

Atmospheric pollution : nuisance, sanitary risk and environmental health

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The negative effects of atmospheric pollution were considered from the beginning of the 20th century because of the mainly olfactive nuisances present. Well before modern epidemiology and the definition of health in the same category as the quality of life according to the World Health Organisation (WHO), atmospheric pollution was denounced for the annoyance it caused. In 1967, the definition of atmospheric pollution according to the EEC was founded on the harmful effects it engendered : *“There is air pollution when the presence of a foreign substance or a significant variation in the proportion of its constituents is likely to cause a **harmful effect**, taking into account the scientific knowledge of the moment or to **cause an annoyance**”*. Smoke and smells lowered the value of property but these nuisances of proximity could be considered as the price to pay for supporting industrial prosperity which until the roaring thirties represented a strong collective asset.

The Loi sur l’Air et l’Utilisation Rationnelle de l’Energie (LAURE), a true fruit of the emergence of scientific epidemiology in France appeared as a public health law. However, the introduction of this rationality led to a depreciation of nuisances which were not considered in the pathologies linked to air pollution. This distortion between the perception of pollution and the evaluation of pathologies can be seen as a blind spot in sustainable development for which numerous present-day reflections on the notion of environmental inequalities are trying to compensate.

Over some ten years, between the PAARC survey (Pollution atmosphérique et affections respiratoires chroniques), carried out between 1974 and 1976 by INSERM, and the ERPURS survey (Evaluation des Risques de la Pollution Urbaine sur la Santé), the Ile de France part of the European research programme APHEA (Air Pollution and Health : an European Approach), health regained its place in the area of air quality. This essential change, further to the American school of Joel Schwartz and Douglas Dockery which introduced the method called temporal ecology, has been described in numerous works (F.Boutaric, 2010, L.Charles, 2009). The results obtained make it impossible to deny the link, in the short term, between air pollution and deterioration of health.

Epidemiology leaves aside the treatment of nuisances

However, the pathologies identified as being linked to atmospheric pollution do not mention nuisances which on the one hand belong to the complainant’s subjectivity and on the other correspond to phenomena which appear in the immediate proximity of sources. The great epidemiological surveys are based on the background noise of urban pollution, that is to say on the common level that everyone breathes, whilst only a few individuals are bothered by phenomena of proximity.

At this time, if industrial pollution diminished, urban nuisances remained numerous and mainly disregarded by epidemiological surveys.

Using the three bodies of complaints received by the APPA, it is possible to pinpoint some characteristics of this popular expression invoking sanitary disorders which large-scale epidemiological surveys cannot appreciate :

- Paris (1260 complaints received by the Préfecture de police between June 2001 and July 2002),
- Nancy (576 complaints received by the municipal hygiene and health services between 200 and 2004)
- the mining area (75 complaints made to the SPPPI of Artois),

Since the law on registered establishments of 1976, it has been the State via the DRIRE and the Préfet which has dealt with complaints concerning large industrial companies. Urban complaints, on the contrary, are received and managed by the former municipal hygiene Bureaux which became the town hygiene and health services when they exist, or by the direction départementale de la santé (département health management) before it disappeared into the ARS or exceptionally, in Paris, by the Préfecture de Police. Urban complaints regularly increased as is shown by the example of Paris as in 1987 3,822 complaints had been made to the Préfecture de police and more than 10,000 in 2001.

This presentation attempts, using the example of France, to show to what extent perceived pollution, that is to say belonging to proximity, as it appears in the complaints, has remained unanswered as the apprehension of pollution and its sanitary impacts has become more and more technical. *“The evolution of sanitary risk makes it difficult to respond to complaints ; on the other hand, it is necessary to quantify the impacts of public policies”* (Boutaric¹, 2010).

This hesitation as to the responses to make leads to the complicated circuit followed by a complaint which can include 14 exchanges before the complainant receives an answer.

