

# Late Prehistoric Fortifications in Europe: Defensive, Symbolic and Territorial Aspects from the Chalcolithic to the Iron Age

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Proceedings of the International Colloquium 'FortMetalAges',  
Guimarães, Portugal



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edited by

Davide Delfino, Fernando Coimbra, Daniela Cardoso and Gonçalo Cruz



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# Another post in the fence. Proto-urban delimitations in Final Bronze Age and Early Iron Age Northern Italy

Paolo Rondini and Lorenzo Zamboni

## Abstract

This paper addresses the early-urbanisation phenomenon in north-eastern Italy, between the Final Bronze Age and the Early Iron Age periods (11th-7th centuries BCE), focusing on delimitation and perimeter structures as a key element of social and settlement changing. The Po Plain played a crucial role in the complex picture of urban civilisation phenomena, due to its position between the Mediterranean and central Europe, it has, however, been underrepresented in recent archaeological discourse. The main case-study of this paper is the site of Verucchio, where ongoing excavations are providing new evidences for the urban-like settlement, dating back to the 9th and 8th centuries BCE, including a wooden palisade and perimeter earthworks. This evidence will be compared to other data from relevant settlements of the southern-alpine region.

**Keywords:** urbanization, wooden palisade, Final Bronze Age, Early Iron Age settlements, Po Plain

## Introduction

A review of the early urbanisation phenomenon in north-eastern Italy is presented in this paper, focused on the crucial period between the Final Bronze Age (11th-10th centuries BCE, hereafter FBA) and the Early Iron Age (9th-7th centuries BCE, hereafter EIA). The investigated region is the fertile alluvial plain situated between two major mountain ranges, the Alps and the Apennines, with the main river, the Po, and several tributaries and secondary streams (Figure 1). We adopt, as sample items, wooden and earthen structures, discovered through recent excavations in several key sites, and interpreted as delimitation, defensive, and boundary works.

Furthermore, the main objective of the research is to highlight, beyond the scope of the current literature, the role of this region at the transition between the 2nd and 1st millennium BCE, when the population patterns drastically changed, creating the first centralised and powerful sites of this European region.

According to an ongoing debate,<sup>1</sup> signs of a centralisation process appear almost simultaneously on both sides of the Alps during the first part of the Iron Age. A crucial issue is whether it was a 'diffusion' from the south that drove early urbanisation in temperate Europe, or was there an independent local 'tradition' which led to urban models differing from the Greek and Roman types.<sup>2</sup> In this broader framework, northern Italy holds

a strategic position between the Mediterranean world and central Europe, providing a long-term history of proto-urban civilisation, from the pile-dwellings of the Bronze Age to the first large settlements, seemingly coeval to those in central and southern Italy and in Greece. Despite an impressive increase in discoveries and excavations over the last twenty years, the region south of the Alps still remains largely overlooked by archaeological research, due to few published data, barely known to international audiences.

Moreover, scholars have paid more attention to the complex phenomenon of urbanisation and 'Early State' formation in central and southern Italy,<sup>3</sup> where a more established tradition of studies – and the highest amount of excavation and survey data – have shown different development patterns of urban models for the main historical sites (i.e. Veii, Caere, Tarquinia, Vulci and Rome), including progressive growth, displacement, *synoecism* between previous villages, and the foundation of new towns.<sup>4</sup> The more consistent conclusions of these studies, albeit different positions, have perhaps identified the consistency of an internal process already underway at the end of the Bronze Age, partially rejecting the traditional diffusionist perspective of a deciding influence from the presumably more developed Mediterranean civilisations. From our perspective, rather than diminish the clear relevance

<sup>1</sup> Buchsenschutz and Ralston 2012; Fernández-Götz and Krausse 2013; Fernández-Götz and Krausse 2016; Fernández-Götz 2017; Krausse *et al.* 2016.

<sup>2</sup> Collis 2016; Pétrequin 2013.

<sup>3</sup> Alessandri 2013; Attema *et al.* 2016; Fulminante 2014; Guidi 2006; 2008; 2010; Pacciarelli 2001; 2016; Riva 2010; Steingräber 2008; Stoddart 2016; Terrenato and Haggis 2011; Vanzetti 2002 (all with previous literature). For Etruria and *Latium Vetus* more categories of evidence, besides settlement excavations, are available and enhanced, including burial and social aspects, religion, art, written sources, and, however controversial, ethnicity.

<sup>4</sup> Guidi 2010: 17-18.



Figure 1: North-eastern Italy in the FBA (11th-10th centuries BCE), with the main sites mentioned in the text (P. Rondini).

of Etruria and central Italy in this multifaceted process, the next step is to offer a detailed analysis to the north-eastern part of the Italian peninsula.

In this paper, specific ideas on early urbanisation will be focused on the archaeological evidence of boundary, defensive and perimeter structures, which could be major factors in identifying the ongoing centralisation process in this region. Despite this perspective having already been stressed in Etruria and central Italy,<sup>5</sup> it appears thus far much less well emphasised in the southern Alpine regions.

Addressing cultural issues, the specific environment of north-eastern Italy should also be considered, since the vast alluvial plain, rich in water and timber, could be a highly unstable landscape,<sup>6</sup> and subjected to various climate changes over time. However, this environment could easily determine long-lasting architectonical and craft traditions, well adapted to the local resources. On the other hand, the continuity and stratification during the historical periods of many towns and cities have not contributed to the good preservation of wooden and earthen monuments, often almost invisible in the present landscape and only partially excavated and documented.

One last assumption concerns the estimated dimension of settlements (in hectares), frequently mentioned in the following paragraphs. It should be clear that these are merely the maximum assumed extensions of the whole settlement area through a certain period, often determined by the natural borders of the area (hillsides, ground elevations, or rivers), as well as by the eventual presence of various categories of landmarks, such as cemeteries, sanctuaries or extra-urban roads, and also based on some trenches and surveys, rather than extended and comprehensive excavations and geotechnical analyses.

