In the early years, statistics were merely enumerations for rather large territories. With the time the collection of individual characteristics was added and smaller and smaller geographical units were used. Today a great detail of characteristics can be achieved at address level. But at this level the variety of individual behaviour doesn't help to analyze the whole data and some aggregation way must be found. So, with the time, the use of predefined zones as a support of the data changed from a mandatory data collection tool to a chosen level of aggregation.

The purpose of this presentation is to show that the use of predefined zonings is in no way unharmed, either because any zoning has some concealed inherent characteristics due to the way that they were created and which can interfere largely with the analyses of the data, or because using zoning as a simple way of classifying the reality leads to forget a very simple thing that is the existence of space itself.

Through several practical examples, the presentation will show the three traps for a spatial analyst relying too much on zonings: the “Modifiable Are Unit Problem” (how to miss the real messages behind the data), the “ecological fallacy” (how to confuse container and contents) and the “chessboard problem” (how to miss spatial relationship). Together with theses difficulties, the presentation will show how, in the French National Statistical Institute, the current works try to find an operational solution that could reconcile the demanding theorist and the final users.

Key words: spatial statistics, zoning