From “Free Information” to Its (Geo)referencing and Analysis: The “Costs” of Open Source

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1. INTRODUCTION

In principle, within a “participatory decision-making” all actors into play can “collaborate” because they share – preferably jointly – the information required to properly manage data flows and processes called for the contingent situation. To ensure to “communicate”, students should also use the same codes for the same conventional signs, which are coded and universally recognizable, also using identical or at least easily recognizable “instruments” for a “standardized format” – through simple computing processes.

Mapping – also in its ultimate form, the digital one – is not an exception to the “rules” described above. The signs that appear on a paper must be clearly understood and shared to ensure an absolutely immediate reading without misunderstandings. Even before caring for the “visual” aspect it is essential to step back. It is essential, therefore, to find and use “official” data sets widely meta-documented and fit for purpose. In this context, during recent years in Europe, several projects and directives have been involved to specify and formalize not just the “representation” – a topic that remains open and of not immediate solution – but the methodology required to “share” catalogs of data on a large scale, in order to:

(a) tackling unnecessary and harmful phenomena of duplication - which also generate problems of “certification” and “official nature” of sources, among other things;

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(b) promoting processes of “derivation” and sharing, for example, for a given scale, a certain amount of data layers should not exist to represent the administrative units (country, regions, provinces and municipalities in the Italian case), but only one from which you can reach the others, even through the information sharing through the display of services such as WMS - Web Map Service, WFS - Web Feature Service, WCS - Web Coverage Service and so on, officially recognized and certificated;

(c) ensuring the free use of the information, encouraging public participation and access to justice (in court proceedings in relation to the environment)\(^2\).

For example, we can mention the INSPIRE project\(^3\) and the SEIS\(^4\) Directive, to which we refer for completeness.

The problem of the availability of “official data” should be resolved or at least the path taken takes out to be correct. As far as this subject is concerned, we highlight the efforts taken up by the Regione Piemonte with the project Dati Piemonte (public data are of everyone) that provides a valuable informative wealth. However, the sources not always fully satisfy the requirements of analysis and research. Increasingly, in fact, we ourselves need to create geo-referred/geo-related data also starting from textual information available online. It is known that any set of information, with full address, can be “transferred” to a map description crossing road databases with the address books of interest. The process is called “indirect geo-referencing”. However, how easy is to deal with it? What are the problems and the “costs” that one must endured in “open source” environments and “open source” tools? This paper will attempt to analyze the problems inherent in such operations, highlighting the key points and the critical issues identified.

2. FROM DATA TO THE GEO-REFERRED INFORMATION

To look up information it may be sufficient to start from a search engine (for example Google, Bing or other) or, even better, making reference to


\(^4\) Acronym that stands for Shared Environmental Information System.