

**“The lethal Meuse valley fog”. 1-5 December 1930**  
**Reciprocal measurements and qualifications of air, perceptions and debate**

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Between 1st and 5th December 1930 a thicker and thicker fog spread into the Meuse valley, not far from Liège. Both men and animals suffered enormously from its passing and many died.

As soon as it had disappeared, experts announced that : “only the fog” was responsible. But what is a lethal fog ? The population on the spot was not satisfied with these conclusions. Many people blamed the emanations of factories of the region, one of the most industrialized in Europe. Abroad, scientists, governments and international authorities wanted to know more about it.

A second commission of experts was swiftly summoned. A year later it presented its conclusions : the massive consumption of coal and the sulphur compounds of industrial emanations are implicated. The exceptional nature of the event is however attributed to the specific topographical and meteorological conditions of this first week of December 1930.

However, it appeared that it was not the first time in the region that the appearance and stagnation of fog lasting several day, was accompanied by a sudden increase in mortality. The region is used to thick fog which takes several days to disappear. The registers of the Meteorological Observatory in Cointe, not far from Liège, show more than a dozen fogs lasting more than 3 days over the 40 years prior to the accident. Amongst them, at least three, those of 1897, 1902 and 1911 were accompanied by an outbreak of “fog asthma”, a typical disease of the region which affected cattle, but also by a sudden increase in mortality in cattle and perhaps human mortality, although the records are ambiguous on this point.

When I was asked to draw up an analysis of the lethal fog, I still had high hopes of finding some documents in the records which would, I thought, allow me to understand the characteristic features of the repeated appearance of this fog. Unfortunately, my hopes have since been dashed. The records of institutions – the ministry of agriculture, the ministry of industry and work and the ministry of the interior, to name the most important – to which the civil servants in charge of these investigations belonged, have either been destroyed or ‘dispersed’ or sold to an “old paper merchant”. As these investigations were never published, it is with meagre traces that we shall tackle the question of discovering how such a repetition could have occurred.

Rather than tackling this question of repetition head on, I intend to come back more centrally to the catastrophe of December 1930 which revealed it and to identify some leads problematic of the relations between measurement, perception and debate about the specific quality of the air in this catastrophe, starting from the way in which mortality linked to the fog was diversely characterized and for this questioning the role and functions played by the expert opinion to which it gave rise.

The first point : in this event, the first ‘layman’ hypotheses blaming industrial emanations – those of journalists and local residents expressed in the press – were immediately discredited by the director of the Hygiene Commission of the Province of Liège and by the representative of the Hygiene department of the Ministry of the Interior. In order to do this, the director of the Commission evoked the treatments administered by doctors, the predisposition of those who had died (mostly elderly and already affected by respiratory problems) and the geographical distribution of the deaths, thus eliminating all the hypotheses which implicated industry.

The second point : an investigation commission was set up further to the opening of a criminal investigation against persons unknown at the request of the Head of the Prosecution department of

the Province of Liège. It was composed of a panel of experts : two chemists, a toxicologist, a pathologist, a meteorologist and a veterinary surgeon. In the course of this investigation, ten post-mortem examinations, toxicological analyses, calculations of industrial chemistry to determine the nature and quantity of industrial emanations and meteorological analyses were carried out. From the first few days of its installation, the hypothesis of toxic gases dominated the discussions. However, when they made a declaration to the press, the experts were careful to play down this option and to attach it, if it became plausible, to the predisposition of the persons concerned.

The third point : in order to try and characterize the quality of the air and the mechanisms which had led to such a catastrophe, the experts, having been unable to take air samples on a foggy day, based their conclusions on numerous testimonies of workers and local residents who described the singular aspects of this fog (yellow, compact, of an unusual consistency), the movements which trapped the smoke just above the ground, the smell and discomfort and pains affecting their respiratory tracts (stinging, burning, desquamation of the oral tract).

The fourth point : the conclusions of the commission (see above) were extremely close to the dominant hypotheses put forward by the local press immediately after the catastrophe. However, significant differences can be seen in precisely determining the compounds which had caused death (sulphur compounds, mainly sulphurous anhydride) and those meteorological conditions which had transformed the valley into a sort of isolated space (the phenomenon of the inversion of temperatures, very little wind). Another important difference was that industry disappeared from the wording of the conclusions, or was present only by metonymy (coal and sulphur compounds).

Considering these elements, we can see that the epistemological gap is relatively small between the commission's conclusions and those earlier made by numerous local residents and journalists. It is now a question of understanding the different functions fulfilled by this survey concerning the qualification/disqualification of the 'lay' word, to the resources needed for the 'administration of proof' and its political translation. We shall ask ourselves, in particular from Foucauldian analyses of regimes of "véridiction", what the modes of this production of truth 'serve' and maintain.