RESEARCH ARTICLE

Open Access



Resilience and urban form transformation: from San Fulgencio monastery to market in Écija, Spain

F.-Javier Ostos-Prieto^{1*}, José-Manuel Aladro-Prieto² and María-Teresa Pérez-Cano¹

Abstract

The nineteenth century city in Spain is defined by modernisation, transformation and urban renewal. The production of urban plans played an important role in projects for the realignment of streets and the opening of new roads. In addition, new urban facilities were added, such as the bullring or the food market, which had hitherto been lacking in many cities. In addition, the church confiscations and the decrease of religious orders led to the abandonment and demolition of many monasteries and convents, which were subsequently used in urban developments. If the new urban facilities were located in the city centre, situated on old monastic plots, is it indeed possible to determine the original monastic plot and building through its urban trace? This research focuses on studying the urban morphology and typology transformation derived from the succession of the monastery to a market. The case study is the Jesuit monastery in Écija, which was transformed into a food market in 1844. A methodology based on the analysis and comparison of maps and planimetry of the market and the disappeared monastery has been used. In order to find the original monastic plot, an inverted chronological order has been followed. The inaccuracies of the original plans have led to an initial study of the current market, towards the market project and finally the monastery itself, trying to identify and define the earliest traces. The results include a hypothesis of the original building of the monastery, as well as the identification of monastic areas under residential buildings on plots outside the market.

Keywords Food market, Jesuit school, Urban plot changes, Urban transformation

Introduction: the modernisation of the city

The nineteenth century urban planning in Spain was marked by a succession of urban changes and renovations aimed at modernising the inherited city. These transformations ranged from the appearance of a greater urban instrumentation to its integration into the morphology of the city. Throughout history, the actions on the pre-existing city were adapted to it, without implying a

transformation as such, but rather a correction (Anguita Cantero 1998). This century was a period of inflection and change not only on a political and social level, but also on an urban level, marking the beginning of the cities as we know them today.

The French occupation at the beginning of the century brought important advances in cartography, such as the introduction of the metric system, replacing the Castilian yard, which facilitated urban planning interventions (Martín López 2002). After the French expulsion in 1812, planimetric development was combined with urban planning, which was further supported both at the municipal and state government levels. During the reign of Isabel II, the Royal Order of 25 January 1846 was promulgated, stipulating the obligation to draw up geometric plans of Spanish cities at a scale of 1:1250 with the aim

² History, Theory and Architectural Composition Department, School of Architecture, University of Seville, Seville, Spain



^{*}Correspondence: F.-Javier Ostos-Prieto fostos1@us.es

¹ Urban and Regional Planning Department, School of Architecture, University of Seville, Seville, Spain

of outlining future urban alterations (Nadal 2017). The lack of urban cartographic documentation of many Spanish cities made it difficult to carry out an adequate urban intervention. Therefore, the main objective of this law was to ensure the drafting of the appropriate urban planning instruments for implementing city modernisations.

The confiscations of religious buildings, which began with the French government, continued in the following decades. Liberal political ideals meant that between 1834 and 1855 the confiscations of Madoz and Mendizábal were key factors to the new urban processes. Prior to 1834, the Spanish clergy was very numerous, exceeding the religious needs of the population, due to the fact that the number of 3207 monasteries and convents was reduced to 1057 (Quirós Linares 2009). Four years later, the Royal Order of 22 March 1838 decreed that buildings of the suppressed convents and monasteries became municipal property free of charge for public use (Arenillas Torrejón 1999). During this period confiscations and massive sales of Church properties took place, in favour of the rising bourgeoisie, linked to the city urban developments (Lazo Díaz 1970). Ecclesiastical buildings turned into municipal ownership or public auction. Suddenly, cities had large areas of vacant land in urban centres, which became prey to real estate speculation.

In 1833, the Minister of Development, Javier de Burgos proposed the reform and division of the territory into 49 provinces (Orduña Rebollo 2012). The capitals of the new provinces would be the main beneficiaries of the urban modernisation processes thanks to the new location of administrative services in them. In this sense, in a more limited way, this circumstance is also reproduced in the towns that are head of judicial districts (Quirós Linares 2009). In the province of Seville, cities like Écija, Carmona, Osuna, Marchena, among others, which are medium-sized cities, were susceptible to significant urban transformations. The new urban proposals undertaken by the municipal governments will be the road alignment modifications, as well as the opening of new streets and avenues. The abundance of old monastic and convent plots in urban centres, linked to urban renovations, gave rise to distinctive urban facilities such as cementeries, boulevards, bullrings and food markets.

Objective and methodology

As a consequence of the urban transformations of the nineteenth century and the disappearance of monasteries, is it indeed possible to determine the original plot and monastic building through its urban trace? Are there still fragments or remains despite its disappearance?

The main objective of this research is to identify the original disappeared plot through the urban morphological and typological study of the transformation from

monastery to market. The first point of the methodological process of the research is to define the scope of the study in four medium-sized cities in Andalusia with representative urban processes of transformation from monastery to market. Afterwards, the study focuses on the city of Écija, where the old monastery of San Fulgencio and the subsequent market are taken as a case study.

Once the case study has been selected, the methodology is based mainly on the study and comparison of both planimetric and cartographic data from different centuries of the monastic plot. For this purpose, a search for original documents was carried out in the Municipal Archive of Écija, the Bibliothèque Nationale de France, the Urbipac architectural office and the consultation of different bibliographical sources and references. This allowed for the location of the original planimetric documentation of both the market and the monastery for their study and comparison.

As an initial hypothesis, it is suggested that the Market may have inherited part of the architectural typology of the monastery, as well as the possible reuse of structural elements such as walls and foundations. Although several sources confirm the location of the monastery, there are few studies on the urban insertion of the building on the site. Therefore, a reverse historical approach, tracing back from the present to the past, is necessary to recognize any potential remnants of the building and the former monastic plot.