### **The centralisation process in north-east Italy during the Final Bronze Age**

The richness of the environment has allowed, during the Middle-Recent Bronze Age (1600-1150 BCE), the birth and bloom of the so-called *Terramare* culture,<sup>7</sup> but also included the advanced stages of the long-lasting lake pile-dwellings of the southern Alps. This cultural phenomenon, characterised by arranged and often fortified villages, sometimes built on piles, is rightfully considered as a first attempt at a 'proto-urban' civilisation.<sup>8</sup> After having established long-range European trades and reaching a high level of

<sup>5</sup> Cifani, Guidi 2016; Fontaine, Helas 2016; Guidi 2008; 2010: 15; Ziolkowski 2005.

<sup>6</sup> Bellintani and Saracino 2015; Ortalli 2010.

<sup>7</sup> For an overview, see Bernabò Brea *et al.* 1997.

<sup>8</sup> Pétrequin 2013.

know-how in both water management and structural woodworking, this civilisation quickly regressed in the late Bronze Age (1200-1150 BCE), and then abruptly collapsed around the second half of the 12th century BCE.<sup>9</sup>

While the lands south of the Po appear completely abandoned during the following centuries of the Final Bronze Age (11th-10th BCE),<sup>10</sup> with only minor sites placed on the highest hills of the Apennines (including among others Bismantova, Monte Valestra, Ripa Calbana, Monte Titano),<sup>11</sup> the northern and north-eastern sectors display a different picture for the Final Bronze Age period (Figure 1).

In fact, after the collapse of the *Terramare* culture, in the wider picture of a strong decrease in human presence<sup>12</sup> for the first two stages of FBA, recent discoveries are bringing to light early evidence of a centralisation process, with the foundation and sometimes persistence of medium-sized settlements (from 4 to 14 ha). These sites are situated at crucial crossroads points in the Plain, such as the cases of Ponte S. Marco, Casalmoro, Montagnana, Frattesina (with its satellite villages), and Treviso (Figure 3, nos 4-5), and are often set on wide sites, slightly elevated, close to one or more rivers, but still protected from floods.

These sites are interpreted as ‘central places’,<sup>13</sup> maintaining control of medium to high density settlement districts, and displaying an advanced economic network, with wide connections from the Baltic to the Aegean seas. Long-range trade is well proven by many bronze hoards discovered near the main sites.<sup>14</sup> The major villages, rich and powerful, were in control of great portions of land and, while their geographical approach marks a clear discontinuity from previous *Terramare* land management, their need for protection exhibits technological solutions inherited from prior experiences. In fact, even when naturally detached from the surroundings by their choice of location, some of them, during the FBA, enclosed themselves with peripheral structures, including palisades, moats, ditches, displaying an overall impressive timber-working capability, probably linked to the previous *Terramare* crafting tradition.<sup>15</sup>

In the western sector lies the remarkable village of Ponte S. Marco (south of Brescia), established between

the Recent and Final Bronze Ages in a regular plan of rectangular houses set in a geometric grid of streets and channels (Figure 3, nos 2-3).<sup>16</sup> During the FBA the site planimetry was restructured, and the whole settlement (maximum area 11 ha) enclosed by a complex perimeter setup, that has been excavated in its eastern part. This structure was a double-ring perimeter of palisade, built with large posts put inside two trenches, and strengthened by large rocks (Figure 3, no. 1). This site controlled a great number and variety of raw materials, and its commercial and cultural links are clearly directed northwards, toward the Alpine region, controlled by the Luco culture.<sup>17</sup>

In the present Veneto region, the site of Montagnana, with its 14 ha of probable settlement area, was the central place of an important district (Figure 2, no. 1). This village had a wooden palisade during the middle 10th century BCE, enclosing the south-eastern sector.<sup>18</sup>

The most important site of this period is Frattesina,<sup>19</sup> a settlement of approximately 10-12 ha, but surrounded by a noteworthy near-site area with dense archaeological evidence, which form the major central locale of the north-western Plain during the period addressed (Figure 2, no. 2). The site, only partially excavated, is characterised by a regular grid of channels, east-west oriented, with a main central ditch that was probably connected, through complex earthen and timber works, with the main ancient river, the so-called ‘Po di Adria’ (a northern branch now disappeared). Founded during the 13th century BCE, Frattesina thrived until the late 10th BCE. Its core role within the northern Adriatic region is indicated by the outstanding variety and span of raw and semi-worked exotic goods present (such as amber, ivory and glass).<sup>20</sup>

### **Early urbanism of the Early Iron Age**

During the following phase, between the last stage of the FBA and the very beginning of the Iron Age (end of the 10th and 9th century BCE), the previous central places were abandoned, along with their districts, and a different territorial organisation was established in northern Italy during the 9th and 8th century BCE (Figure 4).<sup>21</sup> This new model displays the rapid expansion of newly established large and powerful sites, ranging from those of medium size, around 25-80 ha, to large ones, between 100 and even 120 ha. The new locations were carefully selected, situated on flat river

<sup>9</sup> Bernabò Brea *et al.* 1997: 745-756; Cardarelli 2009; 2015: 165-179; Frontini 2011.

<sup>10</sup> de Marinis 1999; Harari and Pearce 2000.

<sup>11</sup> Bottazzi, Bigi 2008; Bietti Sestieri 1997; Pacciarelli, von Eles 1994; Zanini 1999; Zanini, la Pilusa 2009.

<sup>12</sup> A remarkable general trend is around 95%, according to Cupitò *et al.* 2015: 303.

<sup>13</sup> Guidi 2008: 180; Bianchin Citton 2015.

<sup>14</sup> Bellintani 1994.

<sup>15</sup> Mele *et al.* 2013; Cremaschi and Pizzi 2011.

<sup>16</sup> Poggiani Keller 1994; Poggiani Keller and Ruggiero 2008; Redolfi Riva 2017; Ruggiero 2004.

