An analysis of the article

« Quiet no more, French village becomes centre of anti-nuclear protest »

by Gilbert Reilhac and Lucien Libert, using the concept of Contested energy landscape.

This article was chosen as the deep burial Cigéo project has been the greatest source of nuclear protests for the last fifteen years in France, and remains relevant to resume the recent situation in Bure, location of this project. The Cigéo is a project of deep burial nuclear wastes in 82 inhabitant village of Bure, northeastern France, which meets several protests for the last years, enough for the state to keep a strong police presence in the village. This area was chosen initially for the quality of its clay in the underground and it will be designed to get the most dangerous nuclear wastes (C category) (CNPS, 1996 ; Andra, 2018). The article remains neutral and aimed only to show the situation at the current moment, but it is built upon interviewed arguments. The concept of Contested Energy Landscape is going to be used to analyze this news article for getting a deeper understanding of what is going on in France with nuclear wastes. The concept is built with the ideas of Contestation which refers to a ‘legitimacy denial of [state] right’, seen as a tool of ‘domination when it is used by a public authority, and opposed to fundamental right’ (Bosredon & Dumas, 2013), by Landscape to ‘a unity of materiality and representation, constructed out of the contest between various social groups possessing varying amounts of social, economic, and political power’ (Mitchell, 1996), and by Energy, to ‘physical flows and social demands which are co-productive of socio-spatial relations’ (Galvert, 2015), a production and a consumption which generate, as all industrial processes, wastes. So, contested energy landscape is a concept for understanding the impact of a direct or indirect energetic facility to the landscape perception, and for understanding relationship between this landscape and people or individuals to explain a contestation of the facility.

The review is going to be developed according three points of view around the topics of the project : From Nuclear authorities arguments and protesters arguments and wills, and police response.

Olivier Durin, Le monde de l’énergie, « Cigéo Tunnels »

1 Ce n’est pas sorcier : Science, life and nature educational show broadcasted by the own-state television channel France 3 between 1993 and 2014.
One of the first arguments of the article is made by ASN\(^2\) which said that deep geological storage is the safest way to protect future generations from radioactive waste. The properties of Bure’s clay to retain radiations were proved and even published by collaborations between geological researchers and Andra\(^3\) scientists to share the experiments about the underground property (Mazuret et al., 2008; 2011). “We’re not going to do deep burial of (nuclear) waste if we had any doubt that it would leak or contaminate the environment,” said Andra spokesman Mathieu Saint Louis in the article. “The ultimate goal with an underground installation such as this one is precisely to protect ourselves from the danger of (nuclear) waste.” But this argument is defied by time itself. No technical solution can guarantee that these materials will be safely contained as long as their half-lives make them dangerous (Poirot-Delpech, Raineau, 2015). In fact, the nuclear wastes are going to be active and dangerous for the next million of years at least, and the current technology of containers do not guaranty more than 4’000 years before a potential corrosion, and 300’000 years more for vitrified nuclear products (CNPS, 2006). This question of time is in reality the true danger of a deep burial project for nuclear wastes. Poirot-Delpech and Rainau (2015) argued that the lifetime of the this “memory’s” main medium, “permanent paper,” is estimated to be between 600 and 1000 years. They spoke about markers left to the next generations, but they fear that ‘after the surface markers have disappeared, or have lost all meaning for the people encountering them, the radioactive waste and its inherent dangers will still remain underground’. This Cigéo oblivion may be dangerous in case of archeology works on the site long time after this hypothetic period of know legacy, because we don’t know if the future civilization will be able to detect radioactivity, or sill able to read 2020s French.

This article argument of « solution » is also contested by Poirot-Delpech and Rainau (2015) who argue that [Bure’s deep burial is] first designed for fission products for which there is no re-use market, can in no way be considered a “solution”, but rather as a “response” to the problem. That ‘far from being a solution, the deep geological repository project seems instead to express the weakening, if not the end, of faith in scientific and technological progress’, in the way that wastes burying ‘cannot be mastered by [today] technology’. The article concludes that ‘the Bure site is designed so that nuclear waste could be retrieved for the first 100 years if scientists find a better solution than burying it. Otherwise, the underground galleries will be permanently sealed with concrete’. In this way, ‘we recognize the right of the people of the future to change our decisions’ (Poirot-Delpech, Raineau, 2015) and to act in consequence. But for the protestors, hundred years of reversibility is not enough to justified deep burial, that obviously they seen as a bad response for nuclear waste problem instead of the least worst of solutions like ASN and Andra (so the French State) think it is.

