TECHNOLOGICAL RISKS AS A SOCIAL ISSUE

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Abstract - This communication shows how the technological risks issue raises as a social agreement problem. It explores the shaping of this issue and the theoretical approach which should be used in order to explain the difficulty of decision makers to deal with this political question. In particular, it examines the public effects on the decision making process in the French context.

Keywords - Technological Risks, Protests, State, Social Systems

I. INTRODUCTION

As we know, protests against harmful or dangerous activities developed at the same time as industry, i.e. from the end of the 18th century. Most often led by notables, the questioning of malodorous, polluting or deadly factories is a reaction to a devaluation of real estate, agricultural or even industrial heritage, for example when the quality of the water needed to brew beer deteriorates (Bernhardt, Massard-Guilbaud, 2002; Corbin, 1982; Fressoz, 2012; Williot, 1997). Strikes against accidents at work, particularly in mines (Rosental, 2008) but not only, have been part of the history of the industry. However, they have hardly led to workers' demands for the abandonment of hazardous activities. More generally, occupational illnesses, deadly by the tens of thousands (silicosis, asbestos pathologies...), have been treated more by compensation than by the cessation of fatal activities, with some exceptions such as white phosphorus. For the most part, the protests had little impact on the accelerated industrialization that was widely supported by the State, in France as elsewhere, throughout the 19th and, in part, 20th centuries.

II. THE PUBLIC SPACE OF RISKS

During the 1960s and 1970s, a major transformation took place, with the public thematization of technological risks. This thematization, i.e. the construction of a risk topic, involved the formation of a public space of risks (Suraud, 2014), going beyond that described by the "young" Habermas (1962). The emergence of environmental claims is gradually formalized through the rise of "new social movements" (Melucci, 1978; Luhmann, 1993; Offe, 1997). This trend led to a politicization of production (Offe, 1984), that is, to a confrontation centered on the ways of producing and also on products, based on demands often formulated using a negative grammar: "closure of nuclear power plants" or "moratorium on GMOs [genetically modified organisms]". In a certain way, the formation of a risk theme does not eliminate the demands on the standard of living, made by the labor movement, but it is marked by demands on the way of life, made by the associative movement: factory fumes that used to be signs of activity(ies) become signs of pollution. If one confines oneself to simple observations on the persistence of the wage relationship as an issue, it is not relevant to come to the idea that a "risk society" has been constituted (Beck, 1986), that is to say one in which risk has, in a way, become the (new) driving force of history. Nevertheless, the importance of questions of technological risk in social life is real, as shown by the multiplication of controversial subjects, whether nuclear and chemical substances, but also GMOs, synthetic biology or nanotechnologies.

From this perspective, some research has turned to the process of constituting "public problems" (Gusfield, 2009), to better understand how risk problems emerge and are asserted. However, on the one hand, the notion of public problem makes it difficult to go beyond case studies (Gilbert, Henry, 2012) and, on the other hand, it tends to standardize risk topics throughout their careers, without necessarily leading us to a better understanding of the questions of legitimacy raised by the contestation of certain activities.

III. RISKS AND HAZARDS

Indeed, although no one can ignore the risky nature of nuclear energy production and air or automobile transport, these two examples nevertheless reflect a fundamental difference in terms of the process of thematisation of technological risks. Air transport, whose accidents regularly cause several hundred deaths, or automobile transport, which kills several thousand people in France every year, are not criticized on the basis of their ‘accidentology’; and a tightening of risk prevention conditions is capable of responding, at least partially, to criticisms of their deficiency in terms of operation. On the other hand, civil nuclear power, for which the number of deaths recorded is lower than those caused by transport, is the subject of sustained public protest in all "democratic" countries (allowing for protest); and the at least posted security measures for the installations do not put an end, even temporarily, to the questioning of the activities concerned. In other

words, we must admit that there is risk and risk, or rather, that risk as a threat is not, in itself, the basis of the social dynamics that manifest themselves against certain activities.

We can then defend the idea that the theme of technological risks is presented as the expression of a problem of civic confrontation, not on the risks themselves, but on the raison d'être of certain activities, on their ways of producing and/or on their products. In this sense, the theme of technological risks is not built on the distinction between a decision creating the risk and the criticism of those who are exposed to the danger thus created (Luhmann, 1993). This decision/exposure distinction can certainly explain the existence, which is not debatable, of the Nimby refusals (Not In My Backyard). Nevertheless, it does not in any way characterize the depth of the theme of technological risks as a process of delegitimization. Indeed, the fact of being exposed is not a communication operation as such, and it remains to formalize the conditions of its transformation into delicate subjects for the political system. Or, to put it another way, it remains to make explicit what characterizes this transformation into contestations of increasing amplitude, to the point of disrupting the functionality of both economic (and innovation) and political (electorally disturbed) systems.

