

**Transformations, adaptations and resilience... behind the crisis of late antiquity.  
Some reflections from the Abruzzo region**

Sonia Antonelli, Chiara Casolino

**Introduction (S. A. and C. C.)**

Studies of late antiquity have been influenced by a generic and diffused concept of crisis, which in return has been affected by a negative ideological approach. Indeed, too often the perception of the causes of the crisis during the Late antique period has been evaluated in relation to external agents (immigration, invasions, Christianity) considered responsible for the collapse of the imperial socio-economic system. So-called 'crises', however, should be seen as moments of transformation of the socio-economic and cultural framework with different adaptations and solutions depending on the context.

The topic of transformation has always been a subject of study in archaeology, assessed in relation to the evolution of contexts and specific settlement dynamics. Regarding the post-classical period, the change of settlements, too often simplistically resolved in the dichotomy of "continuity and abandonment", has always been one of the main lines of research in post-classical archaeology. In recent times, the multidisciplinary and diachronic approach of archaeology led to a greater contextualisation of the phenomenon of transformation for a more complex reconstruction of the landscape, integrating environmental, anthropological, and cultural studies<sup>1</sup>.

In literature there are many studies that analyse transformation and change through the lens of resilience, where an understanding of the adaptive capacity of a certain place allows for a comprehension of the changes and types of transformation that led to this process<sup>2</sup>. Resilience is considered fundamental to understand the relationship between persistence and change, adaptability and transformation<sup>3</sup>, through studies of the climatic<sup>4</sup>, paleo-environmental and anthropological changes that have influenced and determined settlement choices and, therefore, transformations.

Regarding the urban contexts, so far, the analysis of change and evolution has focused in particular on traditional studies, based on an overview of the context for a reconstruction of urban topography<sup>5</sup>. A more analytical approach is used for specific functional categories, such as housing, craft and commercial spaces, religious buildings.

In order to approach the subject analytically, it should be recalled that the phenomenon of transformation can be divided into:

- gradual transformation, *i.e.*, when a change is consistent and in line with the progressive development of the built-up area;

---

<sup>1</sup> VOLPE 2018.

<sup>2</sup> REDMAN 2005, p. 72; CAU ONTIVEROS, MAS FLORIT 2019. Also, on resilience see BRATMÖLLER, GRIMM, RIEL-SALVATORE 2017; FAULSEIT 2015; KOHLER, VAN DER LEEUW 2007; GUNDERSON, HOLLING 2002.

<sup>3</sup> FOLKE *et alii* 2010.

<sup>4</sup> MCCORMICK *et alii* 2013; VAN DE NOORT 2011.

<sup>5</sup> E.g., for the cities of Lucca and Siena, see CASTIGLIA 2016.

- adaptive transformation, *i.e.*, when a change occurs following a 'traumatic' or unplanned event, which makes the adaptations necessary, functional to the continuity of life of the settlement. In this case it is possible to associate the concept of adaptability with that of resilience.

To get to define the type of transformation and to characterise the phenomenon and identify different 'degrees' thereof, as objective as possible parameters should be applied. However, the quantitative and qualitative data, necessary to establish these parameters, are not easy to be extracted from the available knowledge background.

In this paper we will try to highlight the limits and possibilities of this approach, taking into consideration the minor settlements to understand the landscape of the Abruzzo region during Late antiquity (**Fig. 1**).

The minor settlements<sup>6</sup>, indeed, play a central role in the production of goods, as indicated by a number of organised craft activities, of which there is clear archaeological evidence, in the distribution and circulation of local and imported products, through temporary markets and permanent trade, on a local and regional scale and also in the dynamics of territorial reorganisation in Late antiquity<sup>7</sup>.

A review of the data relating to economic-commercial indicators between the 4th and 7th centuries is proposed in order to assess the transformations and changes in settlements in the late antique period, identifying the main features. A quantitative analysis is proposed for a subsequent evaluation of the relationships and dependencies between the factors determining these changes. A next aim will be to establish whether these changes should be considered as a rupture or degeneration, or whether they are the result of solutions adopted in response to a changed political, socio-cultural and obviously economic order<sup>8</sup>.

Four specific topics have been identified:

- Road system
- Production activities
- Economic and commercial role
- Christianisation as an indicator of the role of settlements

## Road system (S. A.)

In broad terms, the minor settlements in Abruzzo are located - as has been pointed out in other regions - in direct relation to the main road network and coastal landings<sup>9</sup>.

---

<sup>6</sup> It should be pointed out that the attribute 'minor' is not intended to emphasise a preconceived hierarchisation of the settlements, see ANTONELLI, SOMMA 2017, pp. 450-451 note 42.

<sup>7</sup> In the Italian Adriatic Peninsula, recent research has focused mainly on the Comacchio area, Classe and the Apulian region, see GELICHI, HODGES (eds) 2012; AUGENTI (ed.) 2011; VOLPE 2012, pp. 27-57. The central Adriatic regions (Marche, Abruzzo and Molise) have so far been treated marginally and have been brought to the attention only in recent studies CIRELLI, GIORGI, LEPORE (eds) 2019; CIRELLI, DIOSONO, PATTERSON (eds) 2012. The relationship between minor settlements and economic system is centred on important international projects focused on some areas of Italian Peninsula, as well as the middle Tyrrhenian region, evaluating the insertion of local level in geographical and economic exchange systems on a wide scale, individuating models of artefacts distribution and circulation in intermediary position between urban centres and minor settlements.

<sup>8</sup> LAMOINE, BERRENDONNER, CÉBEILLAC-GERVASONI (eds) 2012.

<sup>9</sup> The viability appears of primary importance in the definition of Isidore: *Vicus autem dictus ab ipsis tantum habitationibus, vel quod vias habet tantum sine muris*, cfr. Isid., *Etym.* XV, II, 12. For the ports and harbours see FOSSATARO 2006, pp. 51-56.

The minor settlements (often *vici*) are located at strategic hubs and/or crossroads of the main road system<sup>10</sup>. This is evident for example in Santa Maria a Vico (Sant' Omero, TE)<sup>11</sup>, Campovalano (Campoli, TE)<sup>12</sup>, San Rustico (Basciano, TE)<sup>13</sup>.

The *vicus Stramentarium* (today's Santa Maria a Vico, near Sant' Omero) was located at the junction of an important road of ancient origin, presumably the Roman *Caecilia*, that connected the Tyrrhenian area to the Adriatic<sup>14</sup>.

Similarly, the settlement of Campovalano is located at the crossroads between the north-south road linking the cities of *Asculum* and *Interamna Praetuttiorum* and the east-west trans-Appennine road, known as *Via Caecilia*, already mentioned above.

Also, the settlement of San Rustico (Basciano, TE) is located at the crossroads of a main road system. The 'Capannelle' road connecting the Amiternina area with the Adriatic coast ran through the Vomano valley and forked at S. Rustico: the main branch reached the coast, while the second branch continued towards the *Hatria* colony via the Monte Giove high ground.

The *vicus Interpromium*<sup>15</sup> is located along the *Via Claudia Valeria*. Precisely in *Interpromium*, a *diverticulum* bifurcates in a south-easterly direction<sup>16</sup>. In the proximity of the *vicus*, a *statio* has been identified, which underwent substantial renovation between the 3rd and 4th centuries: the side facing the road remains unchanged, while the part behind it shows a significant reconstruction with walls built with *spolia*<sup>17</sup>.

### Production Activities (S. A.)

Archaeological data on late antique phases of settlements are often very general and lacking in quantitative and qualitative details, mainly due to the lack of attention paid to these phases in past archaeological excavations.

---

<sup>10</sup> Regarding the ancient road system of the *Aprutium* territory and the problematic identification of the *Caecilia*, see ANTONELLI 2008, pp. 27-32.