The article quoted Gerard Antoine, the mayor of Bure and local farmer: « Life will become unbearable here with the nuclear waste […] » for stating right after: ‘[Gerard] Antoine approved the installation of Andra research facilities two decades ago but said he now regrets that decision and would say no if he were asked today. The authors of the article shown an obvious contradiction without brief explanations about what mechanisms made agreed the mayor in 1999. The fact is Bure is in a rural area which have unemployment and desertification for a while (Sander, 2016). After the

\(^2\) ASN : Agence de Sureté Nucléaire (Nuclear safety agency)

\(^3\) Andra : Agence Nationale de gestion des Déchets Radioactifs (Radioactive waste management national agency)
CNRS researcher Laurent Bauguitte (2018), the nuclear industry finances Meuse Department by €304 millions through a GIP5, and the Andra finances directly, as a compensation asked by law (Livolsi, 2013), and the commune of Bure by €4,9 millions (Bauguitte, 2018), so the mayor accepted initial for compensation.

The article argues that activists don’t trust the ASN and Andra to prevent leaks from the capsules of vitrified nuclear wastes and that ‘deep geological does not offer perfect guarantees’. The green party local elected said : « We are heading straight for […] a nuclear disaster, that’s why we’re against it ». This lack of trust comes from an embodied relation to the close environment, and from a though ‘about the land with a new or amplified sense of concern for the future and a new or amplified awareness that the decisions we make today influence what we leave behind’ (Willow et alt, 2014). People are able to refuse an energetic project if they consider that it is made to the detriment of the future generations. By the landscape mutation link to the project, people are also fear to be disconnected from this one, as they ‘perceived [that] landscapes are deeply disturbed by the prospect of losing their connections to the immediate environment and the lifestyle it enables’ (Willow et alt, 2014).

As Bure’s anti-nuclear activists don’t trust the project and are fighting actively against it (ref) , the French state through its own-utilities defends the opposite point. But this confrontation comes from a really different risk perception. From the State, the arguments are developed by Nuclear industry representatives and politics who underline ‘how nuclear facilities are trustful and how weak is the accident probability in France’ (Oiry, 2017). From the activists, the risk is not seen toward people directly at the opposite of the state, but of disintegration of administrative bodies by themselves (loosing of trust from population, loosing of political control of the situation, breakdown of industrial development, etc) (Oiry, 2017). The article bring the information that ‘a police van at the main square is testimony to rising tensions and demonstrations […]’. The tension between activists, or more specifically zadistes6, and the police come from those perceptions of the risk. Oiry argues that challenging the nuclear in France, its to challenging the state in its capacity to be guarantor of public safety, and then to give it the shape of the oppressor. The violence is now rising between zadistes and the police from years. After the article, ‘hundreds of demonstrators who built a camp nearby were

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5 Department : Territorial administrative authority

6 GIP : Groupement d’Intérêt Public, Public found feed by public and privates sources for a common aim (e.g. employment, economy, transport, energy) applies in French Republic.

6 Zadiste : Green activist in a ZAD (Zone à défendre)
kicked out by police in February’, then now ‘police are maintaining a heavy presence […] in the Bure village centre’ when they declare ‘that they […] will fight the project until the government changes its plans’. The protesters applied the ZAD method to keep safe the land, they occupied it and started to live there by an alternative way of life. The police services accused them of radicalization and applied the anti-terrorist procedure against them (Le Devin, Delmas, Hallisat, 2018). Bure’s ZAD spokesman declared in a interview for Ballast (2018) that since the Nuit Debout events, the justice got the order to systematically judicialize Zadistes and strikes leaders with « criminal association » grounds, and that is what happened now in Bure (D’Allens, 2018).

The article review the recent situation in Bure, France, centered on the deep burial geological project for nuclear wastes Cigéo. The authors opposed the Andra vision to the protestors one. If it was shown that if scientific publication strengthen the clay capacity, the question of time which challenges the material resistance to it. There is also the remembered time, and about the time spend before the next generation oblivion of the project. The project is presented as a solution, but in reality it is a response to our technical incapacity to get nuclear wastes safe, and it this way it is important to keep them accessible for a not yet discovered technology to get those safe. The protesters embodied the landscape and give strength to legacy to the next generations, but this concept of landscape and environment comes from an opposed vision of the risk, which leads protesters to challenge the state for his capacity to secure their safety. As consequences, the state unleashes justice and police to silence the protest. Wastes from nuclear facilities are not only the concern of France, which plan to the success of Cigéo for exporting it. Some countries embarrassed of their nuclear wastes look after deep geological repositories as England which prospect since 2012 and now has some interest for the lakes district area.

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7 ZAD : French neologism used to refer to a militant occupation that is intended to physically blockade a development project. The ZADs are organized particularly in areas with an ecological or agricultural dimension

8 Nuit-Debout : Occupancy movement in France happened from 31st March 2016 to June 2016 against liberalism and job flexibility
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