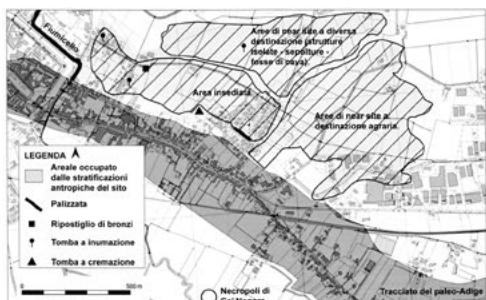
<sup>17</sup> Poggiani Keller 1994, 102-105; for a general overview on the Luco culture, see: Marzatico 2012; Rageth 2010.

<sup>18</sup> Bianchin Citton *et al.* 2015.

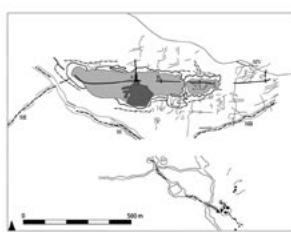
<sup>19</sup> Bietti Sestieri *et al.* 2015; Bietti Sestieri *et al.* 2019.

<sup>20</sup> For the ongoing study of its cemeteries and their grave goods, see Cardarelli *et al.* 2015.

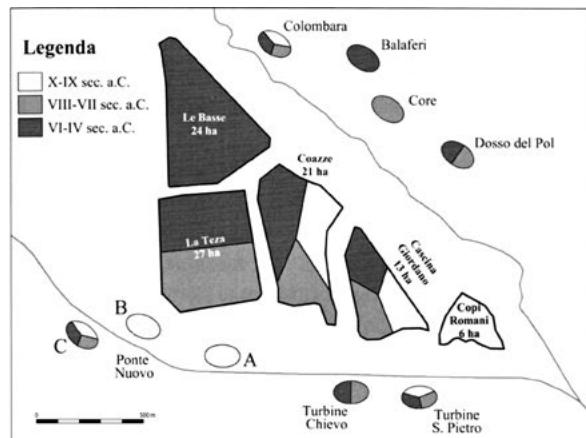
<sup>21</sup> de Marinis 1999.



1



2



3



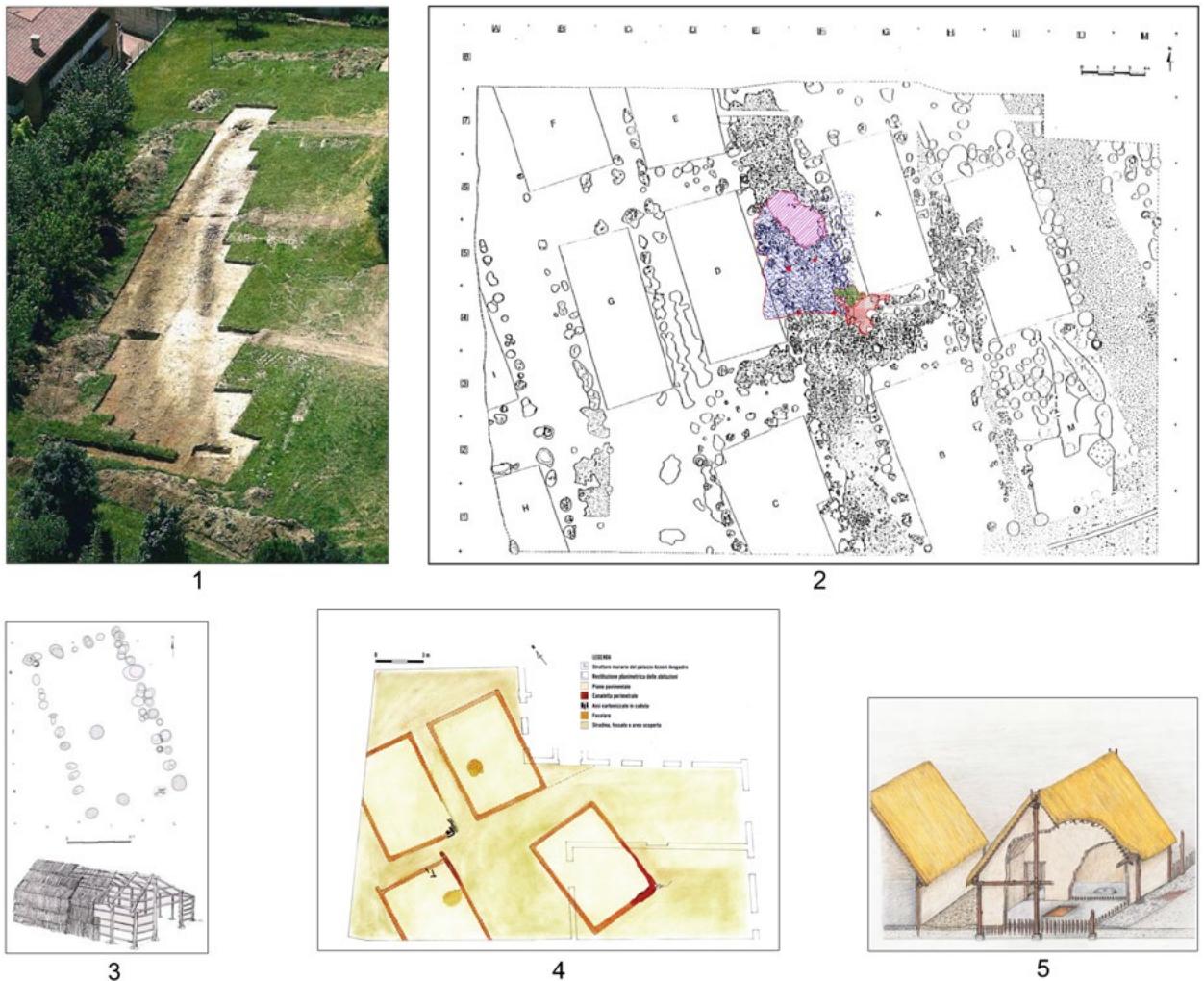


Figure 3: Plans and reconstructive illustrations from the FBA sites of Calcinato Ponte S. Marco (1-3, after Poggiani Keller 1994), and Treviso (4-5, after Bianchin Citton 2004).

terraces, raised over the surrounding wetlands, and always at the confluence between two or more rivers.<sup>22</sup>

The relevant site of Este, for example, at the beginning of the Iron Age appears to be a settlement of nearly 100 ha.<sup>23</sup> Large water management structures and wooden fences around the perimeter are known thanks to preventive excavations (Figure 2, no. 6). An oak timber waterfront foundation of horizontal beams, in the south-eastern part of the perimeter (Figure 5, no. 1), is dated by dendrochronology<sup>24</sup> to the end of the 9th century BCE (825–795 cal. 95%).