From the monastic plot to the market

The Andalusian territory is largely structured by an extensive system of medium-sized cities. The main religious orders such as the Dominicans and Franciscans, after their first foundations in large cities like Seville, Cordoba and Jerez de la Frontera, settled in cities such as Écija, Úbeda, Baeza, Ronda, etc., considered mediumsized cities (Ostos Prieto et al. 2021). Many of these, like Écija, became even more important than some of the current provincial capitals. A total of 21 monasteries and convents can be found in Écija, compared to cities such as Jaén or Cádiz, with 16 or 15 monastic buildings respectively. The number of inhabitants and religious buildings are considered a sign of the economic development of the population. Near to Écija there are three more cities with similar monastic and geographical characteristics, Carmona, Osuna and Marchena (Fig. 1).

The more monastic buildings there were in a town, the greater the impact of the church confiscations in the nineteenth century. There was a common phenomenon in the aforementioned cities, the conversion of the monastic plot into a food market. This was born as an improvement for the cities because of the unhealthiness produced by open markets, also helping to establish

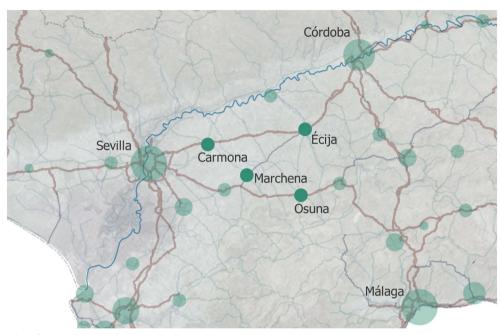


Fig. 1 Situation plan of the medium-sized cities studied in Andalusia, Spain. Own elaboration

Table 1 Characteristics of food markets near Écija. Own elaboration. Source: Arenillas Torrejón (1999), Madoz (1847), Loza Azuaga (2012) and García León (1999)

City	1860 Inhabitants	Building Year	Plot surface (m ²)	Old monastery or convent in the plot
Écija	27,216	1844	3248	San Fulgencio
Carmona	20,074	1842	3225	Santa Catalina
Osuna	17,873	1869	2369	San Francisco
Marchena	13,714	1840	3216	Santo Domingo

greater control over commercial and fiscal activity (Seño Asencio 2013). The market or food market was generally located in the urban centre, constituting a complex in which all basic necessities were located (Collantes de Terán Sánchez 1991). The structure of the market in the city sought to follow models such as those of Madrid or Granada, arranged in public spaces with a quadrangular shape, as was done in the Encarnación market in Seville in 1842 (Fernández González 2009).

The 1840s was the period when the structures of market appeared in the cities of the Seville territory. In Écija, over the old site of the monastery of San Fulgencio, the market was built in 1844, which was defined as a construction "in the beauty of its form, regularity and conformity to the precepts of art." In 1837, the convent of

Santa Catalina in Carmona was confiscated and subsequently transformed into a market (Loza Azuaga 2012). In Osuna, the new market was adapted and integrated into the cloisters of the former monastery of San Francisco in 1869 (Ramírez Olid 1999). In Marchena, José Giraldo commented in 1839 about the market location that:

[...] the suppressed monastery of Santo Domingo could be suitable for its construction because it is large enough and with the walls its cost is considerably reduced, while leaving intact the main part of the building and its church, which is independent and necessary (Arenillas Torrejón 1999:102).

In the four mentioned cities, the occupation of old monastic plots was chosen for their new use as public markets (Table 1). When comparing the cities in number

¹ Archivo Municipal de Écija, book 265, f. 116v-117r.

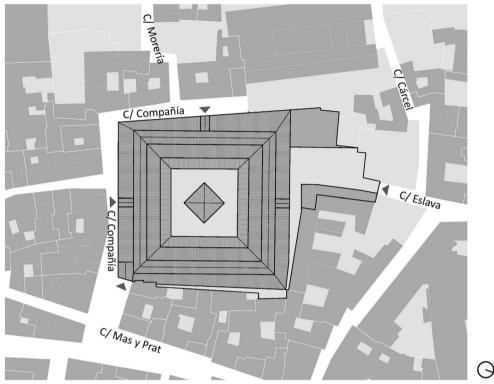


Fig. 2 Situation plan of the food market in Écija in 2021. Own elaboration

of inhabitants,² there is a notable difference. However, despite the population, similar urban processes are taking place, such as the market appearance as a new type of facility. Similar market characteristics are found in the year of construction and the surface area required, approximately 3000 m². Only the case of Osuna differs, both in date and surface area, because it is the only market to be installed without demolishing the old building. The other building projects opt for the demolition of the religious building.

From a comparative analysis, the main similarity can be established in their square geometry, normally with a perimeter gallery open to a central courtyard. The most representative is the one in Carmona, built with a single gallery and without additional constructions in the courtyard. Following the same typological scheme is the Osuna building, but on the cloisters of the Franciscan building. About the two existing cloisters, the stalls are located in the centre of the larger one, while the second one houses a bar and municipal offices (Seño Asencio 2013). The one in Écija choose a maximum use of the perimeter gallery,

doubling the number of stalls and adding others inside the courtyard. In fact, this architectural model follows a scheme similar to the market of Fontán in Oviedo, built in the eighteenth century (Quirós Linares 2009). Finally, the Marchena example is currently configured as a building without a courtyard in response to the last intervention carried out in 1930. The courtyard was occupied by new stalls to provide more commercial space (Arenillas Torrejón 1999). Among the four cases described, Écija is the most important city. The large surface occupied by the market together with the construction year, with the 1844 market plan, the 1627 monastery plan and the urban cartographies from nineteenth century, makes it a unique and important case study.

The market in Écija (Fig. 2) occupies a plot bounded on its southeast and southwest facades by the public space of Compañía Street, whose name continues referring to the original Jesuit school. There are three accesses through this street, the main one being through the door that opens from Compañía Street towards Mas y Prat Street. At the north of the plot there is a secondary access, an extension of the public road that reaches it, Eslava Street. The rest of the plot's perimeter is surrounded by residential buildings, except for a segment bordering an educational building to the west (the current Astigi public school). The market is inserted by a quadrangular

² Historical population data for Andalusia from the Instituto de Estadística y Cartografía de Andalucía. At: https://www.juntadeandalucia.es/institutod eestadisticaycartografia/ehpa/ehpaTablas.htm (30/06/2022).

structure with a central courtyard, which is aligned with the south-east front of Compañía Street. The rest of the facades and built elements are adapted trapezoidally to the morphology of the plot.

