

Walls, Streets and Sewers: Signs of the Urban Vigour in the Hispano-Roman Cities during the 2nd Century AD

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Abstract

In this work we will review briefly the main features of the walls, streets and sewers of the Hispano-Roman cities during the second century A.D., this analysis takes part in a comprehensive approximation about the evolution and transformation process of these urban centres in the mentioned chronological period.

Introduction

We have no concrete knowledge about the evolution of the Roman cities of Hispania during the age of the Antonines. In this regard, the urban changes of each site have been studied separately, however the historical phase has not been analysed in a systematic and synchronic manner. To alleviate this situation, we checked about 30 Roman cities of the Iberian Peninsula, precisely those that provided greater amounts of archaeological and epigraphical information.¹ Furthermore, we have used the comparative method in order to draw analogies from the selected cities; this is a useful way to identify the urban patterns prevailing in the chronological and spatial framework of our research.

We have identified that in the first third of the 2nd century AD several Hispano-Roman cities concluded their urban image to the implementation of reforms and new constructions. Given this, it can be said that on the period of Trajan and Hadrian there was a level of continuity in the construction boom developed in the 1st century AD. However, since the reign of Antoninus Pius this situation changed, in most cities this building growth disappeared. Moreover, some settlements –not all of them– experienced a severe decline in the second half of the century. Precisely, the streets and sewers of most of the analysed cities were involved in this general thrust. Not in vain, the study of the urban equipment is a strong indicator for assessing the vitality degree of the cities during the second century AD.

Walls

The walls constituted one of the defining elements of the Roman urban landscape. Nevertheless, the walls played a subsidiary role in the urban topography of the 2nd century AD. As a rule, these *moenia* were inherited from previous historical phases.

In the 2nd century AD., at least in the analysed cities, no reform or building of walls has been detected.² Probably that was due to the loss of their defensive role at a time of long-

standing peace and political stability. Moreover, we must take into account that walls were strong architectural structures and therefore they did not require much maintenance after their construction.

In some cities the walls and their ancillary parts were abandoned into the Antonine age due to their lack of defensive function. *Baelo Claudia* is a fine example of this dynamic. Concretely, the tower T of the walls was abandoned in a progressive manner. Firstly, blocks of stone belonging to the corner were spoiled. This progressive robbery of materials meant that the tower disappeared completely before the second half of the 2nd century.³ Also, in *Baetulo* the so called *Domus* of *Quintus Licinius* was built at the end of the 1st century AD or the beginning of the next century over part of the line of the wall.⁴ Finally, in *Lucentum* one of the towers of the walls, the tower VII, was dismantled at the end of the 2nd century or the beginning of the 3rd in order to use their building materials.⁵

The need of new lands, on which the city could grow, is another reason for the destruction of defensive elements. In *Augusta Emerita* there was a moat, it was dug into the own geological stratum in order to protect the east flank of the wall. This moat was filled with rubbish and debris in the late 1st century AD. Then at the beginning of the 2nd century, houses were built in this space.⁶ For its part, in *Barcino* different constructions occupied and privatised the *intervallum* of the Augustan wall. Concretely, in the northeast of the colony the *intervallum* was taken over by a *tinctoria*, a *fullonica* and a *cetaria* in the 2nd century.⁷

Urban Road

In the index of cities that we have been studying there are very different situations, from the creation of new streets to the cessation of maintenance of others. This state reflects the value of the street network as an indicator of urban vitality.

On the one hand, in several cities an important building activity in the field of urban infrastructure has been recorded between the end of the 1st century AD and the first third of the 2nd century. This is a process of renovation and improvement of public infrastructure that affected not only the street, but also the sewage system was removed and new arteries were opened. *Lucus Augusti*,⁸ *Asturica Augusta*⁹ and *Valentia*¹⁰ are the cities that better reflect this transformation process. In the three cases the actions were conducted in the entire urban fabric, as is documented by archaeological digs carried out in several point of these localities. The remodelling as executed in Flavian times, but it was not completed until the reign of Trajan or Hadrian.¹¹ In any event, it is clear that this is an only constructive phase.