The near site of Padova, already up to 120 ha in the 8th century BCE (Figure 2, no. 5),<sup>25</sup> had a similar perimeter defined by a double wooden palisade (Figure 5, no. 2), dated to the end of the 9th century ( $840 \pm 130$  BCE).<sup>26</sup>

<sup>22</sup> Capuis and Gambacurta 2015.

<sup>23</sup> Guidi 2008: 181; Capuis and Gambacurta 2015.

<sup>24</sup> Meadows *et al.* 2014 (a later phase of the palisade, with vertical posts, is dated 640–695 BCE, 85%).

<sup>25</sup> Guidi 2008: 182; De Min *et al.* 2005; Capuis and Gambacurta 2015.

<sup>26</sup> Balista *et al.* 1993; Balista 2005: 17.

Another example of a centralised site of the early Iron Age is Oppeano, a settlement of 80 ha in the FBA period onwards (Figure 2, no. 4), which, during the 8th century BCE, was fortified with an earthen rampart and a ditch.<sup>27</sup>

Several other sites of the north-eastern part of Italy, including Gazzo Veronese (Figure 2, no. 3), Verona, Vicenza, Altino, Oderzo (Figure 2, no. 7), and Concordia, Palse,<sup>28</sup> all show similar features and technical solutions, such as orthogonal grids, square houses and defensive timber structures, established between the FBA and EIA.

Another pivotal case study is the ancient city of Bologna, called *Felsina* in the Etruscan period. The site is only partially known, due to the continuous stratification through the millennia, but rescue excavations over the last twenty years<sup>29</sup> have

<sup>27</sup> Balista 2004; Guidi and Salzani 2008; Cadelato *et al.* 2015.

<sup>28</sup> See Gonzato *et al.* 2015, and Saccoccio 2016 for recent data on Gazzo Veronese. Regarding eastern Veneto and Friuli, see Malnati *et al.* 1996.

<sup>29</sup> Curina *et al.* 2010.

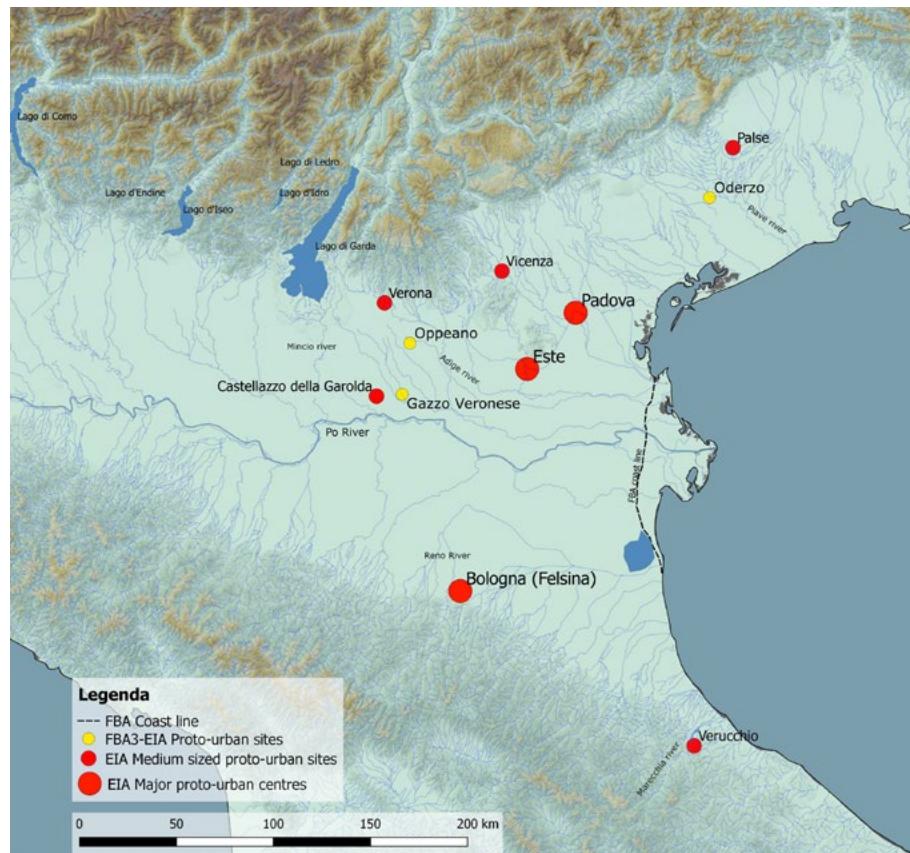


Figure 4: North-eastern Italy between the FBA (11th-10th centuries BCE) and Early Iron Age (9th-7th BCE), with the main sites mentioned in the text (P. Rondini).

