4. Decommissioning of nuclear power plants

In March 1980, six years after embarking on his collaboration with EDF and scarcely one year after the Three Mile Island nuclear accident in the United States, Parent for the first time associated nuclear power plants with spontaneous nature, in scenes such as *Utopie végétale* or *Jardins nucléaires* (Figure 8). In these drawings, he proposed releasing the remains of nuclear power plants once decontaminated into the natural landscape, depicting them as contemporary ruins of striking beauty, in the manner of the Romantic artist such as Giovanni Battista Piranesi. Faced with the demolition proposed by public administrations and their respective owners, the vegetation introduced in his work seemed to be a notable symptom of the persistence of these constructions beyond their intended lifespan as energy-generating facilities. According to this hypothesis, the remnants of the buildings would be abandoned to the passage of time (Gonzalvo, 2025a). What was originally a fully operational electricity facility would be transformed, in Parent's words, into a vigorous garden. Parent envisioned the remains of obsolete constructions being reclaimed by nature's inexorable force. In this utopian scenario, architecture once again placed its trust in the power of nature, not as an element to be dominated, but as something of which it could become a part. Nuclear power plants could thus be reintegrated into the natural landscape, once again forming a single unity. Parent concluded: "Indeed, architecture gradually reconnects with one of its ancestral missions, creating the landscape, being the landscape" (Parent, n.d.).

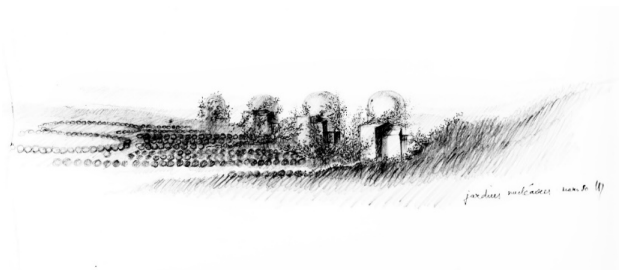


Figure 8. *Jardins nucléaires*, Claude Parent (March 1980) (source: Courtesy of Claude Parent Archives)

[10] To captivate the executives, Claude Parent named the proposals with symbolic titles: "les temples," "les hottes," "les stratifications," and "les orgues" (Parent, 1978).

5. Conclusions

In the 1950s, Sylvia Crowe introduced landscape considerations into the planning of energy infrastructures, proposing an approach that remained relatively generic and abstract when addressing the design and siting of large-scale engineering works. Today, with a deeper understanding, we can engage in a more theoretical exploration of landscape, encompassing all its aspects from architecture, including those that may seem insignificant due to their simplicity. In this article, "perception" has been highlighted as an essential strategy. While the term "landscape" is globally unified by its definition, its interpretation using the "perception" varies across different cultures and throughout history. The year 1974 emerged as a pivotal moment in the construction of nuclear power plants, marking the point at which two opposing attitudes toward their design and sitting began to diverge. In the United States, the natural landscape was understood as an absolute value, conceived as an entity that should remain intact following a cultural approach. The strategies developed to reduce the impact sought, under an appearance of objectivity, to conceal them within the natural environment, but only in terms of visual dimension.

This assertion allows the work of Claude Parent to be introduced by contrast. In his work, the relationship with populations, pre-existing conditions, and natural elements is interwoven to form complex interactions through which architecture sought to assign new meanings to the landscape. Parent strives to address the complex problem of sitting nuclear power plants by integrating aspects of architecture such as color, form, and symbolism. While some values utilized in the manual by Jones & Jones may align with Parent's approach, such as vividness, intactness, and unity, their application differs significantly. Rather than aiming for minimal values, the opposite is true: Parent employ these parameters as catalysts for creating contrast and adding complexity to the construction of the landscape. In Parent's work, the landscape functions both as a visual backdrop and as an architectural element in formation and transformation. In this way, architecture asserts itself to reveal its beauty to the attentive and inquisitive gaze of the viewer, at least during the operational phase of the plants. Once their operational life has ended, Parent proposed integrating nature as a means of romanticizing these structures or allowing them to be slowly dismantled, following the logic of erosion and the passage of time characteristic of the ruins of the ancient world.

These three ways of considering the landscape allow us to understand that its conception depends on subjective positioning, still far from achieving an objective and impartial connotation that can be applied globally. Even the supposedly objective values introduced by the AEC, or the liberation advocated by Parent, still retain a cultural connection, with a subjective implication. Despite their contrasting approaches, both cases seek to argue that nuclear power plants are positive additions, whether through mimetic integration or deliberate contrast. Beyond the cultural learnings of each model, the strategies outlined in this article hold potential relevance for the application in the new energy production infrastructure being built in the climate crisis. Following a slowdown in the construction of nuclear power plants since the 1980s, several countries, including the United Kingdom, France, India, China, and South Korea, are now facing the construction of new units. The construction of this infrastructure conditions a *fait accompli* in the international frame, such as the disruption of the existing balance in the landscape with the massive appearance of new plants, forcing them to rethink new models for their implementation from the discipline of the architecture. Building upon the groundwork laid by Crowe, followed by Jones & Jones and further developed by Parent, there arises a critical need to explore the integration of new facilities into the landscape. This stands as one of the foremost tasks that architects can contribute to society in the present. In this regard, Parent's work reframed the root of the problem as an opportunity for experimentation, using it as a pretext to pursue new architectural solutions to a technical and historical challenge.

Acknowledgements

The author wants to thank Laszlo Parent, of the Parent Archives, for providing documentation on Claude Parent's work, which was instrumental in writing of this paper.

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