<sup>11</sup> The *vicus* identified near the present church of S. Maria a Vico in the Vibrata valley is attested by an epigraph (EE, VIII, 210; ILS, 7215) from the Trajan age, now reused in the right aisle of the church. The inscription mentions a *collegium* of *cultores Herculis* that had its seat in the *vicus* called *Stramentarius* or *Stramenticius*. The inscription was found in 1885, reused as a cover of a burial box with the inscription facing the deceased. On that occasion, as part of excavations for the construction of a farmhouse adjacent to the church, the earthworks brought to light an extensive burial ground, see BARNABEI 1885, pp. 167-170.

<sup>12</sup> There is no explicit epigraphic data to define the juridical status of the settlement, but an inscription reused inside the church of San Pietro a Campovalano contains a dedication to the *divus Iulius* (DI FELICE 2006, p. 106) and is therefore related to the promulgation of the *lex Rufrena* in 44 BC, which promoted the spread of the cult in the *municipia* and the most important *vici*.

<sup>13</sup> There is no epigraphic data for the settlement of San Rustico (Basciano, TE) either. The role of a minor settlement has been assumed considering the 'urban' form, cf. MESSINEO, PELLEGRINO 1986, pp. 136-166. For a brief description of the findings and evidence, even epigraphic, and its bibliography see STAFFA 1996, pp. 283-285.

<sup>14</sup> A first branch of the *Caecilia* road reached the coast near Tortoreto, where an important protohistoric settlement was located and in Roman times an important district with numerous *villae rusticae* was identified. However, the second branch connected to the north-south coastal road network at what is now Alba Adriatica, where the *statio Perturnum* indicated by the *Anonimo Ravennate* and *Guidone* (*Ravennatis anonymi Cosmographia* 5,1 e *Guidonis Geographica* 70, in *Itineraria Romana*, II; see FIRPO 1998, p. 962) on the coastal road between *Castrum Truentinum* and *Castrum Novum* may be located. For this proposal see ANTONELLI 2008, pp. 21-34.

<sup>15</sup> The administrative status and its name are attested by epigraphic sources, CIL IX, 3044,3046.

<sup>16</sup> DE PETRA, CALORE 1900-1901, pp. 186.

<sup>17</sup> ANTONELLI, SOMMA 2017, p. 447 and STAFFA 2006, pp. 25-40, 47-50.

The presence of craft activities during the post-classical phases appears to be a constant, but an obvious limitation is the fact that the data do not allow to obtain estimates of the production volume. Therefore, it is impossible to assess whether this production is for self-consumption or whether some form of trade can be assumed, including local trade<sup>18</sup>.

The *statio* of San Vito Chietino-Murata Bassa (CH), during the imperial period, housed an important workshop specialised in the production of lamps. After its abandonment, the area was used for funerary purposes. Later, around the 6th century AD, there must have been a further settlement phase characterised by housing made of perishable materials. To this period belongs the small ceramic kiln, which was probably linked to the needs of self-consumption for the reception purposes of the *statio*<sup>19</sup>, but it is not possible to exclude that it might have produced a *surplus* that also satisfied short-range commercial needs.

The manufacture of pottery in Late antiquity in a settlement where lamps had previously been produced is an interesting case of resumption of activity, probably facilitated by the availability of good quality clay.

Metallurgy is one of the best attested craft activities in the Late Antique period, not least because of the visible traces it left on the soil, for example slag and pyrotechnic structures.

In the San Rustico *vicus* a kiln for metal working, dated post 4th century A.D., has been clearly identified. “Smelted iron nuclei”<sup>20</sup> were also found during the excavation and it is therefore likely that the furnace was used for ironworking.

Similarly, in the Centurelli *vicus* (AQ), in the Abruzzo interior, many ferrous slags were found in the restructuring phases of the settlement, especially in proximity of the road<sup>21</sup>. No furnace or production facilities were identified.

The case of Centurelli allows to introduce some considerations about slag deposits. In fact, until few decades ago, these production indicators were not considered particularly significant. Only more recently increasing attention has been paid to proper analysis and identification<sup>22</sup>. The remains of metallurgical activities, indeed, are very common and should be carefully analysed on the basis of criteria such as the quantity and the assembly, that is the coexistence of almost homogeneous quantities of different types of slags related to the post-reduction and forging activities<sup>23</sup>. Another aspect to take into account is that of their dispersion or use in the building and in the preparation of roadways such as drainage material<sup>24</sup>. A more accurate analysis of these deposits would likely lead to narrow the proliferation of production activities, which is often interpreted as a symptom of the contractions of medium and long-range trades and other self-consumption phenomena. The abandonment of large industrial centres and multiplication of steel initiatives in many areas, as early as the 3rd century A.D.<sup>25</sup>, could

---

<sup>18</sup> An interesting critical approach to the analysis of the data and the archaeological record has been recently proposed for the “agglomérations secondaire” of north-eastern Gaul, see COQUET 2011, p. 83.

<sup>19</sup> STAFFA 1998, p. 476.

<sup>20</sup> MESSINEO, PELLEGRINO 1986, p. 146.

<sup>21</sup> D’ALESSANDRO, D’ERCOLE, MARTELLONE 2009, p. 189.

<sup>22</sup> ANTONELLI *et alii* 2013, pp. 95-112.

<sup>23</sup> For macroscopic classification of the slags and the possibility of associating the different types to the several steps of the working process, see CUCINI TIZZONI, TIZZONI 1992.

The problem relating the slags’ dispersion and their interpretation in terms of the location of activities has been recently faced for the urban contexts of Roman Gaul, see LEROY, MERLUZZO 2010, pp. 305-321.

<sup>25</sup> PAGÈS 2010. The proliferation of production sites has also been interpreted as a direct result of the inclusion of metals among the charges in kind, see MCCORMICK 2008, p. 54.

be a sign of an economic restructuring in the name of the preservation of the technological knowledge rather than a sign of decline<sup>26</sup>. The studies on the *extra limes* areas have clearly shown that, between the 2nd and the 3rd century A.D., the increase of the iron working in the rural areas is directly connected to an evolution of the agricultural practices<sup>27</sup> and certainly not to a reduction of economic and commercial capabilities for autocracy purposes.

However, it is possible to observe some significant form of late antique occupation and also the presence of craftsmen with specific skills in these centres.

The situation observed for the minor centres of Centurelli and San Rustico appears very different from that of *Peltuinum*<sup>28</sup> (in the Vestina area, near Prata d'Ansidonia, AQ). This settlement presents urban and demographic characteristics very similar to proper urban settlements and can be considered a linking settlement or 'mediator' between the minor centres and the urban centres<sup>29</sup>.

In *Peltuinum*, in the Post-Classical phases, many indicators of specialized craft activities were found, and this could be the evidence of its role as a 'mediator' centre. During the Late antiquity, probably since the 4th century A.D., the north-west corner of the *porticus* of the temple of Apollo is reconverted into an artisanal area (**Fig. 2**). The *intercolumnia* are closed with reused material and create in this way a small regular space. In this space were found "processing waste and slags from the fusion of the bronze, silver and iron"<sup>30</sup> and also a possible melting bed in one of the workshops, as well as a significant number of recovered objects (statue fragments, inscriptions and decorative friezes of the Classic period found out in the sacred area) destined to be remelted.

Instead, in another room, a large deposit of animal bones with obvious traces of cutting and also many objects made of bone were found. This was undoubtedly a workshop involved in the production of bone artefacts<sup>31</sup>.

This is definitely a normal phenomenon since it is a specialized production (compared to ironworking, commonly certified in smaller towns) that is more common to find in urban centres<sup>32</sup> or, at least, in those settlements which have an intermediate function from an economical point of view compared to smaller settlements in which, instead, 'primary' goods are produced.

### **Economic and commercial role (S. A.)**

Archaeological data are often unsatisfactory to understand well the economic and commercial significance of craft activities that can effectively be linked to self-

---

<sup>26</sup> VAN OSSEL 2006, pp. 556-558.

<sup>27</sup> LA SALVIA 2011, p. 83; LA SALVIA, VALENTI 2012, p. 126.