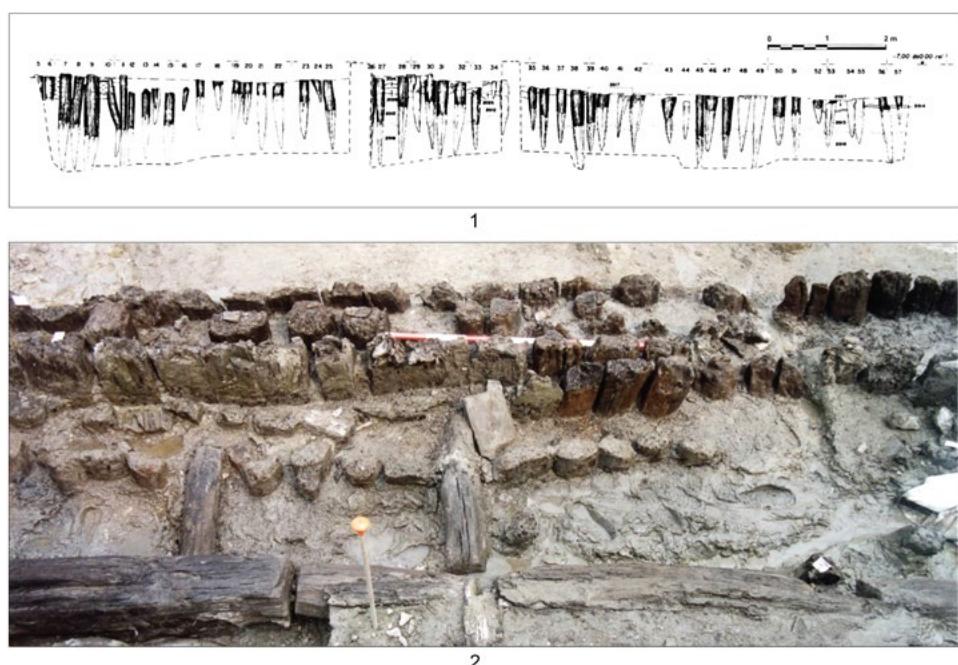


Figure 5: Wooden palisades of the EIA from Padova (1, after De Min *et al.* 2005), and Este (2, after Meadows *et al.* 2014).

unearthed outstanding archaeological evidence of an early urbanisation process (Figure 6, no. 1). According to the latest studies, Bologna was a new foundation in the 8th century BCE, likely after the abandonment of five surrounding villages of the Early Iron Age (Castenaso, Budrio, S. Vitale, S. Donato, Fiera),<sup>30</sup>

and at the foot of the hill of Villa Cassarini, likely a sacred or funerary place during the previous FBA period.<sup>31</sup>

Already in the early phases, the settlement size was impressive (around 180 ha), showing huge foundational

<sup>30</sup> Malnati *et al.* 2010.

<sup>31</sup> Ortalli 2008; 2010; 2013; 2016; Sassatelli 2015.

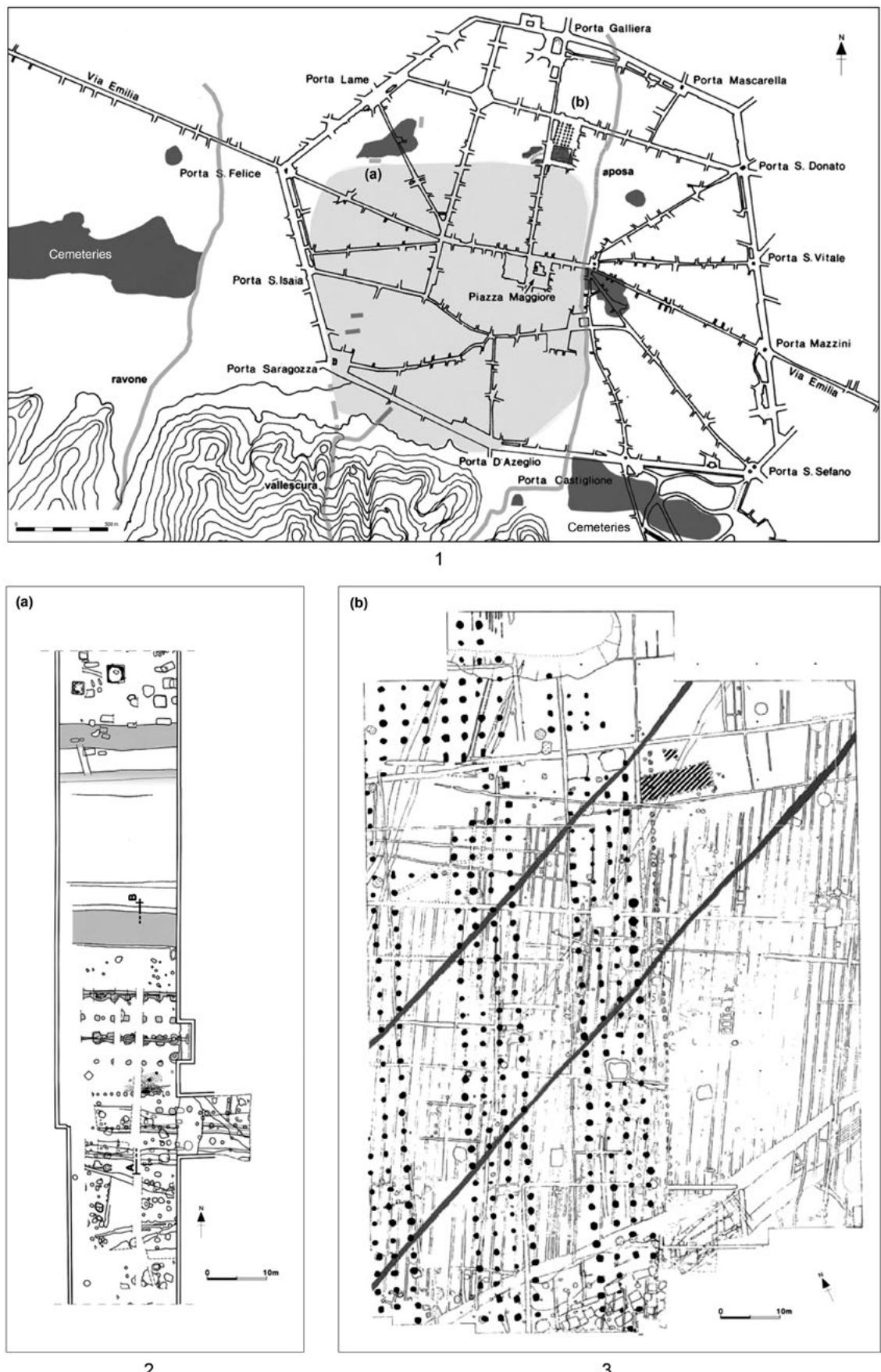


Figure 6: *Felsina/Bologna in the EIA*: 1) plan of the site, with the settlement area in light grey, and the cemeteries in dark grey (after Ortalli 2010), and the boundary wooden structures ('a' and 'b'); 2) archaeological features in Piazza Azzarita (after Ortalli 2010); 3) the excavation in Piazza VIII Agosto (after Ortalli 2016).

structures, including large channels, and defensive structures in the northern sector.