On the other hand, in the studied cities the repair of streets was the more widespread phenomenon, something that is completely logical, since the continuous traffic of coaches, steeds and pedestrians necessitated this maintenance work. Normally, a sort of compact tarmac composed of soil, stone, lime and pottery's fragment was used, either river stone and clay or simply land layers of tamp earth. That is attested in *Barcino*,¹² *Lucentum*,¹³ *Pollentia*,¹⁴ *Carthago Nova*¹⁵ and *Asturica Augusta*.¹⁶

Finally, another feature of the street network during the 2nd century, but in particular of the subsequent centuries, was the occupation of streets and porticoes on the part of private constructions, as well as the cessation of their maintenance. The carelessness of streets is part of the phenomena typical of the late antiquity such as the abandonment and pillaging of public building.¹⁷ These alterations have been dated from the 3rd century AD, but the start began in the Antonine age. Equally, it is common to link these events with cities in decline, that is, *urbes* affected in varying degrees by the urban crisis. Nevertheless, these transformations also happened in full swing cities. This applies, for example, in *Augusta Emerita*. In this provincial capital the porticoes of the urban street began to be occupied by private buildings in the 2nd century AD. This is a gradual process, which started in this century but it reached its peak two centuries later. So the porticoes were turned into *tabernae* or they were absorbed by the houses themselves.¹⁸ In the case of *Barcino*, as we have indicated before that various points of the *intervallum* were occupied by private structures, this fact meant the disruption of traffic on the street. It should be added that the *Domus* of the Plaza de Sant Miquel was extended with a *balneum* that was built partly on a *cardo minor*.¹⁹ Also a *decumanus* of *Asturica Augusta*, located in the current street Alonso Garrote, was occupied in part by a private building in the middle of the 2nd century.²⁰

The cease of the maintenance and cleaning in the streets is not an exclusive feature of the late antique cities. In *Baelo Claudia* the cleaning of a stretch of the *decumanus* close to the Gate of *Carteia* was interrupted before the third century.²¹ Besides, at the end of the second century the alleyway located between the basilica and the *macellum* ceased to be cleansed.²² For its part, in *Clunia* since the middle of the second century debris were deposited in a central area of this city, just next to the forum's baths.²³ Likewise, the eastern pavement of the *cardo maximus* of *Baetulo* was transformed into an unrehearsed landfill at the end of the second century.²⁴

These examples demonstrate that in the Antonine age the deterioration of road space does not only affect to cities with problems, far from it, large *urbes* like *Barcino* or *Augusta Emerita* also record chapters of lack of maintenance and dismantling of the original urban space. Even so, logically these transformations also affected to cities less vigorous or with evidence of urban crisis. A good example is found in *Emporiae*, where since the end of the second century parasitic constructions took over the streets' porticoes, already collapsed at that time.²⁵ In this case, it is not surprising that in this *municipium* the maintenance of streets was interrupted in the middle of the 2nd century.²⁶

Sewage System

On the one hand, we must refer to the cities, which created their sewage systems from the founding time of the city or at a subsequent time. These *urbes* had a waste-water disposal system in full force in the 2nd century, so this inherited equipment was in use during the whole high imperial period, until at least the 3rd century. That is the situation of most of

Hispano-Roman cities during the second century.²⁷ These sewage systems had regular maintenance. In fact these pipes did not have archaeological deposits corresponding to the 1st and 2nd centuries.

On the other hand, other cities completed their definitive urban equipment during the period from the Flavian age to the beginning of the second century. The sewers of *Asturica Augusta*, constructed in Julio-Claudian era, were replaced in this timeframe.²⁸ Just as in the case of *Baetulo*, its sewage system was largely carried out during the reign of Trajan and Hadrian.²⁹ And by the same token, in *Conimbriga* the urban renewal conducted in Flavian times entailed the adjustment of the pre-existing and also the construction of new ones.³⁰ This process was slow since it was not finished until the middle of the 2nd century.³¹ Furthermore, the remodelling of the sewage system and the road network of *Valentia* took place at that very moment.³²

In the 2nd century, but especially in its second half, it has been recorder another interesting phenomenon: the collapse of the sewage system. The earliest examples in the Hispano-Roman cities belong to the 2nd century. That did not affect the whole of cities, but only to a minority of them, which had signs of urban regression. Silting of sewage system starts when the network ceases of to be cleaned. Therefore, that is a long and gradual process, which does not alter the entire network equally. For instance, the local government of *Lucentum* ceased to maintain the section of the sewer, which dumped the wastewater outside the wall already in the Flavian epoch. The abandonment of the sewage system was not uniform, since the sewer pipe that drained the forum operated until the first half of the second century.³³ Similarly, the interruption of *Bilbilis*' central sewer is dated in the second century, likewise the waste pipe of the baths became clogged at the end of this same century.³⁴ Also the wastewater pipe of *Emporiae* became completely filled at the end of the second century, for its part, the piping of *Carthago Nova* ceased to be clean in the second half of this century.³⁵

Finally, it should be noted that the lack of maintenance and the occupation of porticoes and streets are not hallmarks of urban crisis, from our point of view. In fact, this phenomenon took place in cities with relative vitality. To the contrary, the abandonment of sewage networks is an attribute of cities in decline, which highlights the inability of the local government to keep up the urban infrastructure.

