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# Infographic restitution of the historic centre of the Spanish town of Oviedo



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#### ABSTRACT

Our historic town centres possess an evocative quality that has recently led to considering these town centres a subject of scientific research, overtaking, if not contradicting, the romantic vision by which they obtained importance in the Western world from the late 18th century.

Thus, the present work is framed in the existing and ultimately consolidated method of European universities, which analyse, with an increasing scientific rigour from many different perspectives, the knowledge of the abundant and rich historic town centres that geographically define our living environment.

This study focuses on the reconstruction of the urban shape of the town of Oviedo in a series of stages that are marked by the cartographic data collected during the time of the study and that involve substantial changes to the urban fabric of the town. The study attempts to be a historical analysis of urban transformation. This research established a systematic study of earlier times when the urban form offered space patterns different from existing patterns. Using the current structure of the historic centre of Oviedo and the analysis of its pathologies throughout history as a starting point, this study considers the possibility of a methodical study of the past.

This project presents the coexistence of parallel textual and visual accounts, which can be read together, as a new methodology to understand the spatial formation and transformation of urban landscapes.

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#### 1. Introduction

The historic centres of European cities and towns are now exposed as the superposition of buildings and places that have been appearing and disappearing in different times and that together form the complex and often contradictory organism that we perceive as the existing town.

The importance of drawings has been crucial to this study. Drawings are used as a means of analysing the footprint left over the years in the town (Carazo Lefort, 2010). This work focuses on the historic centre of Oviedo, a town linked to the origins of the Spanish monarchy.

The use of drawings for urban analysis and in particular to propose a graphic narrative of the development of the urban form could itself justify the research methodology proposed here. Moreover, this is so for several reasons. First is the particular efficiency of drawing, with its long tradition of representing architecture and the city. It may be said that from the drawings of Villar D'Honencourt, by the representations of the ideal city of the Renaissance, that the urban views of nineteenth-century city projects or the current digital cartographies are a millenary link between the graphic and the urban. Second is the great evocative capacity of drawing, which renders art particularly appropriate for the representation of the past city and its lost heritage, both

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being essential keys to the interpretation of the present urban form. Third is the ease with which the most diagrammatic graphic systems are capable of disseminating to the general public the heritage values of historical centres, even transferring graphic mechanisms to new information and communication technologies, of which traditional drawing is frequently the basis and foundation.

The analytical purpose of the drawing becomes one of the intended unique features of this study. Although there have been many works regarding the town of Oviedo (Álvarez Fernández, 2009; Rodríguez Balbín, 1977; Tomé Fernández, 1988), their graphic contributions have been scant and incomplete. This research suggests, as a methodological innovation, the parallel coexistence of text and graphics, which facilitate a comprehensive reading and an understanding of the space formation and transformation of the urban form.

The use of graphic analysis to describe the development of the historic centres helps to develop an understanding of their current shape by the morphological changes the centres have endured. Hence, a new concept for urban analysis arises: *the urban graphic history*. This concept has its foundation in the long tradition of studies on artistic form in general and on architectural and urban forms in particular, which pursue their "etymological" analysis and development from "forms that derive from forms". Essentially, this theory was articulated by the Central European School of Art and forms Historiography, with antecedents by Frankl (1914) or Focillon (1943), leading to the more concrete proposals of Kubler (1962) or Gombrich (1997).

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Fig. 1. Aerial photograph of the years 1957 and 2002. Ejército del Aire. Archivo Fotográfico. B492-50214 y 40000-157-P6H001H029.

This project is based on primary analysis compared with the current map of the town of Oviedo, created using the precision of modern day graphic media, with the orthophotos of the town centre that have been kept since 1957 (Fig. 1) and historic maps, which, although considerably less precise, give us an idea of the elements that shaped the old town. From all of the information gathered and by providing a uniform approach through drawing, a new topographic and cartographic database was created by linking five significant urban moments and keeping the exact correlations that enabled observation of the evolution -or involution- suffered by the old town during this time span. The changes that occurred in the historic town centre will be comparatively analysed using a colour code assigned to each of the reconstructed dates (1800, 1850, 1900, 1950 and 2000).