The excavations in Piazza Azzarita, for example, uncovered a huge structure 40 m long with three channels at the front, to the north, and a complex alignment of timber palisades, at least three rows with planking (Figure 6, no. 2). The cemetery is located just outside these city walls.

An even bigger structure of about 100 m in length and 50 m wide was found in Piazza VIII Agosto, in the northernmost sector of the city (Figure 6, no. 3). Here, hundreds of large posts, with holes of more than 1 m deep, are aligned north-south in three rows, spaced 10 m apart. Each row is made of four posts placed every 3 m. According to the excavators, the hypothetical reconstruction indicates the presence of covered galleries, bridges, stairs and walkways, possibly for a complex fortification, a large workshop, or even a building for public meetings.<sup>32</sup> It is worth mentioning that both the structures of Bologna, from Piazza Azzarita and Piazza VIII Agosto, were dismantled soon after their construction, during the 7th century BCE, for reasons not yet clear.

### The Early Iron Age structures of Verucchio

In the south-eastern sector of the region, Verucchio was the main site for almost three centuries, between the 9th to the 7th centuries BCE. The settlement is positioned on a hilltop of maximum 45 ha (Figure 2, no. 8), in south-eastern Romagna, about 15 km from the Adriatic coast. This location granted control of both the mouth of the Marecchia river towards the sea and the Marecchia valley towards the mainland, which leads directly into the core of the peninsula, all the way to Etruria.

During the Final Bronze Age, the whole Romagna region was dotted with small settlements positioned on hilltops and cliffs, related to the Chiusi-Cetona facies, a material culture which linked the Po Plain sites, such as Frattesina in the north, to the northern and inner part of present Tuscany, Marche and Umbria to the south.<sup>33</sup> However, most of these sites were abruptly abandoned at the end of the FBA, while subsequently the site of Verucchio was chosen as the new centralised location. During the EIA, Verucchio displayed, through its unique grave goods, many signs of a highly hierarchised society, with a ruling class of powerful warriors and rich brides.<sup>34</sup>

Between 2011 and 2017, the University of Pavia carried out new archaeological excavations inside the

settlement area of Pian del Monte, the south-eastern sector of the hilltop, where poorly documented discoveries were carried out in the late 19th and 20th centuries.<sup>35</sup> Our excavation discovered a series of earthen and timber structures, north-south oriented, composed of parallel furrows, two canals, a wide ditch, water wells, several pits, and a timber palisade.<sup>36</sup> Taking the excavations of the 1970s into consideration, partially documented in the archive data,<sup>37</sup> we estimate this earthwork system to have an overall length of over 70 m north-south, by at least 8 m wide (Figure 8, no. 1).

Regarding chronology, through three radiocarbon calibrations from the upper EIA layers the disuse of these structures is dated to the end of the 9th century BCE.<sup>38</sup> Pottery finds confirm this chronology, also suggesting a possible connection to the material culture of the previous FBA period, as shown, for example, by the typical impasto cup handles, shaped as anthropomorphic or zoomorphic figures (Figure 7, no. 4).

As a working hypothesis, this complex system of structures could be linked to drainage, water management and delimitation. As previously mentioned, water management was a basic skill of the former Bronze Age cultures from which, we assume, the know-how had been handed down.

The large timber palisade, discovered east of the ditches, shares their north-south orientation, documented with a maximum length of 11 m (Figure 7, no. 3). Its large posts were placed in holes 80 cm wide (maximum) and as deep as 60-70 cm, dug at the bottom of a ditch. Other smaller posts were placed between the large ones, at regular intervals (Figure 7, no. 5), with further evidence of a possible entrance or secondary feature being present.

Altogether, these considerable wooden and earthen works may have met both the functional defensive and delimitation needs of the settlement, although with the limited extent of excavations it is still unclear whether the boundary involves the whole centralised settlement of the EIA period, rather than a pre-existing, smaller village, eventually established on Monte dei Gigli, a low hill few meters east.

It is clear, however, that the dismantling of that large delimitation structure occurred well before the definitive collapse and abandonment of Verucchio, which took place only during the 7th century BCE.

<sup>35</sup> Gentili 1988; Rondini and Zamboni 2016.

<sup>36</sup> Harari *et al.* 2017; Rondini and Zamboni 2016; Zamboni and Rondini 2018.

<sup>37</sup> Courtesy of the ‘Soprintendenza Archeologia, belle arti e paesaggio per la città metropolitana di Bologna e le province di Modena, Reggio Emilia e Ferrara’ Archive.

<sup>38</sup> Harari *et al.* 2017.

<sup>32</sup> Ortalli 2013.

<sup>33</sup> Bietti Sestieri 2012; Zanini 2013.

<sup>34</sup> Gentili 2003; von Eles 2015.

