

Mapping the historical Soundscape. A digital project to enhance the cultural identity of Modena (Italy)

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Abstract:

The article presents the project, still in progress, to create a map-based digital platform through which to reconstruct and explore places, spaces, sounds and events that have contributed to the soundscape of the city of Modena. With their social and cultural resources, over the centuries, cities have been a prerequisite for the growth of music production. At the same time, sound and music are essential elements in the landscape perception process. In this sense, the soundscape of a city and its historical development can be considered as a local intangible heritage to be enhanced and preserved.

During the 17th century, the ducal city of Modena became an important musical centre thanks to the Este court. Especially, during the two decades of Francesco II d'Este's reign (1674–94), music began to appear in public spaces as a tool for displaying the Duke's authority and became one of the main artistic languages of the city. The comparative study of sources of different types (historical maps, musical manuscripts, archival sources) grasps the multiform connections between court, city and territory, offering many details on the complex relationships between sound and space within the urban context.

To study the musical and cultural heritage concerning the urban context through an innovative approach, an online interactive map with digital resources has been created thanks to the use of Geographic Information Systems (GIS) (Fig. 1). For musicological research purposes, cartography is very useful for locating music production centres within the urban context, improving knowledge of places and music production and dissemination methods and above all understanding how geographical areas and musical expression have interacted with and influenced each other.

The platform is based on a relational database system, created in Django Framework, containing data derived from the analysis and study of musical, cartographic, historical, and archival sources. The database is divided into interrelated entities called *Sources* (Fonti), *People* (Persone), *Genres* (Generi), *Events* (Eventi), and *Institutions* (Istituzioni). The database offers various possibilities for accessing the data: the free text search and browse resources, a search indices and a time slider.

The *Institutions* are the connecting element between the relational database system and the map called EsteWebGis: each institution is georeferenced showing the location on the map.

The interactive map consists of a *Google Satellite basemap* on which a 17th century map belonging to the Biblioteca Estense collection has been superimposed and georeferenced. In this way the user has the possibility, through the select/deselect and transparency functions, to compare the 17th century territory with the contemporary one. On this basis, several vector layers were added to represent places of music (*Istituzioni*: theatres, squares, palaces, churches) were inserted. In addition, each icon can be clicked and allows a pop-up to be opened showing descriptive information about the represented institution and its musical activity (Fig. 2). The pop-up includes a list of the works that were performed at the place in question from which, via a link, it's possible to open a bibliographic record in the Estense Digital Library and the complete digitisation of the document. In a second step, the intention is to also include, where possible, recordings of the musical works.

Starting from the map, the user can select in the key the categories of information he wishes to display. By using queries, it will be possible also to filter and cross-reference the data according to specific criteria (e.g. to find out which places in Modena have hosted events related to Casa d'Este ceremonies). These functions allow for interactivity with the user who, at different levels, can delve into information about music venues, works, authors and institutions/places in the city by exploiting the potential of digital for the study of musicology.

In conclusion, the map can be a valid tool for analysing the artistic and spatial context of a city in a more general sense, but above all it enables to have new points of view to study a city and its historical and spectacular development, enhancing the architectural heritage, identifying the main places and institutions, and discovering new visit itineraries that can also be promoted from a tourist point of view. The project wants to propose a collaborative and multidisciplinary model for historical research, but also it will provide new ideas for the enhancement and the governance of cultural heritage and, more generally, of the city.



Figure 1. Este WebGis demo (source: Authors' elaboration from Map data ©2015 Google and *Pianta di Modena*, cat. C.G.A.6.B, Biblioteca Estense Universitaria di Modena, <https://edl.beniculturali.it/beu/850008218>).

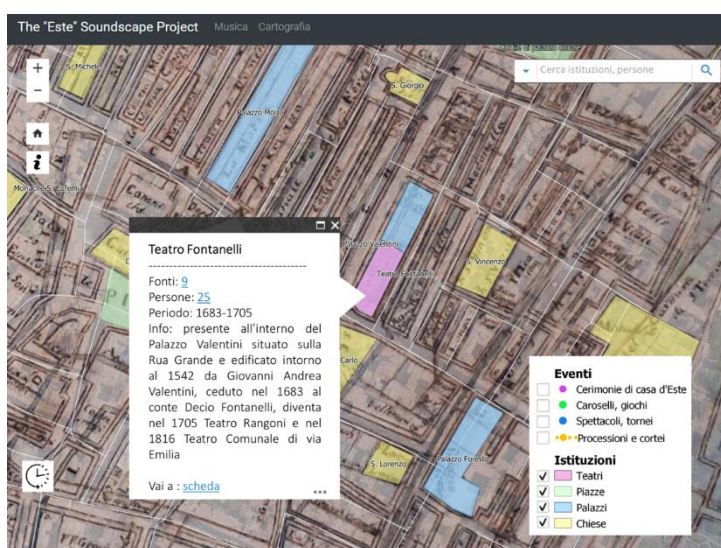


Fig. 2 – Este WebGis: example of pop-up (source: Authors' elaboration from *Pianta di Modena*, cat. C.G.A.6.B, Biblioteca Estense Universitaria di Modena, <https://edl.beniculturali.it/beu/850008218>).

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