<sup>28</sup> ANTONELLI, SOMMA 2017, pp. 454-455.

<sup>29</sup> We refer to the Central Place model based on settlements that we define as 'minor' and that play the role of local markets and service centres for the circulation and exchange of products and goods, also coming from distant areas. These sites are normally located at the centre of a systemic area of reference, which is integrated by other centres of greater urban and demographic consistency (but not urban *strictu sensu*), spread out over a wider area, where specialised craft activities are carried out and/or specialised services are provided, see CHRISTALLER 1966.

<sup>30</sup> TULIPANI 1996, p. 52.

<sup>31</sup> For a long tradition on bone working in the Abruzzo interior see MANCINI, MENOZZI 2017.

<sup>32</sup> In the 5th century bone carving is also attested in the city of *Alba Fucens*, see CECCARONI, BORGHESI 2009, p. 230, fig. 22.

consumption or structural needs: this is the case of rest and service places<sup>33</sup> such as the coastal *statio* in San Vito Chietino (location Murata Bassa CH).

Based on the evidence of craft activities, it is clear that a class of merchants and craftsmen was still living in minor settlements in Late antiquity.

In this sense, the discovery of a sarcophagus at the *vicus* of Campovalano is suggestive. The sarcophagus dating from the age of Constantine is produced in oriental workshops and made of Proconnesian marble; it is now stored in the church of San Pietro a Campovalano<sup>34</sup>.

Unfortunately, the inscription is lost<sup>35</sup> but a transcript of it is preserved in the Archive of the Biblioteca Apostolica Vaticana within the Gaetano Marini's fund<sup>36</sup>. The inscription regards an epitaph in Greek letters of a certain Aurelius Andronicus from Nicomedia, a marble merchant (*λιθέμπορος*), buried with his wife Fortuna (**Fig. 3**).

Another *λιθέμπορος* named M. Aurelius Xeronianus Aquila, a native of Bithynia, is well-known in Rome during the 3rd century A.D.<sup>37</sup> through a funerary inscription in the church of San Saba on the Aventine. The activity of these *negotiatores marmorarii* consisted in submitting the sarcophagi orders to the production workshops<sup>38</sup>, especially after the 'revitalization' of the quarrying and the resumption of the role of Nicomedia in the commerce of the marble<sup>39</sup>.

<sup>33</sup> BASSO, ZANINI (eds) 2016.

<sup>34</sup> The front-side preserved is 0.87 m high and 1.73 m long. The decoration consists of two levels with two other figurative scenes focused on Saint Peter's iconography alternating with two panels characterized by very tight 'strigilated' motifs. In the upper register are represented: on the right, St. Peter who makes water gush from the source and a prayer ('orante') between St. Peter and St. Paul; in the lower register, again from the right, Christ on the throne with a child and a female figure (perhaps the presentation of Jesus in the Temple), and a male figure praying again between Peter and Paul, see WILPERT 1929, I, pp. 114, table CVI, 2 and PANI ERMINEI 1976, pp. 43-44.

<sup>35</sup> The inscription belonged to the private collection of the historian G.B. Delfico who published it in 1812 without any reference to the sarcophagus, see DELFICO 1812, p. 151. The collection was later offered to the city of Teramo, but by autumn 1994 only a small portion of the inscription had remained. It is placed along the wall of the *atrium* in Palazzo Comunale, see BUONOCORE 2001, p. 62.

<sup>36</sup> *Cod. Vat. Lat.* 9072, p. 505 n. 1 e 9102 f. 56, published in BUONOCORE 2001, p. 62, figg. 4-5. Marini took the information directly from Mons. A.L. Antinori, who was present at the time of the sarcophagus' discovery. Few decades ago, A. Ferrua, after the reading of some Gaetano Marini books, successfully rewrote the events of the important *sarcophagus*, see FERRUA 1984, pp. 383-386.

<sup>37</sup> M. Aurelius Xeronianus Aquila carried out his activities at the *Horrea Petroniana*. J. B. Ward Perkins in the discussion of the problem about the presence of these merchants of oriental marbles, from the Late Roman Imperial period, also took into account our *Aurelius Andronicus*, but improperly talked of the inscription as coming from Terni territory probably on the basis of the presence of *Interamna* in the *Corpus Inscriptionum Graecarum*, which likely Ward-Perkins identified with the better-known *Interamna Nahars* rather than *Interamna* or *Interamnia Pretuttiorum*, see WARD-PERKINS 1980, p. 34 and WARD-PERKINS 1983, p. 243.

<sup>38</sup> The city of Nicomedia operated an effective trade of sarcophagi, exploiting well-structured trade routes for other products. The activity of the workshops and craftsmen in Nicomedia became highly skilled and the city in the Late Imperial period is designed as a 'lead centre', even from an artistic point of view, WARD-PERKINS 1980, pp. 23-69.

<sup>39</sup> On the sarcophagi in Proconnesian marble, their spread, costs and methods of trade see KOCH 2011, pp. 12-15. In the 5th century the *graeci negotiatores* managed the retail in Rome, staining often of unfair competition (these *Graeci negotiatores* were expelled in 440 A.D. as a result of a Valentinian decree, see *Nov. Valent.*, V) and even in the *Leges Visigothorum* they are mentioned as *transmarini negotiatores* operating in the Western area (*Leges Visigothorum*, XII, 2, 14 e M.G.H. *Leges*, t. 1, p. 420). Therefore, some of these eastern merchants settled in the *pars occidentalis* continuing to maintain contacts with the motherland and creating effective networks of exchange (an overview of the eastern merchants and business networks between West and East is offered by PIERI 2002, pp. 123-132). They are characterized by an extraordinary mobility (MCCORMICK 2008, pp. 272-278), as evidenced even in the Early Middle Ages (this is what emerges for the North Adriatic area and its emporia, see GELICHI 2009, pp. 154-155).

The presence of a merchant of marbles in a minor centre, as Campovalano used to be, is a relevant factor which may be partially explained by the settlement's strategic location, situated at the intersection of two main routes in close topographic relationship with the coastal approach of *Castrum Novum* (Giulianova, TE), which from Late antiquity acquires a relevant role in the Adriatic relations with the East<sup>40</sup>.

Another sarcophagus dating from the 4th century and currently exhibited in the church of San Clemente a Casauria, near the ancient vicus *Interpromium*<sup>41</sup>, deserves special attention. The sarcophagus of San Clemente a Casauria<sup>42</sup> comes from a Roman workshop<sup>43</sup> and presents an uncommon iconography<sup>44</sup> - Susanna and the Elders<sup>45</sup> - and has parallels with a single exemplar, now preserved in Barcelona<sup>46</sup> (**Fig. 4**).

The two specimens probably come from the same workshop, according to the particularity of the decorative theme and especially some formal and stylistic elements<sup>47</sup>. This workshop must have been well integrated into the international trade circuit, given the example found in Barcelona. These materials from funerary contexts are meant for a high social class and can be interpreted as 'evidence' of the socio-economic and also cultural and religious dimensions of these settlements.

### Christianisation as an indicator of the role of settlements (S. A.)

In recent years, the role of minor settlements in the dynamics of Christianisation has been clearly highlighted<sup>48</sup>. Indeed, the presence of religious buildings with *cura animarum* in these settlements is clear evidence of their vitality. Moreover, these churches are often equipped with furnishings that indicate commercial and cultural contacts with other Mediterranean regions.

Concerning this topic, it is important to note that in Campovalano, at San Pietro church (**Fig. 5**), have been found also architectural elements made of Proconnesian marble, some of which are semifinished<sup>49</sup> (especially a column), and there is also a small *pergula* capital with acanthus leaf decorations dating to the VI century A.D.

---

<sup>40</sup> With the name of κάστρον Νόβω the settlement and its port are placed in the Byzantine *castra* by the geographer Giorgio Ciprio, see Georgii Cyprii, *Descr.*, p. 98 n. 623.