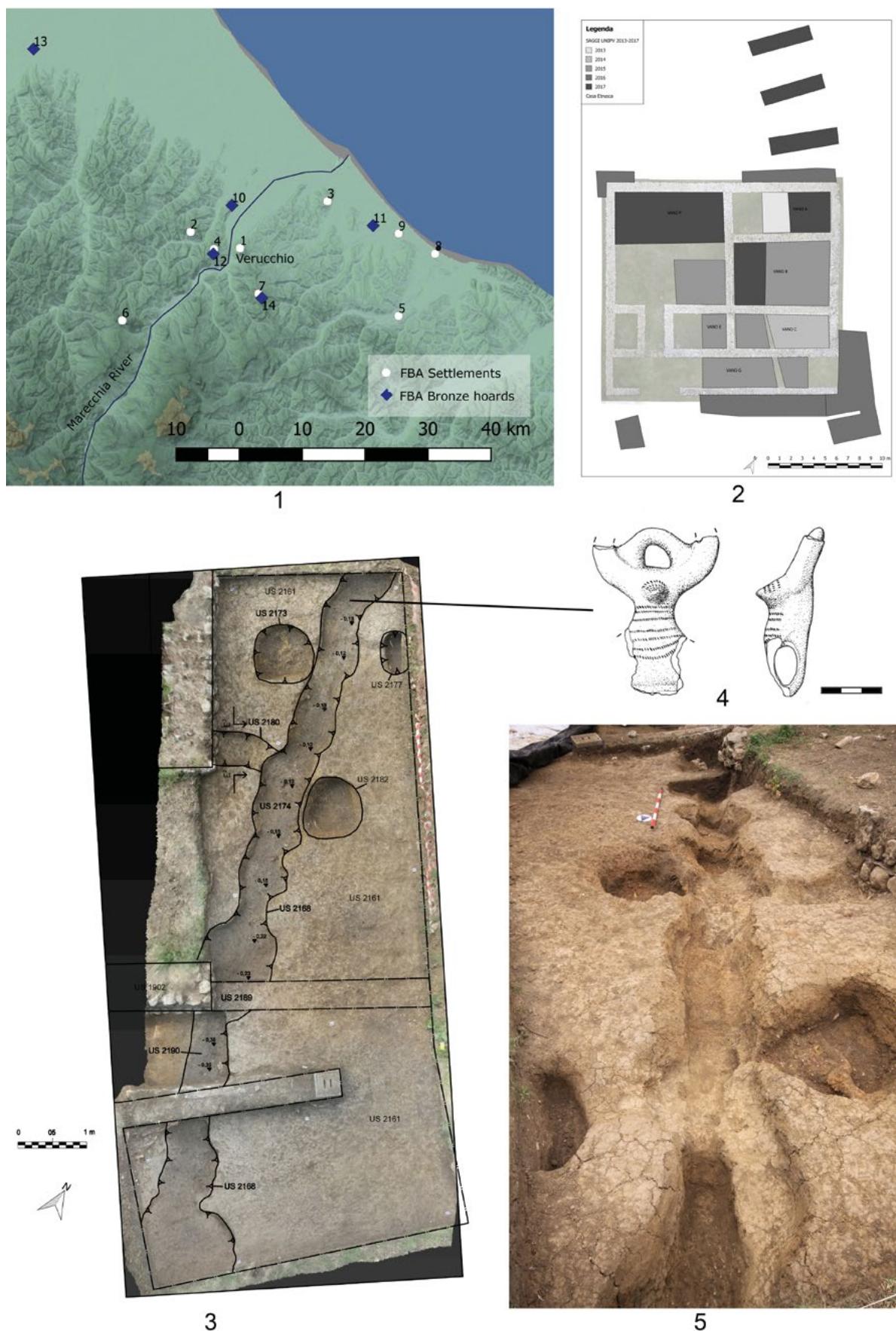


Figure 7: 1) Eastern Romagna in the FBA (P. Rondini); 2) Scheme of the 2011-2017 excavation trenches (authors); 3) The EIA ditch and the palisade; 4) An *impasto* handle, from a layer of the palisade (P. Rondini); 5) The palisade, view from the north (M. Harari, University of Pavia).