The market consists of an interior courtyard in which a central kiosk-bar is located. Commercial stalls are distributed around the perimeter, some facing the courtyard and others facing the interior corridor, enclosed by a new ring of stalls which in turn form the edge of the building (Figs. 9 and 11). Apart from this main structure, the rest of the building pieces are storage and service areas accessed from the aforementioned Eslava Street. Starting from the current situation described above, the original projects for both the market and the Jesuit monastery have been analysed in order to understand the transformation undergone by the urban space and the historical plot.

The Jesuit School San Fulgencio

As the mendicant orders, the Society of Jesus spread throughout the area of Christian influence. After its arrival in Spain in 1547, it was not until 1554 that Ignatius of Loyola divided it into three Jesuit provinces: Aragon, Toledo and Andalusia (Soto Artudeño 2004). Under the influence of the Andalusian nobility, they settled their first foundation in Cordoba in 1552. This was followed by Seville (1554) and Granada (1555). They would progressively establish themselves in the main Andalusian cities, arriving in Écija in 1573 (Martín de Roa 2005). Once the process of implantation was completed, the Jesuit order came to form a system of more than forty establishments in the Andalusian region, reaching not only the urban but also the rural population.

According to its rules, the activity of the Ignatian order was to focus fundamentally on study and teaching, converting its establishments into schools. This is where the importance of this order lies, dedicated to the education of the population in a context where public schools, as we know them today, were non-existent. It was this need for teachers and schools that motivated the installation of the Jesuit Society in Écija. The Jesuit priest Martín de Roa noted about the school in Écija that there were three grammar classes, an art course, another in philosophy and lessons in moral theology (Martín de Roa 2005). Although in 1590 they began teaching, it was not until the transfer of some houses owned by Alonso de Escalera (Martín Pradas & Carrasco Gómez 1999) in the centre of the city that the school of San Fulgencio was established.³

Monastery planimetry

Five different building proposals have been located. The fifth plan has been omitted for the analysis, because it is a redistribution of an interior room, which does not provide decisive information for the plot study. Three of the planimetric documents belong to the architects Pedro Sánchez (1569-1633) and Juan de Santibáñez (1582–1649). They are currently in the National Library in Paris, while the fourth, anonymous, is in the municipal archive of Écija. Pedro Sánchez was responsible for the dome transept and main chapel of San Pablo in Granada, the novitiate of San Ignacio in Baeza and the build direction of San Hermenegildo School in Seville. He also designed the Jesuit church in Toledo, the plans for the novitiate in Madrid and the Imperial School (Martín Pradas & Carrasco Gómez 1999). Juan de Santibáñez excelled in the work and design of the churches of Guadix and Jerez de la Frontera. Therefore, they were two architects of recognised prestige who designed the project for the new school in Écija.

The first plan of the school (Fig. 3) is 31×52.5 cm size, signed by Pedro Sánchez at the lower right, although it lacks a date. However, a letter sent from Rome to Melchor de San Juan priest establishes its reception in Rome on 27th June 1607 (Vallery-Radot 1960). The graphic scale is placed vertically on the left-hand side, measured in 190 Castilian yards.⁵ Although the orientation is not defined, due to the location of the streets, the north can be located to the right. The access and urban frontage is located along the Compañía Street, plus a smaller access to the north. The building complex is divided into three main areas: school, monastery and services. In the south is the church, the rooms in the western half occupy the school area and those to the east, which are separated by the main staircase, are used for cells and monks residence. The north of the complex is used for service purposes such as kitchens, storerooms and gardens (Fig. 7).

The second plan belongs to Juan de Santibáñez (Fig. 4), signed the 15th September 1627. With similar dimensions to the previous one, 33×56.5 cm, it has a graphic scale of 180 Castilian yards vertically on the left-hand side. Centred at the top, it is the north symbol. Compared to Sánchez's plan, there is a general modification and redistribution of the spaces in the upper part of the complex. Greater care can be seen in the graphics, in the projection of the vaulted spaces, and even in the design of the fountains or gardens. At the urban level, the main

³ The name of the school is in honour of San Fulgencio, bishop of Écija. De Santibáñez (1655).

⁴ The National Library of Paris acquired the plans in 1773, initially kept in Rome. They are part of a five-volume collection entitled *Piante di diverse fabbriche*. Vallery Radot (1960).

⁵ The decimal equivalence of the Burgos yard or Castilian yard is 0.835905m according to the Real Orden de 9 de diciembre de 1852.

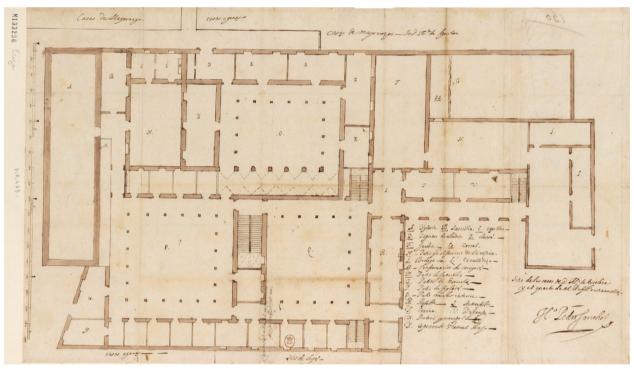


Fig. 3 Plan of San Fulgencio school in Écija (© National Library of Paris, Colección del Gabinete de Estampas. Hd-4c, 150. Architect Pedro Sánchez, made in 1607)

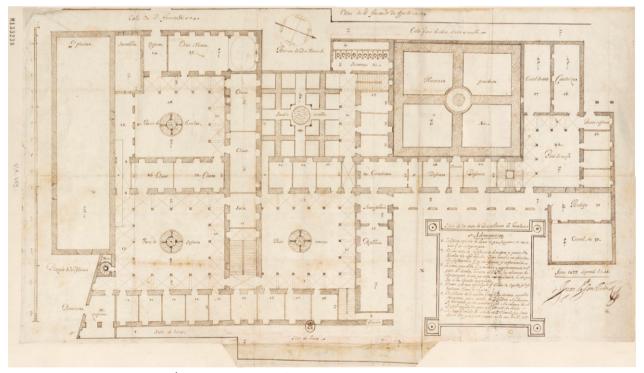


Fig. 4 Plan of San Fulgencio school in Écija (© National Library of Paris, Colección del Gabinete de Estampas. Hd-4c, 146. Architect Juan de Santibáñez, made in 1627)