IV. THE SOCIAL ASYMMETRY OF RISKS

To account for this problem of legitimacy, we can turn to Jürgen Habermas' (1981, 1992) distinction between system and lived world. From this perspective, the public theme of technological risks can be interpreted as a form of confrontation between the public space and the system. More precisely, it is about the formation of demands on the protection of the environment and health, addressed to the economic and political systems, which can only deal with these demands through decisions that are compatible with their mode of operation via the media of money and functional power.

Without going into too much detail about Jürgen Habermas' theorization, a social asymmetry is clearly apparent. On the one hand, claims about or against risks are established, constituted by universalizable discussions, "disinterested" because they are dissociated from monetary and political-administrative calculations. On the other hand, the operations of the system must ensure the reproduction of the payment capacities of companies, whose processes and/or products are threatened with ecological extinction, and that of the political system, shaken by a civic contestation that escapes the conventional (electoralist) politics that tends towards the alternation of a majority and an opposition.

From this point of view, the public theme of technological risks is detached from the issues represented by the labour movement. The dispossession of workers from the means of production (to follow both Karl Marx and Max Weber) organizes a dependence, certainly reciprocal but unequal, of workers on employers who control wage payments. On the other hand, the civic space, where a public "of" risks is formed, offers, and this is its strength, no hold on the system, because it develops - and can only develop - by making itself independent of the functional monetary and bureaucratic (thus hierarchical) operations. The thematizing capacity of the civic space presupposes its self-constitution and self-reproduction. Consequently, no negotiation can take place between companies and associations, which, moreover, cannot commit themselves on behalf of the population to assume risks or any other concession. For its part, the State, placed under electoral pressure, cannot enter into agreements with a public space that does not fall under the conventional policy of alternating majority/opposition. The possible entry into government of ministers from associations does not alter this separation, even if it may (very) momentarily blur it until discussions are reconstituted: the public space is composed not of actors, but of discussions, in the strong sense of the term.

As a result, it is unlikely that a social agreement on the appropriateness of activities involving technological risks will be established if the conceptions of industrialization, whether carried by the public "of" risks or by the components of the system, are fundamentally heterodox and if they are not reduced to the problems of risk alone. The confrontation on nuclear power brings into play, in the first place, the potential for disaster thus generated, but it also concerns the lack of solutions for waste treatment and, again, the criticism of the political order, the defence secrecy, which is associated with nuclear power. Similarly, the confrontation on GMOs concerns not only the potential risks to the environment and health, but also the patentability of life and the dependence that is thus established, from producers to seed suppliers.

V. THE SYSTEM UNDER PRESSURE

This sovereignty of the public space explains why its pressure, in economic or electoral terms, is difficult to bear by the system and why it can produce structuring effects. Prevention in the chemical industries has become more stringent, especially since the 1970s at European level, and has gradually called into question many activities and products, even if the number of occupational or environmental victims remains substantial.

Moreover, the introduction of the precautionary principle - whose institutionalization is classically referred to in Principle 15 of the 1992 Rio Declaration on Environment and Development - not only reinforces the effectiveness of civic discussions, but also constitutes a turning point by now providing a lever for public protest to raise problems of technological risks even before an activity develops industrially. Its development in France is moreover significant. Whereas Law No. 95-101 of 2 February 1995 on the strengthening of environmental protection, known as the Barnier Law, moderated the precautionary principle by introducing a restrictive clause governing a political-administrative decision subject to "economically acceptable costs", Article 5 of the Charter for the Environment, which was constitutionalized in 2005, no longer refers to it. More concretely, even if the European Union is between the two positions, the adoption of the REACH Regulation (Registration, Evaluation, Authorization and restrictions of CHemical Substances) applies to the most widespread elements a precautionary principle - "no data, no market" - regulating the circulation of chemical substances on the basis of a demonstration, even if it is still debatable, of the security of the production and marketing of substances.

Admittedly, the public space of risks is far from being in control of technological and industrial activities. It is true that substances and products continue to degrade the environment and health and to kill prematurely. It is also true that criticism of certain risky activities has caused tension between industrial workers and environmental associations. But it would be wrong to conclude from this that the public theme of technological risks is merely an irritation of systemic spheres: it has produced major inflections in functional decisions and, at the same time, in the expansion of universalizable discussions. It is thus remarkable that trade unions and non-governmental organizations (NGOs) have gradually moved closer together, at the French or European level, whether in the development of the Reach regulation or on the topic of nanotechnologies. From this point of view, the public space of risks has been significantly enlarged (Chaskiel, Suraud, 2014), and the terms of its confrontation with the system have been resized.

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