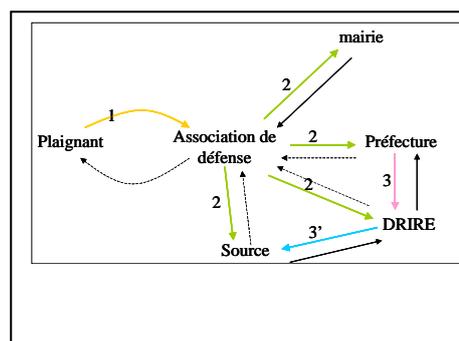


Fig1. The circuit taken by a complaint examined by the SPPPI of Artois

The rigorous measurements made by the AASQA (Certified associations for monitoring the quality of the air) have made it possible to discredit complaints based on subjective criteria of the nuisance. Complaints having gone through a difficult circuit, a true obstacle course, were discredited as being not recognized. However health is often invoked to support the petition, but how is it possible to verify the veracity of verbatim remarks such as these ? *“As soon as we*

¹Boutaric F. L'appropriation de la méthode de l'évaluation des risques sanitaires en France *Écologie & Politique*, n° 40, June, 2010 p.117-135

arrived in this apartment, various health problems concerning me and my wife and our 5-year-old daughter never stopped accumulating ; sneezing, nasal discharge, dry mucous membranes, accompanied by nose bleeds, headaches, breathing problems, a soporific or lethargic state after several hours spent in the apartment” or “I would like to ask if you could send me someone competent to certify the nuisances which I suffer from (emanations in my apartment), the very strong smells which irritate the oesophagus and greatly upset my organism”.

These two different approaches to health posed a problem to the principles of sustainable development as the object of this notion is precisely to remind us that it is the inhabitant who is at the heart of his environment. He is thus the main player and knows all the “knowers” or the institutions which claim (often justifiably so) to convey knowledge. (B. Zuideau, 2010). At that point in time, the management of local pollution which was in the domain of municipal hygiene offices, found itself disconnected from the expertise required to evaluate toxic risk, as is emphasized by B. Barraqué (1997).

A necessary reconfiguration of the question of atmospheric pollution in environmental health

The difficult evaluation of risks carried out in the town of Champlan, exposed to numerous pollutions led to the awareness of the limits of epidemiology and the need to include other approaches in order to meet the inhabitants’ sanitary aspirations (I.Roussel, 2008). The second Plan National Santé Environnement (National Health Environment Plan) and its regional forms aim to put the inhabitant at the heart of the public health tools. Drawing up these plans shows the progress made in the field of consultation and the inhabitants’ participation. These systems offered an arena for the inhabitants’ expression, which even supported by health professionals remains little understood. The difference between health as it is perceived and strongly vested with affective by the inhabitants and sanitary prevention as it appears from these plans illustrates the difficulty in institutionalising the notion of environmental health.

An APPA survey led by L. Charles as part of the Primequal² programme had carried out a survey in three French regions ; it showed the gap between the concern for the environment of populations and the policies implemented. Whilst the people questioned knew the effects of a deteriorated environment on health and 22% of the inhabitants of the Nord-Pas-de-Calais questioned even knew about the link between Alzheimer’s disease and the environment, very few knew the public policies in force.

	NPC	Angers	Paris
PNSE	23.8	29.6	25
PRQA	12.9	12.4	15
PPA	12.1	9.4	8.2
PDU	20.6	32.4	25.8
Agendas 21	5	8	4.6
PLU	45	57.8	52.6
AASQA	18.1	14.6	18.4

Tableau 1 % of replies given to the following question : do you know the following schemes ?

The replies given show that the PLU (Plan Local d'Urbanisme) is the best known system as it concerns property and the nearby environment of individuals. The other planning tools are known in a much vaguer and remote way. These findings surely show us the true challenge to the management of air quality which must become a local issue, not only by smells and smoke as at the time of hygienism, but following freely agreed inflexions of daily behaviour with a scientifically validated benefit on the control of particle emissions and so on the quality of air. Once again, this new direction follows the efforts made in the United States with the development of the Environmental Justice movement which grew out of the sanitary claims perceived by underprivileged populations. (J.Maantay, 2000, L.Charles, 2007). Environmental health in France must be undertaken by responses adapted to questions concerning local pollution whilst being based on the important issues linked to air pollution which are present at different levels.

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