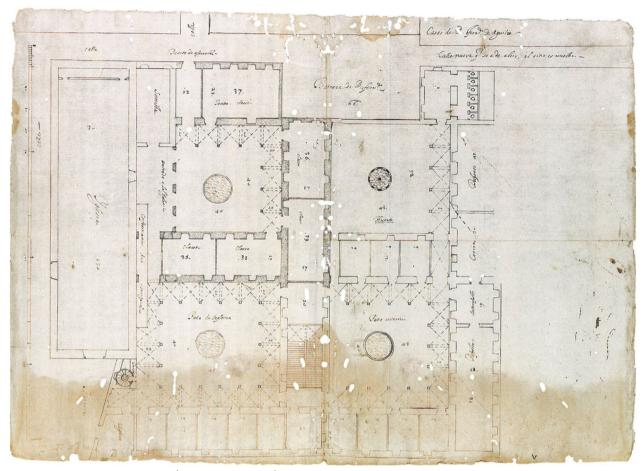


Fig. 5 Plan of San Fulgencio school in Écija (©City Archive of Écija, 150. Architect Juan de Santibáñez, made in 1627)

difference is the incorporation of the so-called *barrera* ⁶ of Don Fernando, in the upper part of the plan. Next to the *barrera*, there is the opening of a new road, as an extension of the street, which is expressively labelled "calle que se a de abrir, el sitio es nuestro" (street to be opened, the site is ours).

The third plan is in the Ecijan archive (Fig. 5). Although it is not signed or dated, the lines of the drawing and its geometry are similar to those used by Juan de Santibáñez. It follows the same orientation as the previous ones, as well as the graphic scale in Castilian yards in the same position and place. The dimensions of the document are 32×43.8 cm. Compared with the 1627 one, changes can be seen, mainly in the configuration of the aforementioned *barrera* and the service rooms (Fig. 7), an area which was probably unfinished. The graphic design of the document shows a lesser degree of completion than the

other plans. This is also reflected in the partial shading of walls and sections, which has only been done on the upper left courtyard, leaving the rest uncompleted.

The last plan also belongs to Juan de Santibáñez, although it lacks a date (Fig. 6). However, it can be assumed that it belongs to around 1627, the date of the first plan. This one represents a new proposal. The size is 31×51 cm and with same orientation. The graphic scale is in the same position, being 200 Castilian yards. The situation as the fourth proposal is due to the greater complexity of the interior of the monastery. One of the main modifications is the removal of the barrera in favour of a more elongated one that provides a doorway and facade to the school space. In this new barrera, Santibáñez locates the previous one and layout with a dotted line so as not to lose the reference of the former proposal. In general, the building maintains the earlier organisation of school, monastery and service spaces, although these are arranged differently from the previous plan.

The sequence of the four plans (Fig. 7) allows us to analyse graphically the different modifications proposed.

⁶ In Écija the term *barrera* refers to a small square. http://ecijahistoria.blogs pot.com/p/diccionario-ecijano.html (30/06/2022).

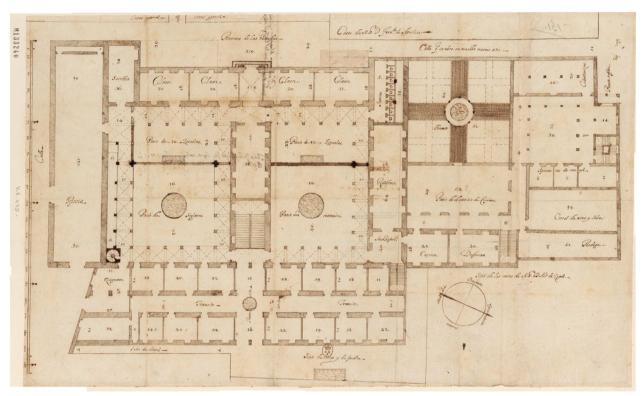


Fig. 6 Plan of San Fulgencio school in Écija. (© National Library of Paris, Colección del Gabinete de Estampas. Hd-4c, 151. Architect Juan de Santibáñez, made in 1627)

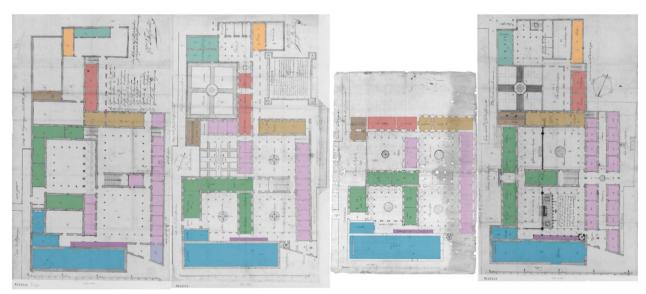


Fig. 7 Layout comparison of the floors uses of the San Fulgencio school in Écija. Church and chapel (blue), nuns confessional (purple), school classrooms (green), cells (pink), latrines (brown), refectory (yellow), kitchens and pantry (red), stables (turquoise) and cellar (orange). Own elaboration

There is a consensus regarding the position of the church and chapel, which is never altered. From there, the different functional areas, classrooms, cells and service rooms, occupy similar sectors within the complex, although with alterations in their specific layout. The main entrances to the monastery and school are from the south and east, respectively. The entrance through Eslava Street, in the north, is reserved for the stables and the service quarters. Linked to this position there is a large space for gardens, differentiated from those located in the more noble parts of the building. Finally, all the analysed plans represent the ground floor of the building. Up to three stairwells have been found in the building, as well as projection lines, which most probably indicate the existence of at least one first floor of which no planimetry has been found.

Regarding to the Pedro Sánchez's plan, the later one show the tower with spiral staircase at the foot of the church that Santibáñez would add. As well as one of the priorities for this author, the opening of the *barrera* on the side of the schools, as well as a possible new street. This proposal would generate, in addition to the building, new urban spaces.