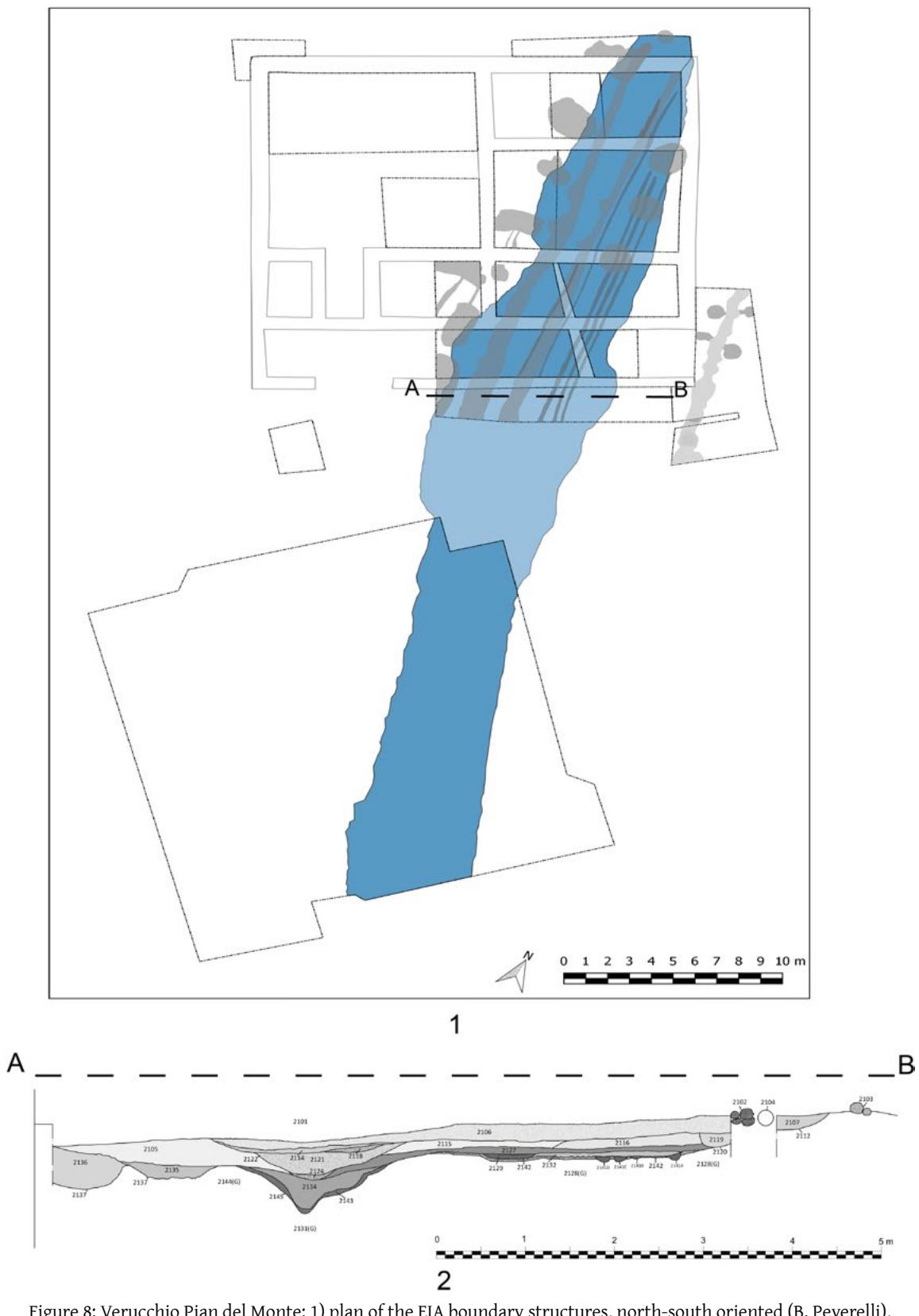


Figure 8: Verucchio Pian del Monte: 1) plan of the EIA boundary structures, north-south oriented (B. Peverelli), with in blue the large ditch, in light grey pits and canals, and in orange the palisade; 2) profile of the double ditch (L. Zamboni).

What we have discovered, the filling of ditches, canals and fences during the late 9th century BCE, is a sign of a new layout of the settlement of Verucchio, probably linked to an overall change in the social structure, as also suggested by the grave goods.<sup>39</sup>

The presence on the hilltop of previous FBA settlements, as well as the elements of continuity seen in the material culture, suggest that Verucchio should no longer be considered only as a ‘colony’, founded during the 8th century BCE by newcomers from the mainland Etruria, as presumed in previous literature.<sup>40</sup> Verucchio is more likely also the outcome of a local proto-urban process, which is much more comprehensible within the broader picture of the early centralisation phenomenon that occurred in north-eastern Italy, and towards the north Adriatic region, as mentioned in the previous paragraphs.

From a technological standpoint, it is possible to identify a local high-level craft tradition, deep-rooted in the Bronze Age cultures of the Po Plain, in the dimension and types of earthworks, defensive and boundary structures, as well as in the water management systems and wooden artifacts.

### **Discussion and further developments**

Ongoing excavations in north-eastern Italy are providing increasing data regarding an early centralisation process, at least between the end of the FBA and the first centuries of the 1st millennium BCE. Since it appears to begin before the establishment of the Greek colonies of southern Italy, this phenomenon could be interpreted as an independent process, spread from local experiences and long-lasting traditions, strongly connected to the specific wetlands of the Po Valley. From this perspective, it is possible to even suggest a direct transmission of technical knowledge from the last Bronze Age cultures to the early Iron Age ones, in terms of settlements planning, architectural solutions and exploitation of resources. Particularly, perimeter structures like ditches, ramparts and timber walls, seem to be key features for these early urban sites, being foundational and essential elements, especially for the new central and powerful sites of the Early Iron Age.

Of course, several aspects still remain to be addressed. First we must understand the relationship between settlements and their surrounding landscapes, including the possible effects of climate change, as done for neighbouring regions.<sup>41</sup> Other categories of finds should be considered as well, including the dispersal and the layout of cemeteries, the presence

and characteristics of sacred places, sanctuaries and shrines, as well as the scattered remains of extra-urban roads.

Another key aspect is the different lifespan of the delimitation works described. While in Este and in Padova, for example, wooden palisades appeared to be maintained for centuries after the foundation, in Bologna and Verucchio the dismantling and abandonment happened after a short period of use. This difference could be due to continuity versus change in settlement layout during the various phases of the Early Iron Age. In fact, the dismantling of a perimeter could be a sign of expansion or, instead, reduction of the shape and dimension of a proto-urban site. Only more extended excavations inside and outside the perimeter, while often prevented by the presence of modern disturbance in many present cities, could solve the question.

The latter aspect implies a broader issue of the continuity of the centralisation and ‘urbanisation’ process south of the Alps. As seen before in this region, there are cases of discontinuity, already during the FBA period (Montagnana), or during the EIA, as for example in the case-study of Verucchio, with the abandonment or displacement of major settlements, probably shifting towards different locations. Otherwise, there are several evidences of continuity, throughout the entire 1st millennium, even in historical times (Este, Padova), though the process is not always linear, and many events of crises and transformation are documented (Bologna).

Furthermore, these changes could be better understood when a social analysis of the proto-urban and urban settlements is approached, deepening the role of self-representation of the emerging aristocratic élites of the EIA, *vis-à-vis* possible more early ‘egalitarian’ instances,<sup>42</sup> even addressing other categories of public monuments, households, and evidence of grave goods.

In conclusion, although this paper is more focused on the FBA and EIA periods, the process of urbanisation and the role of perimeter structures will have noticeable advances throughout the following centuries. It is only during the 7th and the 6th centuries BCE, also thanks to more direct Mediterranean contacts, that many of the central sites mentioned became cities (in the ‘Classical’ sense of the term), while new trading emporia were also founded from the Apennines to the Adriatic gulf. Amongst many examples, we could mention the case of Spina, founded during the second half of the 6th century BCE at the mouth of the Po, on the northern Adriatic coast. The excavations at Spina show the integration, within a new ‘polis’, of many architectural solutions of

<sup>39</sup> von Eles 2015.

<sup>40</sup> Guidi 2008: 180.

<sup>41</sup> Fernández-Götz 2017; Magny 2013.

<sup>42</sup> As suggested, for instance, for Bologna (Ortalli 2013).

the ‘traditional’ types previously described, including an urban layout planned in a wet environment, based on a regular system of water canals and rectangular blocks,<sup>43</sup> as well as perimeter and defensive structures made of several rows of wooden posts, last rebuilt during the 4th century BCE.<sup>44</sup>

### Contributions and Acknowledgements

This paper has been conceived, discussed and commented by both the authors in late 2017. L.Z. wrote paragraphs 1, 3 and 5. P.R. wrote the paragraphs 2 and 4. The excavations at Verucchio – Pian del Monte were conducted in the field by the authors, under the scientific direction of Maurizio Harari, University of Pavia.

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<sup>43</sup> Zamboni 2016; 2017.

<sup>44</sup> Buoite et al. in press.

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