<sup>41</sup> STAFFA 2006 and 2017. Concerning the presence of a late antique funerary area (IV-VI century) in the proximity of Abbey of San Clemente a Casauria see also STAFFA 2017, pp. 246-247.

<sup>42</sup> Dimensions: 2.15 m. length; 0.54 m. width; 0.55 m. height. Regarding the iconographic aspects see WILPERT 1936, p. 50 table 297, 1; SOTOMAYOR 1975, pp. 26, 27, 80-81, 227, 231; PANI ERMINE 1976, pp. 42-43. Also SOTOMAYOR 1975, p. 26 (n. 2) for the sarcophagus from Girona that has the same compositional scheme.

<sup>43</sup> The sarcophagus dated back to the Constantinian period in PANI ERMINE 1976, p. 43 and, specifically, to the 320s A.D. in SOTOMAYOR 1975, p. 175. It has been attributed by both the scholars to a Roman workshop.

<sup>44</sup> For the Susanna iconography see BISCONTI 2000, pp. 302-303 and RÉAU 2000, p. 450.

<sup>45</sup> Already claimed in the past by GARRUCCI 1879, p. 115 table 378 and BOVINI 1954, p. 40. See also ANTONELLI, SOMMA 2017, pp. 457-458.

<sup>46</sup> WILPERT 1929, p. 118, tav. CX, 3.

<sup>47</sup> The origins from the same workshop of the two sarcophagi from Spain and Abruzzo have already been supposed in SOTOMAYOR 1975, p. 80, tav. 2, 4.

<sup>48</sup> CANTINO WATAGHIN, FIOCCHI NICOLAI, VOLPE 2007, pp. 85-134.

<sup>49</sup> This system not only allowed to contain costs, but also ensured the circulation of products that could be adapted to the taste of the final beneficiaries in different and distant regions of the empire, through the activity of local workshops that provided the finishing touch of the products. The same sarcophagi were sometimes exported just rough-finished and/or semi-finished, in this regard see ASGARI 1990, pp. 110-117.

which probably refers to a presbyterial enclosure<sup>50</sup>. It is not clear the role of the church but it is likely that it may have had the function as *cura animarum*.

Santa Maria a Vico (near *Vicus Stramentarius*, currently in the municipality of Sant'Omero) certainly had the role of *cura animarum* and retained it throughout the Middle Ages (Fig. 6). In this church there are still the latticework windows with geometrical decorations (Fig. 7). At least for one of them, a precise comparison can be made with an artefact from the Euphrasian complex in Porec<sup>51</sup>, on the other side of the Adriatic, dating back to the VI century A.D.

In the Adriatic area, once again, can be found comparisons and stylistic influences that characterize the mosaic floor of the church of S. Stefano in Rivo Maris in Casalbordino (CH). In the late V century A.D., the church was built in an earlier Roman villa, located in close relationship with a harbour and a *statio*<sup>52</sup> as well.

The archaeological investigations unearthed a series of mosaic floors, including a fragment of figured floor with a deer that longs for a *kantharos* from which grows a vine shoot, dating back to the VI century A.D (Fig. 8). The most punctual comparisons refer to the mosaics known in the Balkans and the Aegean<sup>53</sup>. This decorative motif is particularly widespread on both sides of the Adriatic<sup>54</sup> and despite the diversity of representations it reveals a common iconographic matrix. Moreover, the theme of the deer which longs for a *kantharos* is usually used in relation to baptismal environments and even in the absence of the baptismal font, might suggest a *cura animarum* function also for the church of S. Stefano in Rivo Maris.

There is no doubt that the circulation, during late antiquity, of materials, models and perhaps artisans from long-range networks such as the other side of the Adriatic or the East attest to the inclusion of these settlements in the same networks, but also to their still relevant economic and socio-cultural dimension.

### Some reflections on method (C. C.)

The analysis of the data presented above on the relationship between secondary agglomerations and the road network, the presence of productive activities, the economic and commercial role and, finally, the elements of Christianisation show how they participate in the evolution of these settlements, both in terms of urban transformation and in terms of their roles and functions in the settlement reorganisation in Late antiquity.

Although this close relationship between the elements considered is well understood, an analytical assessment would be appropriate. It should be pointed out that

---

<sup>50</sup> All presbyterial fences and liturgical furnishings were produced in series and finished on site, circulating throughout the Mediterranean. For instance, the well-known case of Marzamemi wreck in which elements of a pergola, decorated with acanthus leaves, were also present. See KAPITÄN 1980, pp. 85-94. For a more detailed description of the Campovalano materials see ANTONELLI 2008, p. 91.

<sup>51</sup> The barrier closes the east window of the southern side of the Episcopo complex, RUSSO 1991, pp. 205-206, n. 151, fig. 175.

<sup>52</sup> The complex is very articulated planimetrically and included a part intended for animal shelter and a residential part closely linked to the road and the *villa* located on the hill immediately behind. The *statio* is datable to the late republican age, but it was renovated in the imperial age and was still in use in the 4th-5th century, based on the pottery found, see TULIPANI 2001; Corsi 2000, pp. 137-138.

<sup>53</sup> TULIPANI 2001, p. 328 with related bibliography.

<sup>54</sup> JAKŠIĆ 2009; JELIČIĆ-RADONIĆ 1993. For a broad review of the evidences see GIULIANI, LEONE 2011, pp. 158-159.

the data available is rather meagre and not uniform for all the settlements taken into consideration, and that the sample is also very small: 11 sites.

However, it was considered appropriate to find some specific characteristics in relation to the four topics identified and, where possible, numerical values were assigned in order to parameterise the data (**Tab. 1**).

Specifically, with regards to the road system the distance to the nearest crossroad was considered. The distances in kilometres were calculated and then classified: the maximum distance measured is 15 km and the minimum is 0 km (*i.e.*, the site is located exactly at a crossroads). The distance range is therefore between 0 and 15 km and has been divided into degrees of distance. There will therefore be a distance:

- Coincident/Low, from  $\geq 0$  to 5 km;
- Medium from  $> 5$  to 10 km.
- High from  $> 10$  to 15 km.

Concerning the productive activities, the following variables were considered:

- the continuity of the activity with respect to the Roman settlement, parameterized as a dichotomous variable yes/no;
- the supply of material, parameterized as a dichotomous variable primary/recycling;
- the type of productive activity;
- the place of planting in relation to the Roman settlement;
- the chronology of the activity.

The economic and commercial role of the settlement was analysed according to:

- presence of imported products or models (yes/no);
- type of product;
- provenance;
- chronology.

Finally, concerning the Christianisation, the following items have been considered:

- type of evidence;
- location in relation to the Roman settlement;
- chronology.

		VICUS STRAMENTARIUS	CAMPOVALANO	COLLE DEL VENTO	SAN RUSTICO	INTERPROMIUM	CENTURELLI	FROCONA	SAN VITO MURATA BASSA	PORTUS VENERIS	STATIO PALLANUM	PELTUINUM
ROAD SYSTE	Relation to crossroads	yes	yes	no	yes	yes	no	no	no	yes	yes	no
	Distance to nearest crossroads	$\geq 0$ to 5	$\geq 0$ to 5	$> 10$ to 15	$\geq 0$ to 5	$0 \geq 0$ to 5	$> 5$ to 10	$> 5$ to 10	$> 10$ to 15	$\geq 0$ to 5	$\geq 0$ to 5	$> 10$ to 15
PRODUCTION ACTIVITIES	Continuity of activity	-	-	-	no	-	no	-	yes	-	-	no
	Procurement material (primary; recycled)	-	-	-	non id.	-	non id.	-	non id.	-	-	recycled
	Type of production	-	-	-	ironworking	-	ironworking	-	pottery	-	-	specialized; bronze; bone
	Location compared to the ancient settlement				non id.		non id.		production area			sanctuary
Chronology				after IV		IV-VI		VI			IV-VI	
ECONOMIC AND COMMERCIAL ROLE	Imported product/models	yes_imported model	yes_imported product	no	no	yes_imported product	no	no	no	no	yes_imported product	no
	Product	transennae	marbre sarcophagus			marbre sarcophagus					mosaic	
	Provenance		East			Rome					Balkans and Aegean area	
	Chronology	VI	IV			IV					end of the VI - early VII	
CHRISTIANISATION	Evidence	church	cemetery	church; cemetery	non id.	cemetery	non id.	church	non id.	church; cemetery	church	church
	Relation to ancient settlement	non id.	suburban	temple	non id.	non id.	non id.	non id.	non id.	temple	villa/statio	suburban
	Chronology	V-VI	IV	VI-VII	non id.	IV	non id.	VII	non id.	VI-VII	end of the V - early VI	VII?