The Jesuit expulsion from Spain was in 1767. A year later, the Augustinians requested permission from the king to move from their monastery to the old school, offering their own for the the crown and committing themselves to continue the opening of the school. However, the proposal was rejected and the property was ceded to the City Council in order to support the teaching purposes. The lack of municipal funds led to the ruin of the building in 1815, being used as a military barracks, remaining unused again two years later (García León 1999). In 1819, the educational use of the old monastery was resumed thanks to the foundation of academies of drawing, mathematics, physics, chemistry, agriculture and logic by the Sociedad Económica de Amigos del País de Écija. The project did not achieve the desired success. In 1824 the building was used as a deposit for municipal goods, while parts of it, such as the church, were leased to private individuals. Finally, in 1842, the town council proceeded to demolish the building and put the site up for auction (García León 1999), which was acquired for the construction of the future food market.

The food market of Écija

The food market is a new architectural typology from the nineteenth century, coinciding with the addition of new infrastructures and urban changes. Until this moment, the traditional market system had been maintained often followed with some improvements, as occurred in the fish market in Castellón, the food market in La Coruña, Jaén or Bilbao (Quirós Linares 2009).

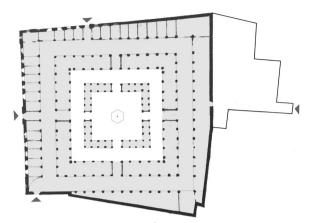


Fig. 8 Plan of the food market in Écija. (Plan included in the dossier for the construction of an access ramp. Anonymous architect, made in 1863)

The concentration of commercial activity in a building makes it a place of centrality and a new area for the development of social relations.

From sixteenth century, Écija had a granary and royal butcher's shops for the purchase and sale of foodstuffs. The rest of the commercial activity took place in an ephemeral market located in the town's main square, which lacked regulated sanitary and fiscal standards. With the concentration of all commercial activity in a single building, the use of granaries and open markets would fall into disuse, while at the same time improving fiscal and tax control (Seño Asencio 2013). For its construction, the Sociedad de Fomento was constituted in Écija, organised by José Angulo Lasso de la Vega, Marquis of Arenal, building the market in 1844 (García León 1999). Without any commercial activity in the main square, the town council promoted the construction of a promenade and its embellishment. This was in accordance with the model known as the "plaza-salon", a modernising feature typical of Spanish urban planning during the Elizabeth period (Suárez Garmendia 1986).

The former site of the Jesuit monastery, due to its urban centrality and size, was chosen for the design of the new market. Madoz (1847) described it as one of the buildings that most embellished the town due to its solidity and beautiful architecture. The market was object of numerous proposals. Only two of them have survived, one belonging to Manuel Galiano and the other to Agustín Gómez de Santa María, both dated 1843. Neither of them represent the built market, the plan was lost between 1844 and 1846 (García León 1999). However, in the 1863 dossier for the access ramp construction in Eslava Street, it is found a copy of the original lost project with unknown author (Fig. 8).

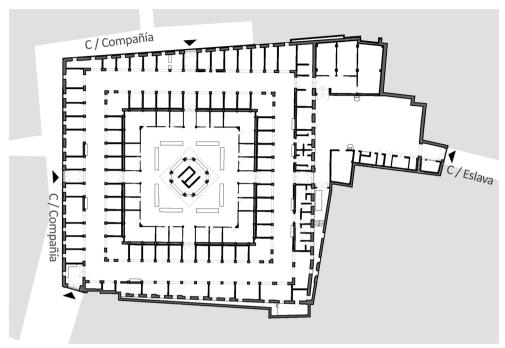


Fig. 9 Plan of the food market rehabilitation in Écija (Rehabilitation project plan carried out by Urbipac architecture office, made in 2003)

In the aforementioned 1863 plan, the building establishes a quadrangular order based on a square central courtyard, around which five concentric quadrangular bands are arranged. This last one absorbs the deformations of the plot at all its limits without forming a perfect square around the perimeter. The original dimensions of the project established an outer square of 57 yards, distributed in 56 stalls, an inner courtyard 33 yards long, filled with a central fountain. Although it is not detailed in the plan, the upper right-hand area was intended for use as a butcher's and fishmonger's shop, as well as a space for the Society meetings (Madoz 1847).

Despite the functionality of the market, the lack of maintenance led to a continuous deterioration, causing its closure and abandonment at the end of the twentieth century. In 2003, a market rehabilitation was carried out funded from 1%⁷ Cultural of the Ministry of Development (González Beviá et al. 2002). The intervention introduced few modifications in order to adapt the building to current needs, without losing the market character of the initial project. Figure 9 shows the current floor plan, which continues with a central aisle with stalls on both sides, adding a third perimeter inside the courtyard on which a kiosk-bar is located in the central part. The

Results and discussion

In order to understand the urban morphology and transformation of the plot, it was necessary to analyse the buildings separately. However, it would still be necessary to identify the monastery and the market in the historical urban cartography. As plans of the city exist prior to the demolition of the monastic building, these will be decisive, together with the plans of the buildings themselves. The three oldest of Ecija's urban maps have been chosen, to which a current land registry plan must be added. These are: Spínola's plan (1826), Écija parish plan (1826–1829), Courtars's plan (1863–67) and the land registry plan (2021). The choice is not arbitrary, but represents the four decisive moments in the process of the plot transformation.

Figure 10 shows the different plans in series, from the earliest to the most recent. The Spínola's plan shows the religious building in its entirety. According to the legend on the plan, the letter R occupies the monastery of the Society of Jesus. In addition, the building is marked with the same colour as the other 20 monasteries and

upper right-hand area is mainly used for loading and unloading services for the traders, as well as for storage and cold storage. The market is currently open and in use.

 $^{^{\}overline{7}}$ Currently the amount destined for heritage conservation is 1.5% according to the Orden de 30 de diciembre de 2019 of the Ministerio de Fomento from the Spanish Government.

 $^{^{8}\,}$ The date of this plan is referenced in Ostos-Prieto et al. (2022).