This historical/graphic analysis was conducted using multiple and varied information from a range of sources. From this information, one can begin to glimpse what the town once was. All of the assembled and classified documentation presents the chronological changes in the historic centre. The hypothesis of this study is that beginning in the present and moving backwards through time, the documents can progressively lead to the past.

The basis for this study considers some preliminary reflections that define the so-called Frame of Study.

The first task was to narrow the study. The scope of this research is limited both temporally and spatially. The time is restricted to those periods from which there is accurate and complete cartographic information available. In terms of space, there is a focus on the fortified area of the 13th century and surrounding areas.

Second, the study includes a digital database containing the historic town maps and other information such as urban planning operations, built or planned, and other minor works involving the blocks and buildings in the studied area.

The proposed graphic analysis was then conducted using various available drawings, particularly general, partial, urban and cadastral maps, as well as drawings from the files of public works and construction. From all of these documents that compose the research basis, the results of the study offer a reasoned analysis of the actions that led to the transformations. The work concludes with a series of virtual recreations of buildings and urban areas. The study objective was to get closer to the towns underlying the current city centre to comprehend the present town in light of its historical memory.

#### 2. Methodology

The investigation presented here does not solely comprise diagrams of the old town. In reality, the study presents an original and innovative methodology for the study and documentation of urban heritage by

graphic representation as a key instrument leading to the awareness and spread of rising value, of which historic town centres are an example.

By studying the evolution of the oldest part of Oviedo's historic town centre, we present a series of innovative actions in terms of analysing historic heritage.

First, we present a code system of block numbering to identify each of the buildings located within the area of study, using an easily recognisable code that gives the investigation an unprecedented structure and organisation in terms of identifying buildings. This system, which has been used in previous projects, was used in this project as a system that can be transposed to the study of another historic town centre, establishing a standard coding system for future investigations. Furthermore, the aforementioned naming system not only refers to each building but corresponds to the database that combines all of the documentation related to each plot in all of their analysed historic stages.

The use of colour coding to represent different periods and areas of the town also led to innovation in the field of study known as urban transformation. The use of different plots distinguishes building land from free land has been in use for a long time, such as in the work of Camilo Sitte (1889). Carlos de San Antonio's project (San Antonio Gómez et al., 2014) was similar to ours. In that project, a series of plots marked existing elements or alterations between certain plans and other plans. Elements that provide greater information regarding mapping were added to these processes, which can distinguish unambiguous buildings from structures that have been restored. In addition to using colour coding to indicate blocks in different periods and urban transformations, colour allows us to locate and visually structure the study of the historic town during its different periods of evolution (Table 1).

#### 2.1. Temporal scope

The proposed methodology limits the time frame by selecting the following years: 1800, 1850, 1900, 1950 and 2000. This choice of dates is not random; these dates are milestones in the transformation of the urban form, and there is significant historical cartographic documentation from all of those years.<sup>1</sup>

To portray the oldest portion of the historic town centre over these five temporal stages, the process of this study begins with the redrawing

<sup>&</sup>lt;sup>1</sup> The general plans of 1777 of F. Reiter, of Joaquín María Fernandez from 1885, of Manuel Lopez Dóriga from 1912, the plan of the city of Oviedo and its suburbs from 1917, of Dóriga and Antonio Landeta, of the German Valentín from 1941, and the Gamazo artistic historical set of Oviedo from 1964. The documentation for this work was from the following archives and institutions: Archivo de la catedral de Oviedo, Archivo histórico de Asturias, Archivo Municipal de Oviedo (AMO), Instituto del Patrimonio Histórico Español, Ministerio de Educación y Ciencia y El Real Instituto de Estudios Asturianos.

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