**Tab. 1-** Table of some specific characteristics in relation to the four topics.

The summary table shows the elements identified, with their specific features. Although there are several gaps in the variables, some recurrences are noted: sites at crossroad are characterised by early Christianisation and the presence of imported material.

While being aware of the limits of this assessment caused by a very small sample, nevertheless, the potential of the method used is well understood.

The data relating to the three variables mentioned above (distance from the nearest crossroads, chronology of Christianisation, presence of imported material) will therefore be taken into consideration, proceeding with a descriptive analysis, aware that the small number of samples does not allow us to hypothesise correlations and dependencies between the variables at the moment.

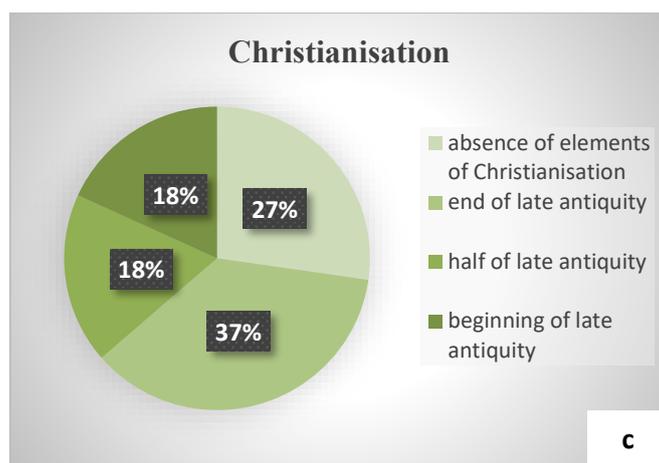
What is of interest at this step is to show how, starting from qualitative data, it is possible to assign values that characterise their meaning.

This step answers very precise questions which are, of course, the starting point for all evaluations which are made on the reference sample. What is the relationship between the proximity of the site to a crossroads and the chronology of Christianisation? And between proximity to a crossroad and the presence of imported material? Similarly, what factor has the greatest influence on the commercial role and therefore on the role of the settlement as a territorial reference? The road system or early Christianisation?

Regarding the proximity to the nearest crossroads, 27% of sites are within a range of > 10 to 15 km, 18% of sites are within a range of > 5 to 10 km, and 55% of sites are within a range of  $\geq$  0 to 5 km (**Tab. 2\_a**).

Concerning the presence of imported products in 64% of the sites there are no imported materials or models, while in 36% of the cases this element is attested (**Tab. 2\_b**). Finally, with regards to chronology of Christianisation, 18% of the sites show evidence from the early phase, 18% from the middle phase and 37% from the end of Late antiquity. Only 27% of the sites have no evidence of Christianisation (**Tab. 2\_c**).





**Tab. 2-** a) Frequency of distance to nearest crossroads; b) Frequency of imported products/models; c) Frequency of Christianisation

If we analyse the relative frequencies between the chronology of Christianisation of the sites and the distance from the road crossroads, we find that all the sites with Christianisation attested at the beginning and middle of the Late Antique period are located at a distance from the road crossroads of between  $\geq 0$  and 5 km<sup>55</sup>.

It should be noted that all the sites within this range have a distance of 0 km, *i.e.*, they are located at a crossroads. For the sites that have a chronology of Christianisation dated to the end of the Late Antique period, it is recorded that 50% are located at a distance between  $> 10$  and 15 km and the remaining 50% are equally divided between a distance between  $> 5$  and 10 km and  $\geq 0$  and 5 km.

In addition, 34% of the sites located at a distance of  $\geq 0$  to 5 km have evidence of Christianisation at the beginning of the Late antiquity, another 34% have evidence of Christianisation dated to the middle of the Late antiquity, 16% to the end of the Late antiquity and the remaining 16% have no evidence of Christianisation.

No site located between  $> 5$  and 10 km has evidence of Christianisation within the mid-late antique period, 50% of the sites have Christianisation within the late antique period and 50% have no evidence of Christianisation. No site at a distance of  $> 10$  to 15 km has evidence of Christianisation within the mid-late antique period, 67% of the sites have Christianisation at the end of the late antique period and 33% have no evidence of Christianisation (**Tab. 3\_a**).

Analysing the relative frequencies between the chronology of Christianisation of the sites and the presence of imported products/models shows that all the sites with Christianisation dated within the middle of the Late Antique period have imported products; while all the sites with Christianisation dated to the end of the Late Antique period have no imported products; this is also true for sites with no evidence of Christianisation (**Tab. 3\_b**).

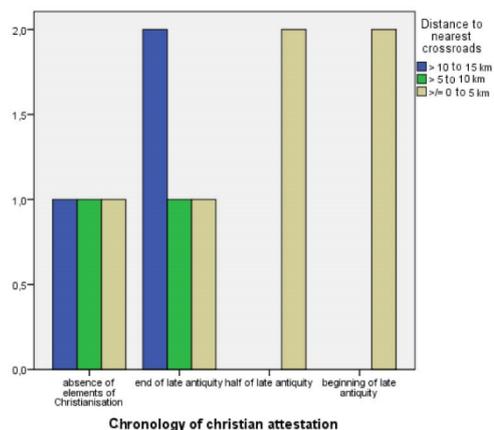
Finally, with regard to the relative frequencies between distance to the nearest road crossroads and the presence of imported products/models, it can be seen that 66% of sites with a distance to the road crossroads of  $\geq 0$  to 5 km have imported materials, in contrast to 34% of sites.

All sites with a distance between  $> 5$  and 10 km and a distance between  $> 10$  to 15 km have no imported products. In addition, the totality of sites that have a distance

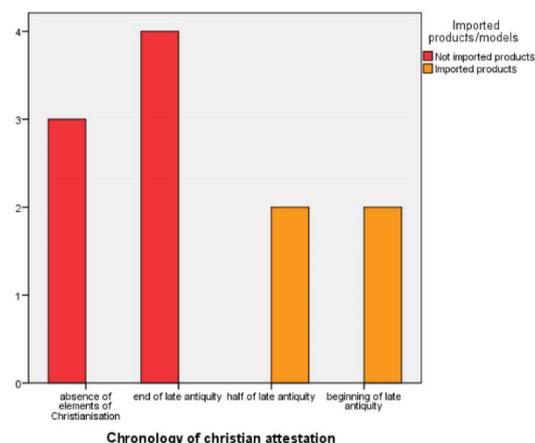
<sup>55</sup> The data were analysed using the statistical programme SPSS.

from the nearest crossroads of  $\geq 0$  to 5 km have imported products; while with regard to the sites that do not have imported products, 28.5% are located at a distance of  $> 5$  to 10 km, another 28.5% are located at a distance of  $> 10$  to 15 km, and finally, 43% of the sites are located at a distance of  $> 10$  to 15 km (**Tab. 3\_c**).