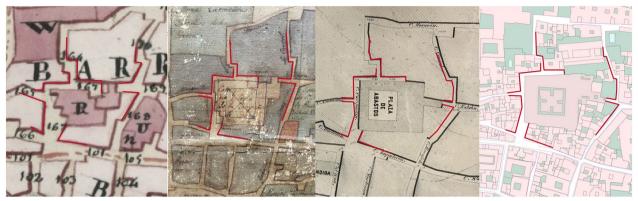


Fig. 10 Urban cartography evolution of the plot from monastery to market. From left to right: Spinola's plan (1826), Parish plan (1826–1829), Courtars's plan (1863–67) and land registry plan (2021). Own elaboration

convents in the city (Ostos-Prieto et al. 2022). It can be also seen how on the left side, on Compañía Street, a stepped facade profile is formed, while on the upper part of the same street a barrera is set back from the monastic facade. Finally, the access from Eslava Street can also be seen. The second plan shows the same elements mentioned in the previous one. However, the layout of the alignments seems to be more in keeping with the urban reality, allowing for less deformation. The most characteristic feature here is the superimposition of the market project on the monastery, reflecting the intention to occupy the plot with the new building. In the third plan, the market is completed, although with a very rectilinear and orthogonal perimeter. At the same time, the aforementioned access from Eslava Street stands out. Finally, the land registry plan shows the current layout of the plot, which reproduces the situation of the food market today, practically unchanged since its construction in 1844.

In order to analyse the possible changes in the plot alignments, the boundaries of the surrounding area have been marked in red. Morphologically, the size and shape of the blocks remain unchanged. However, a slight alteration in the relative layout of Compañía and Eslava streets can be detected. In the first two plans, it can be seen how these streets appear to have continuity between them, only hindered by the monastery itself. However, in the two later documents there is an evident shift between the axes of the aforementioned streets, thus correcting a mistake in the urban layout.

Using urban cartography and the planimetry of the buildings, we reconstructed the 1844 market plan, inserted into the urban fabric, and traced the insertion of the 1627 monastery plan. In the previous plans, they are not included in an urban environment that contextualises them. In order to achieve their insertion, we

have taken the current building as a starting point, that one from the 2003 rehabilitation (Fig. 11). As a rehabilitation of the previous building, access and distribution have been maintained.

In Fig. 12, the 1844 market has been superimposed on the project of 2003. As it is the original plan, the superimposed document differs in some lines due to possible graphic errors, but the lines of both dates are practically the same. Perimeter walls, structural support lines and plot boundaries have barely been modified. The accesses have been maintained, as well as their distribution through the interior gallery and the central courtyard dimensions. In addition to the appearance of the fountain, the main modification has been the elimination of the original gallery inside the courtyard and its replacement by the perimeter gallery carried out in the subsequent reform. With regard to the market north sector, the lack of definition of the original project prevents us from making a comparison. But the written sources indicate that this sector was used as a butcher's and fishmonger's shop, and that it provided access from Eslava Street.

Related to the establishment of San Fulgencio, the existing evidences are scarce. Firstly, from the four school proposals, no confirmation has been found about which of them was the one built. The study of the urban cartography representing the monastery plot allows us to advance a hypothesis. In the two urban plans in which the religious building has been located, they have a *barrera* in Compañía Street that coincides with the one represented in the first and second plan of Santibáñez (Figs. 4 and 5). However, the dimensions of the *barrera* in the urban plans in relation to those of the building, it is more in keeping with the first project, the one in Fig. 4. In fact, it is the only document signed by the architect Santibáñez and dated. The second project

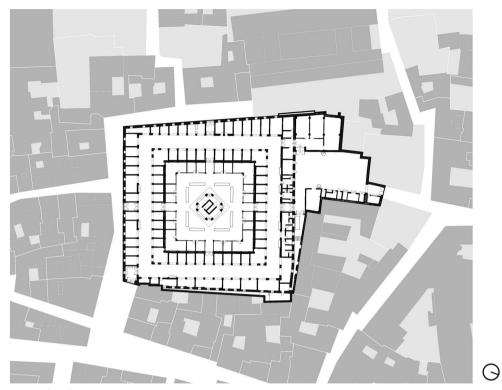


Fig. 11 Establishment of the food market in 2003. Own elaboration

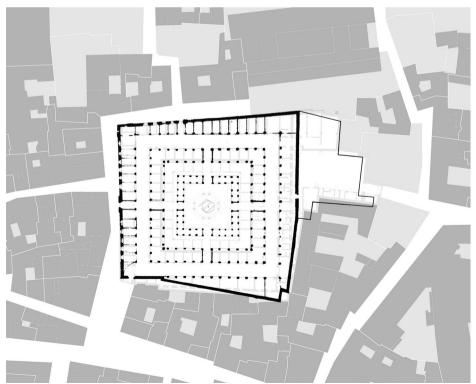


Fig. 12 Hypothesis of the establishment of the food market in 1844. Own elaboration

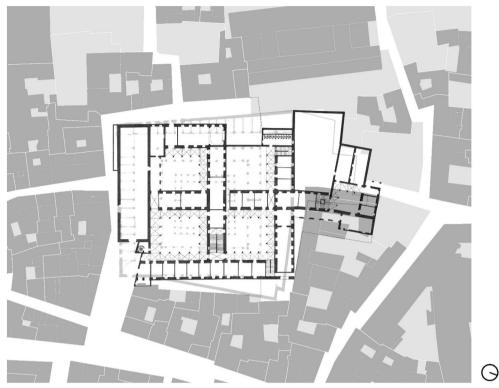


Fig. 13 Hypothesis of the establishment of San Fulgencio monastery in 1627. Own elaboration

is unfinished, which reduces the possibility that this was the one that was finally built.

In Fig. 13, the 1627 monastery plan and the 1844 market plan are superimposed on the plot. Logically, the monastery plan cannot be directly transferred to the cadastral cartography, as it does not correspond to the real proportions of the plot. The building perimeter in the original plan does not coincide with the existing one. The plan must have been adjusted to the actual size of the plot during its construction. Following this hypothesis, the monastery floor plan has been adapted to the plot, trying to maintain the proportions and dimensions as much as possible. If anything had to be reduced in size or adapted, the most sensible thing to do would have been the service area and other minor functions, giving priority to the noblest part of the building. To this hypothesis of readapting the morphology of the floor plan to the plot, possible modifications detected in the analyses have been incorporated. These are: the barrera, the staggering of Compañía Street facade and the access from Eslava Street.

