

**Marine LEROY, « Les Français et les ondes, des années 1950 à nos jours » (“French People and the waves from 1950’ to nowadays”), Master thesis in contemporary history, under the direction of Pascal Griset, University of Paris Sorbonne – Paris 4, 2012, 290 p.**

Electromagnetic waves have been used since the invention of radio broadcasting and first wireless communication devices. However since the 1950’s their use has become a lot more common. Radiation sources proliferate to the extent of being part of the everyday environment of French people. In order to study how the latter react to this growing circulation of electromagnetic fields, I had to analyse the local reactions towards installation of transmitters near houses. Thanks to my research on the pioneering towers of Meudon and of Loos, I was able to identify the way that people have perceived the deployment of the microwave network since 1953. Furthermore, consulting sociological books about risk perception and management allowed me to better contextualise my research at the same time.

After technical, scientific and aesthetic concerns were expressed over the use of electromagnetic waves, the general public opinion in France considers it to be a health hazard. The existence of a potential health risk is strongly linked to local and socio-political tensions and to an increasing mistrust in techno sciences. This results from a lack of consultation between experts and neutral people, which in turn contributes to strengthening the idea of a scientific and industrial conspiracy in the opponents’ speech.

The imposing look of the first radio centres worried the locals even though they were enthusiastic about obtaining telephone and television. The inhabitants also denounced the landscape damage caused due to increasing power lines in the 1970’s. An emerging scientific debate about the harmfulness of electromagnetic fields had few repercussions in the French society.

However in 1979 an American study published by sociologist Nancy Wertheimer and physicist Ed Leeper triggered a scientific controversy worldwide. Magnetic fields were suspected of developing cancers in children who lived near high voltage lines. That debate encouraged whistle-blowers and associations to denounce the existence of an ‘electromagnetic pollution’. In the early 1990’s, the health risks emerged in French local oppositions, with many regional issues also at stake. Hence the need for firms such as *Orange* and *RTE* to improve their local discussions and communication systems before implementing infrastructures.

The debate about EMF and health, which tensions are symptomatic of a crisis of land use planning, especially encompassed the waves emitted by base stations in 1999. Members of the parliament were in turn questioning the Government regarding the issue. Local conflicts were also on the rise. Given that mobile phone network uses electromagnetic radiation belonging to the same frequency as the one emitted by microwave network, we have to question the renewal of the conditions of societal acceptability of new technologies that have emerged since the 1950’s. Technological cycles have been reduced and so has the adaptation period. This could justify the

impression of being subjected to the exposition and the willingness to improve the management of a risk that has yet to be identified.