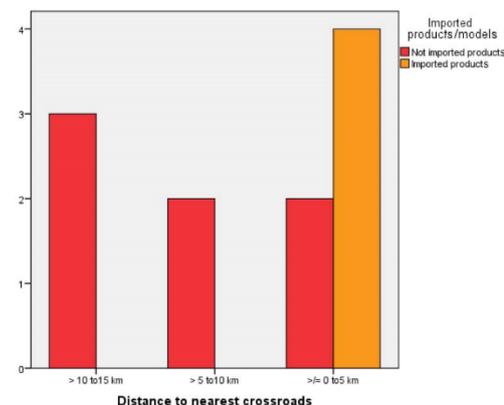
a) Chronology of Christian attestation * Distance to nearest crossroads					
		Distance to nearest crossroads (km)			Total
		$> 10$ a 15	$> 5$ a 10	$\geq 0$ a 5	
Chronology christian attestation	absence of elements of Christianisation	1	1	1	3
	end of late antiquity	2	1	1	4
	half of late antiquity	0	0	2	2
	beginning of late antiquity	0	0	2	2
Total		3	2	6	11



b) Chronology of Christian attestation * Imported products/models				
		Imported products/models		Total
		Not imported products/models	Imported products/models	
Chronology Christian attestation	absence of elements of Christianisation	3	0	3
	end of Late Antiquity	4	0	4
	mid Late Antiquity	0	2	2
	beginning of Late Antiquity	0	2	2
Total		7	4	11



c) Distance to nearest crossroads * Imported products/models				
		Imported products/models		Total
		Not imported products/models	Imported products/models	
Distance to nearest crossroads (km)	$> 10$ a 15 km	3	0	3
	$> 5$ a 10 km	2	0	2
	$\geq 0$ a 5 km	2	4	6
Total		7	4	11



**Tab. 3- a)** Contingency table between Christianisation and distance to nearest crossroads; **b)** Contingency table between Christianisation and imported products/models; **c)** Contingency table between distance to nearest crossroads and imported products/models

The analysis of the frequencies between the variables proximity from nearest road crossroad, chronology of Christianisation and presence of imported products/models shows a positive trend between high proximity/coincidence to a road crossroad and earliness of Christianisation, between earliness of Christianisation and presence of imported products/models and higher proximity/coincidence to a road crossroad and presence of imported materials/products.

The smallness of the sample does not allow to make further analyses on the variables considered. In any case, the assignment of numerical values to the three variables considered, together with the increase in the number of the sample, will allow an evaluation of the correlations and, above all, of the significance of one variable with respect to another (**Tab. 4**).

<b>Distance to nearest crossroads</b>	>= 0 to 5 km		> 5 to 10 km		> 10 to 15 km
	3 = high		2 = middle		1 = low
<b>Imported products/models</b>	yes		no		
	2 = imported products/models		1 = not imported products/models		
<b>Chronology of Christian attestation</b>	beginning of Late Antiquity	second half of Late Antiquity	mid Late Antiquity	end of Late Antiquity	absence of elements of Christianisation
	4	3	2	1	0

**Tab. 4-** Numerical values to the three variables considered

In conclusion, the study shows that the minor settlements played a key role in the transition between the Late Antiquity and the Middle Ages, through different dynamics of transformation and adaptation depending on the role and location in relation to the road network. The analytical approach applied here allows us to make some considerations, although the sample is small. In particular, it is possible to note that in the minor settlements located at a distance of > 5 up to 15 km from the nearest crossroads, the first marks of Christianisation are dated not before the end of the Late Antiquity and, moreover, all the materials recovered are local products. While for settlements within 5 km of the nearest crossroads, most evidence of Christianisation is dated within the mid-late antiquity period with totally imported materials. What has been said is interesting not only with regard to the modes and times of Christianisation of these settlements but could also make us reflect on their roles. In other words, it is possible to specify even more precisely the dynamics of Christianisation not only between different categories of settlement - urban centres, minor settlements, rural settlements - where early Christianisation first affects the urban centres and then the rural ones, but also within the same category of settlement. What is evident from the analysis of minor settlements permits the identification of different dynamics of Christianisation, hypothetically related to a different hierarchy within the same category of settlement, in which certain factors - proximity to crossroads, number of imported materials, extension of the settlement, types of arrangements and structures, presence of production facilities - connote its importance.

In perspective, the proposed method of analysis could prove effective in highlighting, objectively and standardised, the phenomenon of settlement transformations and in assessing roles and functions, and therefore hierarchies, in the Late Antique settlement pattern.

## REFERENCES

- ANTONELLI 2008 = S. Antonelli, *Il territorio di Aprutium. Aspetti e forme delle dinamiche insediative tra VI e XI secolo*, Roma 2008.
- ANTONELLI *et alii* 2013 = S. ANTONELLI, A. IACONE, S. PROSPERI, M. TORNESE, *L'impianto metallurgico dell'Athenaeum: processi empirici tra "teoria e metodi" ed esperienza archeologica*, in M. Serlorenzi and R. Egidi (eds), *L'Athenaeum di Adriano. Storia di un edificio dalla sua fondazione al XVII secolo*, Atti del Convegno, Roma, 22 settembre 2011, Bollettino di Archeologia online, IV/2-3-4, pp. 95-112.
- ANTONELLI, SOMMA 2017 = S. ANTONELLI, M.C. SOMMA, *Vicatim habitantes. Centri minori in Abruzzo nella tarda antichità*, in S. Santoro (ed.), *Emptor et Mercator: spazi e rappresentazioni del commercio romano. Studi e ricerche internazionali coordinate da Sara Santoro*, Bari 2017, pp. 443-465.
- ASGARI 1990 = N. ASGARI, *Objets de marbre finis, semi-finis et inachevés du Proconnese*, in M. Waelkens (ed.), *Pierre éternelle du Nil au Rhin. Carrières et préfabrication*, Catalogo della Mostra (Bruxelles, 12 octobre – 2 décembre 1990), Bruxelles 1990, pp. 106-128.
- AUGENTI 2011 = A. AUGENTI (ed.), *Classe. Indagini sul potenziale archeologico di una città scomparsa*, Bologna 2011.
- BARNABEI 1885 = F. BARNABEI, *S. Omero*, *Notizie degli Scavi di Antichità*, 1885 pp. 167-170.
- BASSO, ZANINI 2016 = P. BASSO, E. ZANINI (eds), *Statio amoena: sostare e vivere lungo le strade romane*, Oxford 2016.
- BISCONTI 2000 = F. BISCONTI, *Temi di iconografia paleocristiana*, Città del Vaticano 2000.
- BOVINI 1954 = G. BOVINI, *Sarcofagi paleocristiani della Spagna*, Città del Vaticano 1954.
- BRATMÖLLER, GRIMM, RIEL-SALVATORE 2017 = M. BRATMÖLLER, S. GRIMM, J. RIEL-SALVATORE, *Resilience theory in archaeological practice-An annotated review*, *Quaternary International*, 446, 2017, pp. 1-14.
- BUONOCORE 2001 = M. BUONOCORE, *Per un'edizione dei codici Vaticani Latini 9071-9074 di Gaetano Marini: l'epigrafia cristiana dalle origini fino all'anno Mille*, in *Miscellanea Bibliothecae Apostolicae Vaticanae*, 8, (Studi e Testi, 402), Città del Vaticano 2001, pp. 45-73.
- CANTINO WATAGHIN, FIOCCHI NICOLAI, VOLPE 2007 = G. CANTINO WATAGHIN, V. FIOCCHI NICOLAI, G. VOLPE, *Aspetti della cristianizzazione degli agglomerati secondari*, in R. M. Bonacasa Carra and E. Vitale (eds), *La*

*cristianizzazione in Italia tra Tardoantico ed Altomedioevo*, IX Congresso Nazionale di Archeologia Cristiana (Agrigento, 20-25 novembre 2004), Palermo 2007, pp. 85-134.