Final Remarks

To conclude, important changes have taken place in the field of the urban infrastructure during the 2nd century. With regard to the urban road, the most widespread phenomena were road repairing and sewage cleaning. Both actions must be included under the trend of maintenance and reparation, which affects all elements of urban topography in this century. We suppose that this maintenance measures were quite frequent, however, they are likewise, hard to detect in the archaeological record. The minor role of the walls is another fundamental urban feature of the Hispano-Roman cities in this period, as is evident by the

fact that hardly any walls of the analysed cities had experienced a reform. In some instances, their own walls or their annexes were abandoned on a date so early owing to their lack of defensive role.

The occupation of streets and porticoes by private individuals is another phenomenon that caught our attention. Building abuse was a punishable offence according to the law, its emergence could be linked with the lack of building land and also especially with the over-tolerance of the local authorities. However, the privatisation of public space must not be directly conceived as an indication of the urban crisis because this fact also affected major cities whose vitality in the Antonine age is very clear.

Notes

¹ The analysed cities are as follows: A) Baetica: *Astigi, Baelo Claudia, Carteia, Corduba, Italica, Munigua, Regina Turdulorum*. B) Hispania Citerior: *Asturica Augusta, Baetulo, Barcino, Bilbilis, Bracara Augusta, Caesar Augusta, Carthago Nova, Clunia, Complutum, Emporiae, Labitolosa, Lucentum, Lucus Augusti, Pollentia, Saguntum, Segobriga, Tarraco, Valentia, Valeria*. C) Lusitania: *Augusta Emerita, Capara, Conimbriga, Mirobriga Celticorum*.

² *Munigua* is a unique case, the walls of this *municipium* were built between the end of the second century or the beginning of the 3rd. As is well known, the walled enclosure remained unfinished, it was interrupted in the north and southwest end. *Spolia* including funerary monuments were used to make it. It has been proposed that this wall could have a defensive role connected with the invasion of the *Mauri*. Vid. Grünhagen 1982, 315–321; Schattner 2003, 52–59.

³ Bernal et al. 2007, 447.

⁴ Cuyás 1977, 139–142; Padrós – Sánchez 2014, 103.

⁵ Olcina 1990, 25–60.

⁶ Pérez Maestro 2005, 238.

⁷ Beltrán de Heredia 2000, 254; Beltrán de Heredia 2001, 98.

⁸ González Fernández – Carreño 1999, 1176–1189; González Fernández 2011, 300.

⁹ Burón 2006, 289–312; Orejas – Morillo 2013, 96 f.

¹⁰ Ribera – Romani 2011, 333. 337.

¹¹ Ribera – Romani 2011, 333. 337; González Fernández 2012, 273.

¹² Beltrán de Heredia – Carreras 2011, 238.

¹³ Olcina – Pérez Jiménez 1998, 64 f.; Olcina 2009, 78 f.

¹⁴ Orfila et al. 2005, 99 f.

¹⁵ Noguera et al. 2009, 274.

¹⁶ Burón 2006, 295.

¹⁷ Diarte-Blasco 2012, 23–25.

¹⁸ Alba 2001, 407 f.; Alba 2002, 135 f.; Alba 2004, 75.

¹⁹ Miró 2011, 71 f.

²⁰ Burón 2006, 295.

- ²¹ Alarcón 2006, 67.
- ²² Diderjean et al. 1986, 98.
- ²³ De la Iglesia – Tuset 2013, 109.
- ²⁴ Padrós – Sánchez 2011, 229; Padrós 2014; 108 f.
- ²⁵ Castanyer et al. 1993, 190–192.
- ²⁶ Mar – Ruiz de Arbulo 1993, 417 f.
- ²⁷ Remolá y Acero, 2011.
- ²⁸ González Fernández 2012, 273.
- ²⁹ Padrós – Sánchez 2011, 224–226; Padrós – Sánchez 2014, 99–101.
- ³⁰ Reis et al. 2011, 189–192.
- ³¹ Reis et al. 2011, 181.
- ³² Ribera – Romani 2011, 333. 337.
- ³³ García Barrachina et al. 2009, 84 f.
- ³⁴ Martín-Bueno – Sáenz 2013, 367 f.
- ³⁵ Castanyer et al. 1993, 190–192; Egea 2002, 27.

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