A singular point in the urban plan is the facade staggering on Compañía Street, although this does not appear with total clarity in the plans of the building. An analysis of the facade in these documents has led us to think that there was a change in the final position of the church

tower. A shift towards the outer side of the tower body, or perhaps a widening of the tower, which made it necessary to extend it towards the street. In this case, the building would coincide with the one depicted at urban level. About the staggering at the left side of the church, no elements have been detected that would give rise to a hypothesis of this protruding body. It could be a chapel or chapels added later, but it is also plausible to think that the women's confessional took a different position to the one shown in the plan, moving it to the outer side of the church. Given its dimensions, it could perfectly well be located on the upper side, freeing up the interior gallery in which it is located, as it would reduce the space of the latter by half. Santibáñez wrote in point 2 of the plan that the passage between the women's confessionals and the school room is very narrow, offering as a remedy to narrow the confessionals. This reinforces the idea that the confessionals could eventually be displaced and adopt the aforementioned position.

Figure 13 allows us to interpret the 1627 monastic plan, including the displacement of the tower and the nun's confessional, as well as the rotation and reduction in size of the service areas and gardens. The graphic analysis also allows us to hypothesise that the monastic plot was larger than the one inherited by the market. According to this, a large part of the service areas may have been located

above the current dwellings, which, due to their constitution and plot dimensions, seem to have served this purpose. Probably, during the multiple changes of use of the building after 1867, this part may have been segregated and sold to a private. This fact can be seen not only through the superimposition of the floor plan itself but also in the urban plans.

The initial research question was answered positively. It has been possible to verify whether it was possible to know the original monastic plot from the market. It was also possible to verify that part of the structure and architecture of the monastery have been reused by the market. However, no evidence has been found to determine the subsequent existence of walls or large elements in the construction of the market. These research results help fill in some of the existing gaps, such as the lack of information or documentation on the transformation process of the building.

In the superimposition of the monastery plan with the market one, it can be seen that there is a close relationship between both buildings (Fig. 13). Practically, the perimeter of the monastery, as well as the first corridor and the lines of pillars, coincide with the later structure of the market. In fact, the Jesuit school is configured in a square structure that envelops the four main spaces, which is very similar to the one used later for the market, with the central crosspiece of the monastery removed. The similar main layout, together with the coincidence of a large number of pillar lines and load-bearing walls, points to a very probable reuse of the foundations of the religious building for the market construction.

It is also interesting to note how the monastery and the market coincide in the use of the plot, reserving the southern part for the main functions and leaving the spaces to the north for service. In both cases, the main entrance from Compañía Street with Mas y Prat Street is used, while the secondary entrance from Eslava Street is maintained. Despite the demolition of the religious building for the market construction, there is a direct transfer in structural elements, functional issues and even accesses. This means a direct transfer and relationship from one building to another, which allows the survival of the Jesuit school to a certain extent to be maintained through the commercial building.

Conclusions

The nineteenth century in Spain witnessed a period of city modernisation, which was enhanced by political and social changes, as well as the development of urban planning instruments. The proliferation of urban cartography during this time facilitated city reordering through the opening of new streets and the emergence of new urban facilities such as food markets. As part of this process,

several ecclesiastical properties were confiscated, freeing up substantial areas in the city centres. This phenomenon occurred not only in provincial capitals but also in cities with a significant number of monastic buildings, such as Écija, Carmona, Osuna and Marchena in the province of Seville. These cities serve outstanding examples of the urban transformation from a monastery into a market. Comparing these cities at the urban, architectural and plot levels reveals that the conversion process usually took place in the 1840s on large areas of approximately 3000 m². Écija stands out not only due to its sizeable plot but also because it is the population centre with the largest number of inhabitants, monasteries and convents.

A review of the contexto and establishment of the Ecijan monastery of San Fulgencio has led the discovery of the original plans. Four projects have been found, the first one signed by Pedro Sánchez and the others by Juan de Santibáñez. Comparing the floor plans has contributed to an understanding of the different proposals, which involved modifications and increased complexity of the spaces, particularly in the servisse rooms and cells. The existence of multiple proposals, as well as the commissioning of prestigious architects, establishes the importance of this monastery for both the city and for the religious order. The influence of the Jesuits i salso evident in the urban toponymy, as the street surrounding the monastery was named Compañía Street, a name which is still present today in the city's street map. The food market in Écija is a symbol of modernisation that uses the former site of the Jesuit school for its new location. Although the original ground plan from 1844 has not been preserved, it appears in a later renovation project from 1863. The building, with a quadrangular shape, adapts to the perimeter of the plot contours and remains practically unaltered until the end of the twentieth century. In 2003, the rehabilitation works were completed, without significant modifications to the original building.

The plot study through historical urban cartography allows us to verify and identify both the monastery and the market in relation to its urban context. Elements such as the barrera, the staggering of the facade, and the access from Eslava Street had been key to corroborate the monastic location. Establishing the hyphothesis of the 1844 market was relatively straightforward, as the current square is the sucessor to the one built in that same year, with only minor alterations detected. However, determining the monastic layout has proven to be more complex. The urban elements identified in the first plan by Santibáñez increase the probability of its construction. The situation of both the tower and the nuns's confessional has been modified in the new plan in order to establish a greater resemblance to the urban plans. Additionally, the new plan have been readapted to

the urban contexto, considering the differences between plot morphology and plan orthogonality. The monastic plot was larger than the market one, extending over part of an existing dwelling in the northern area. Finally, the overlapping between the market and the monastery has led to the conclusion that the Market building may have inherited the cloister structure. A large part of the structural lines of the load-bearing walls and pillars in the outer corridors coincide. It is hightly likely that the foundations of the Jesuit school were reused in the future market construction.

The use of old monastic structures either for their reuse or demolition for the construction of a market was a widespreade practice in cities during the nineteenth century. The case of Écija is a reference example of transforming a monastery into a market, using urban analysis as a valuable source of historical knowledge about the city. By starting with the current market layout, the timeline is traced back to show the establishment of the monastic building. The study of the current market and previous projects have their scope and direct relationship with the disappeared religious building. These processes of urban transformation not only offer a unidirectional observation towards the present, but also enable a retrospective exploration that unveils elements that have dissapeared over time in the city. The research carried out not only contributes to advancing the understanding of the monastic city of Écija, but also presentes a methodology that could be applied to other instances of urban transformations. Through the case study of San Fulgencio, viewed as an urban development transitioning from a monastery to a market, the study aims to reverse this process in order to reach the genesis of the urban transformation from market to monastery.