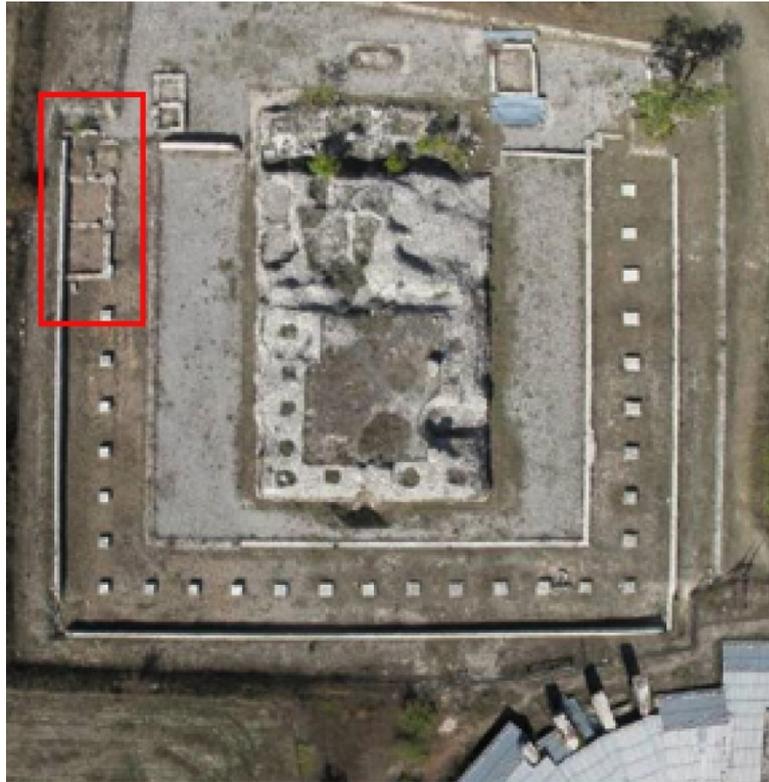
- CASTIGLIA 2016 = G. CASTIGLIA, *Lucca e Siena a confronto: trasformazioni urbane nella Tuscia annonaria dall'età classica alla fine dell'altomedievale*, MEFRM, 128-1, 2016. <http://journals.openedition.org/mefrm/3008>
- CAU ONTIVEROS, MAS FLORIT 2019 = M. A. CAU ONTIVEROS, C. MAS FLORIT, *Change and Resilience. The Occupation of Mediterranean Islands in Late antiquity*, Oxford 2019.
- CECCARONI, BORGHESI 2009 = E. CECCARONI, H. BORGHESI, *Alba Fucens (Massa d'Albe, AQ), Via del Miliario. Campagne di scavo 2007-2009*, Quaderni di Archeologia d'Abruzzo, 1/2009 (2011), pp. 221-231.
- CIRELLI, DIOSONO, PATTERSON 2015 = E. CIRELLI, F. DIOSONO, H. PATTERSON (eds), *Le forme della crisi. Produzioni ceramiche e commerci nell'Italia centrale*, Bologna 2015.
- CIRELLI, GIORGI, LEPORE 2019 = E. CIRELLI, E. GIORGI, G. LEPORE (eds), *Economia e Territorio. L'Adriatico centrale tra tarda Antichità e alto Medioevo*, Oxford 2019.
- CHRISTALLER 1966 = W. CHRISTALLER, *Central Places in Southern Germany*, New Jersey 1966.
- COQUET 2011 = N. COQUET 2011, *Les agglomérations du nord-est de la Gaule: bilan critique des données*, in M. Reddé et alii (eds), *Aspects de la Romanisation dans l'Est de la Gaule*, vol. 1, Bibracte 2011, pp. 75-90.
- CORSI 2000 = C. CORSI, *Le strutture di servizio del Cursus Publicus in Italia. Ricerche topografiche ed evidenze archeologiche*, (British Archaeological Report 875), Oxford 2000.
- CUCINI TIZZONI, TIZZONI 1992 = C. CUCINI TIZZONI, M. TIZZONI, *Le antiche scorie del golfo di Follonica (Toscana). Una proposta di tipologia*, Rassegna di studi del Civico Museo archeologico e del Civico Gabinetto numismatico di Milano, suppl. 9, Milano 1992.
- D'ALESSANDRO, D'ERCOLE, MARTELLONE 2009 = S. D'ALESSANDRO, V. D'ERCOLE, A. MARTELLONE, *Caporciano (AQ). Il vicus di Cinturelli*, Quaderni di Archeologia d'Abruzzo, 1/2009 (2011), pp. 186-191.
- DELFIKO 1812 = G.B. DELFIKO, *Memorie dell'Interamnia Pretuzia*, Napoli 1812.
- DE PETRA, CALORE 1900-1901 = G. DE PETRA, P.L. CALORE, *Interpromium et Ceii*, Atti della Regia Accademia napoletana di Archeologia, 21, 1900-1901, pp. 155-192.
- DI FELICE 2006 = P. DI FELICE, *Pagi e vici. Identità culturale e modello insediativo delle comunità locali*, in M. P. Di Felice and V. Torrieri (eds), *Catalogo del Museo Civico Archeologico "F. Savini"*, Teramo 2006, pp. 103-110.
- FAULSEIT 2015 = R. K. FAULSEIT (ed.), *Beyond Collapse: Archaeological Perspectives on Resilience, Revitalization, and Transformation in Complex Societies*, Carbondale 2015.

- FERRUA 1984 = A. FERRUA, *Il sarcofago di Campli*, Rendiconti della Pontificia Accademia, (serie III), LIII-LIV (1980- 81, 1981-82), pp. 383-386.
- FIRPO 1998 = G. FIRPO, *La viabilità antica*, in M. Buonocore and G. Firpo (eds), *Fonti latine e greche per la storia dell'Abruzzo antico*, II, 2, L'Aquila 1998, pp. 959-984.
- FOLKE *et alii* 2010 = C. FOLKE, S. R. CARPENTER, B. WALKER, M. SCHEFFER, T. CHAPIN, J. ROCKSTRÖN, *Resilience Thinking: Integrating Resilience, Adaptability and Transformability*, Ecology and Society, 15 (4), 20, 2010. <https://www.ecologyandsociety.org/vol15/iss4/art20/>
- GARRUCCI 1879 = R. GARRUCCI, *Storia dell'arte cristiana*, V, Prato 1879.
- GELICHI 2009 = S. GELICHI, *Alla fine di una transizione? L'Italia settentrionale nel primo Alto Medioevo tra città, villaggi e economie*, Territorio, Sociedad y Poder, 2, 2009, pp. 143-158.
- GELICHI, HODGES 2012 = S. Gelichi, R. Hodges (eds), *From One Sea to Another. Trading Places in the European and Mediterranean Early Middle Ages*, Proceedings of the International Conference (Comacchio, 27th-29th March 2009), Turnhout 2012.
- GIULIANI, LEONE 2011 = R. GIULIANI, D. LEONE, *La cattedrale paleocristiana di s. Maria a Canosa: nuovi dati sulle pavimentazioni musive*, in AISCOM XVI, Tivoli 2011, pp. 153-176.
- GUNDERSON, HOLLING 2002 = GUNDERSON, HOLLING (eds.), *Panarchy. Understanding Transformation in Human and Natural System*, London 2002.
- KAPITÄN 1980 = G. KAPITÄN, *Elementi architettonici per una basilica dal relitto navale del VI secolo di Marzamemi (Siracusa)*, Corsi di Cultura e Arte Ravennate e Bizantina, 27, 1980, pp. 71-136.
- KOHLER, VAN DER LEEUW 2007 = T. A. KOHLER, S. E. VAN DER LEEUW (eds.), *The Model-Based Archaeology of Socionatural Systems*, Santa Fe 2007.
- KOCH 2011 = G. KOCH, *Sarcofagi di età imperiale in Asia minore: una sintesi*, in F. D'Andria and I. Romeo (eds), *Roman sculpture in Asia Minor*, Proceedings of the International Conference to celebrate the 50<sup>th</sup> anniversary of the Italian excavation at Hierapolis in Phrygia (Cavallino – LE, 24-16 May 2007), Portsmouth-Rhode Island 2011, pp. 9-29.
- JAKŠIĆ 2009 = N. JAKŠIĆ, *Il nucleo del complesso vescovile paleocristiano di Zara*, in R. Farioli Campanati, C. Rizzardi, P. Porta, A. Augenti, I. Baldini Lippolis (eds), *Ideologia e cultura artistica tra Adriatico e Mediterraneo orientale (IV-X secolo). Il ruolo dell'autorità ecclesiastica alla luce di nuovi scavi e ricerche*, Atti del Convegno Internazionale (Bologna-Ravenna, 26-29 Novembre 2007), Bologna 2009, pp. 303-312.
- JELIČIĆ-RADONIĆ 1993 = J. JELIČIĆ-RADONIĆ, *Mozaici konsignatorija salonitanske katedrale*, Diadora, 15, 1993, pp. 275-288.
- LAMOINE, BERRENDONNER, CEBEILLAC GERVASONI 2012 = L. LAMOINE, C. BERRENDONNER, M. CEBEILLAC GERVASONI (eds), *Gérer les territoires, les patrimoines et les crises*, Clermont-Ferrand 2012.

