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## Creative Mapping Landuse and Human Activities: From the Inventories of Factories to the History of the City and Citizens

Authors: R. Tamborrino, F. Rinaudo

Abstract: Digital technologies offer possibilities to effectively convert historical archives into instruments of knowledge able to provide a guide for the interpretation of historical phenomena. Digital conversion and management of those documents allow the possibility to add other sources in a unique and coherent model that permits the intersection of different data able to open new interpretations and understandings. Urban history uses, among other sources, the inventories that register human activities in a specific space (e.g. cadastres, censuses, etc.). The geographic localisation of that information inside cartographic supports allows for the comprehension and visualisation of specific relationships between different historical realities registering both the urban space and the peoples living there. These links that merge the different nature of data and documentation through a new organisation of the information can suggest a new interpretation of other related events. In all these kinds of analysis, the use of GIS platforms today represents the most appropriate answer. The design of the related databases is the key to realise the ad-hoc instrument to facilitate the analysis and the intersection of data of different origins. Moreover, GIS has become the digital platform where it is possible to add other kinds of data visualisation. This research deals with the industrial development of Turin at the beginning of the 20th century. A census of factories realized just prior to WWI provides the opportunity to test the potentialities of GIS platforms for the analysis of urban landscape modifications during the first industrial development of the town. The inventory includes data about location, activities, and people. GIS is shaped in a creative way linking different sources and digital systems aiming to create a new type of platform conceived as an interface integrating different kinds of data visualisation. The data processing allows linking this information to an urban space, and also visualising the growth of the city at that time. The sources, related to the urban landscape development in that period, are of a different nature. The emerging necessity to build, enlarge, modify and join different buildings to boost the industrial activities, according to their fast development, is recorded by different official permissions delivered by the municipality and now stored in the Historical Archive of the Municipality of Turin. Those documents, which are reports and drawings, contain numerous data on the buildings themselves, including the block where the plot is located, the district, and the people involved such as the owner, the investor, and the engineer or architect designing the industrial building. All these collected data offer the possibility to firstly re-build the process of change of the urban landscape by using GIS and 3D modelling technologies thanks to the access to the drawings (2D plans, sections and elevations) that show the previous and the planned situation. Furthermore, they access information for different queries of the linked dataset that could be useful for different research and targets such as economics, biographical, architectural, or demographical. By superimposing a layer of the present city, the past meets to the present-industrial heritage, and people meet urban history.

Keywords: digital urban history, census, digitalisation, GIS, modelling, digital humanities

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