Acknowledgements

This article has been carried out within the framework of a grant for University Teacher Training (FPU) from the Ministry of Universities of the Spanish Government. We would like to acknowledge the Municipal Archive of Écija and the Urbipac Architecture Office for their provision and assistance with the plans.

Author contributions

The publication has been carried out jointly and equally between all three authors. The different knowledge and experience have contributed to the development of the article. The development of the text, figures and revision of the text has been a joint task of all authors.

Funding

The article has been funded by the Urban and regional planning Department and the HUM-700 Research Group of the University of Seville.

Availability of data and materials

Not applicable. All materials come from the aforementioned references and figure foot.

Declarations

Competing interests

The authors declare that they have no competing interests.

Received: 23 November 2022 Accepted: 21 July 2023 Published online: 25 September 2023

References

- Anguita Cantero R (1998) La planimetría urbana como instrumento para la transformación de la ciudad en el siglo XIX: La incidencia de los planos geométricos en España. In Boletín Del Instituto De Estudios Gienenses 169: 563–589
- Arenillas Torrejón JA (1999) El mercado de abastos de Marchena (1840–1930). In Actas de las IV Jornadas sobre Historia de Marchena: Marchena en los tiempos modernos (siglos XIX–XX): 101–122
- De Santibáñez J (1655) Historia de la Compañía de Jesús en la Provincia de Andalucía. Facultad de Teología de Granada
- Collantes de Terán Sánchez, A. (1991) Los mercados de abasto en Sevilla: Permanencias y transformaciones (siglos XV y XVI). In Historia Instituciones Documentos 18: 57–70
- Fernández González A (2009) Arquitectura y urbanismo en la Sevilla ochocentista: la plaza-mercado de la Encarnación. In Anuario Del Departamento De Historia y Teoría Del Arte 21: 205–222
- García León G (1999) La plaza de abastos de Écija. Antecedentes y proyectos. In: Actas del V congreso de historia de Écija. Gráficas Sol: 111–137
- González Beviá FJ, Martín Sanjuán F, Romo Salas A, & Dils de la Vega S (2002) La política municipal de protección del patrimonio histórico. In: PH: Boletín del Instituto Andaluz del Patrimonio Histórico 38: 210–224. https://doi.org/10.33349/2002.38.1337
- Lazo Díaz A (1970) La desamortización de las tierras de la Iglesia en la provincia de Sevilla (1835–1845). Diputación Provincial de Sevilla e Instituto de Estudios Sevillanos
- Loza Azuaga ML (2012) El contexto arqueológico de la plaza de abastos de Carmona (Sevilla). In Romula 9:225–246
- Madoz P (1847) Écija. In Diccionario Geográfico-Estadístico-Histórico de España y sus posesiones de ultramar. Tomo VII: 433–434
- Martín de Roa SJ (2005) Historia de la Provincia de Andalucía de la Compañía de Jesús (1553–1662). Editing and transcriptions by Martín Pradas, A. & Carrasco Gómez, I. Asociación de Amigos de Écija
- Martín López J (2002) Historia de la Cartografía y de la Topografía. Centro Nacional de Información Geográfica
- Martín Pradas A & Carrasco Gómez I (1999) Planos para el colegio de San Fulgencio de la compañía de Jesús de Écija (1607–1627). In: Boletín de la Real Academia de Ciencias, Bellas Artes y Buenas Letras "Vélez de Guevara", 3, Gráficas Sol: 205–222
- Nadal F (2017) Reformismo liberal y cartografía urbana municipal en la España del siglo XIX. In: Urteaga L & Nadal F (eds) Historia de la cartografía urbana en España: Modelos y realizaciones. Centro Nacional de Información Geográfica: 357–386
- Orduña Rebollo E (2012) Orígenes de las diputaciones provinciales: territorio y administración. In: En Salvador Crespo M, Nieto García A & Orduña Rebollo E (eds) El bicentenario de las diputaciones provinciales. Cádiz 1812. Fundación Democracia y Gobierno Local: 41–42
- Ostos Prieto FJ, Aladro Prieto JM & Perez Cano MT (2021) La ciudad conventual en el territorio de Andalucía. Procesos de implantación territorial monástica de las órdenes de dominicos y franciscanos. In: Marfil Carmona R (ed) Historia, arte y patrimonio cultural. Estudios, propuestas, experiencias educativas y debates desde la perspectiva interdisciplinar de las humanidades en la era digital. Dykinson S.L: 1148–1171
- Ostos Prieto FJ, Aladro Prieto JM & Pérez Cano MT (2022) Manuel Spínola's plan for the urban configuration of Écija in 1826. ACE Archit City ENviron 16 (48): 1–24. https://doi.org/10.5821/ace.16.48.10378

- Quirós Linares F (2009) Las ciudades españolas a mediados del siglo XIX. Ediciones Trea
- Ramírez Olid JM (1999) Osuna durante la Restauración. 1875–1931. Ayuntamiento de Osuna
- Seño Asencio F (2013) Acerca del valor patrimonial de los mercados municipales y plazas de abastos de nuestro entorno, Cuadernos de los amigos de los museos de Osuna, 15
- Soto Artudeño W (2004) Coordenadas Histórico-Geográficas de la Provincia Bética de la Compañía de Jesús. In El Arte de la Compañía de Jesús en Andalucía (1554–2004). Caja Sur
- Suárez Garmendia JM (1986) Arquitectura y urbanismo en la Sevilla del siglo XIX. Diputación Provincial de Sevilla
- Vallery-Radot J (1960) Le recueil de plans d'édifices de la Compagnie de Jésus conservé a la Bibliothéque Nationale de Paris. Institutum Historicum

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Submit your manuscript to a SpringerOpen journal and benefit from:

- ► Convenient online submission
- ► Rigorous peer review
- ▶ Open access: articles freely available online
- ► High visibility within the field
- ► Retaining the copyright to your article

Submit your next manuscript at ► springeropen.com