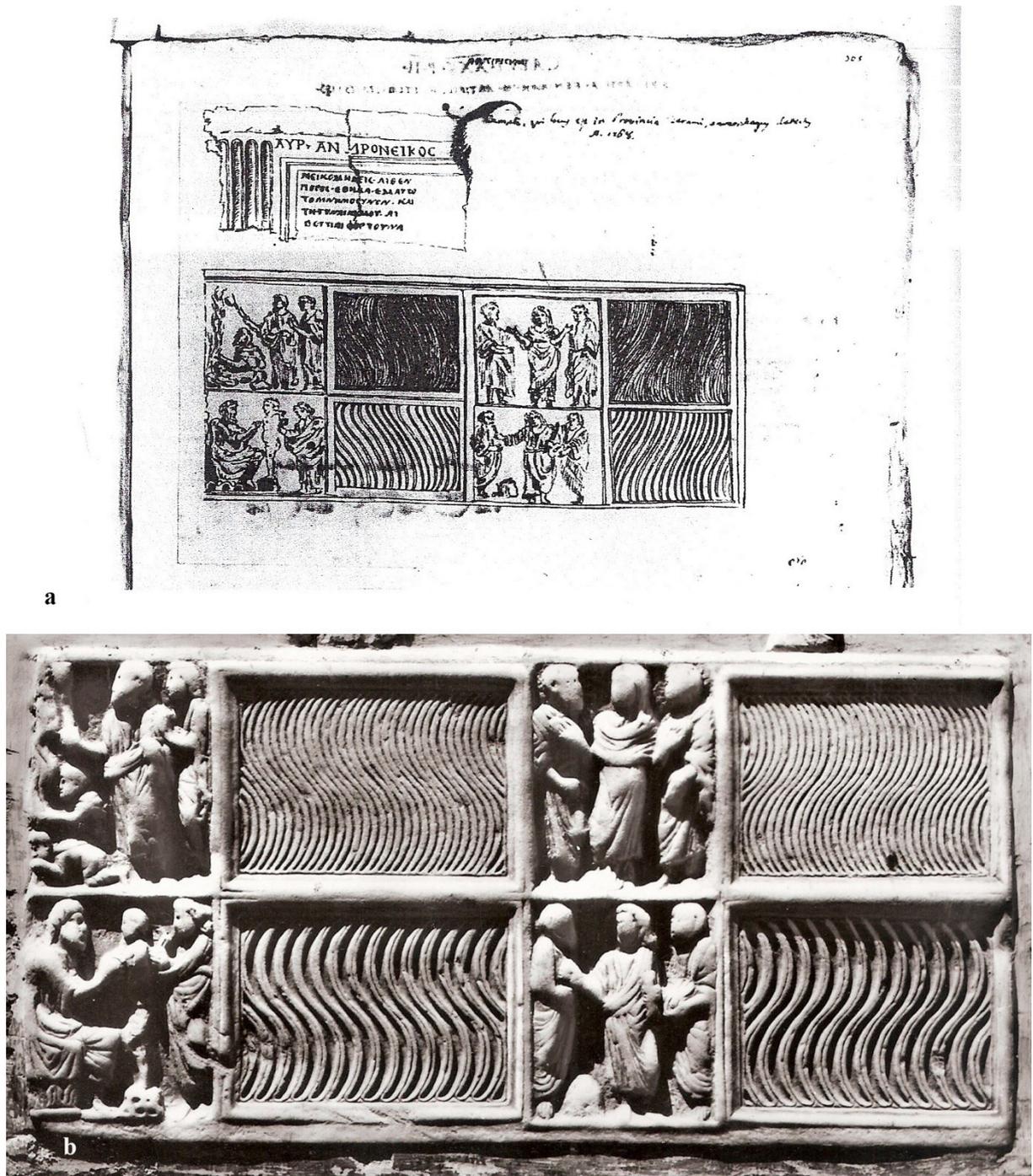
- LA SALVIA 2011 = V. LA SALVIA, *Tradizioni tecniche, strutture economiche e identità etniche e sociali fra Barbaricum e Mediterraneo nel periodo delle grandi migrazioni*, *Postclassical Archaeologies*, 1, 2011pp. 67-94.
- LA SALVIA, VALENTI 2012 = V. LA SALVIA, M. VALENTI, *Insedimenti, strumenti e culture altre fra Mediterraneo e barbaricum. Alcuni esempi*, in C. Ebanista and M. Rotili (eds), *La trasformazione del mondo romano e le grandi migrazioni. Nuovi popoli dall'Europa settentrionale e centro-orientale alle coste del Mediterraneo*, Atti del Convegno internazionale di studi (Cimitile-Santa Maria Capua Vetere, 16-17 giugno 2011), Cimitile (NA) 2012, pp. 121-142.
- LEROY, MERLUZZO 2010 = M. LEROY, P. MERLUZZO, *Les déchets des activités de métallurgie du fer dans les agglomérations de Gaule romaine: ateliers, dépotoirs et rebuts déplacés*, in P. Chardon-Picault (ed.), *Aspects de l'artisanat en milieu urbain: Gaule et Occident romain*, Actes du colloque international (Autun, 20-22 septembre 2007), *Revue d'Archéologie de l'Est*, 28<sup>e</sup> supplément, Dijon 2010, pp. 305-321.
- MANCINI, MENOZZI 2017 = M. C. MANCINI, O. MENOZZI, *Vicantim habitantes. Centri minori in Abruzzo in età romana*, in S. Santoro (ed.), *Emptor et mercator. Spazi e rappresentazioni del commercio romano. Studi e ricerche internazionali coordinate da Sara Santoro*, Bari 2017, pp. 421-441.
- MCCORMICK 2008 = M. MCCORMICK, *Le origini dell'economia europea. Comunicazione e commercio 300-900 d.C.*, Milano 2008.
- MCCORMICK *et alii* 2013 = M. MCCORMICK, U. BÜNTGEN, M. A. CANE, E. R. COOK, K. HARPER, P. HUYBERS, T. LITT, S. W. MANNING, P. A. MAYEWSKI, A. F. M. MORE, K. NICOLUSSI, W. TEGEL, *Climate Change during and after the Roman Empire: Reconstructing the Past from Scientific and Historical Evidence*, *Journal of Interdisciplinary History*, 43 (2), 2013, pp. 169-220.
- MESSINEO, PELLEGRINO 1986 = G. MESSINEO, A. PELLEGRINO, *Il vicus di San Rustico*, in L. Franchi dell'Orto (ed.), *La valle del medio e basso Vomano*, *Documenti dell'Abruzzo Teramano II*, 1, Chieti 1986, pp. 136-166.
- PAGES 2010 = G. PAGES, *Artisanat et économie du fer en France méditerranéenne de l'Antiquité au début du Moyen Âge. Une approche interdisciplinaire*, *Monographies Instrumentum*, 37, Montagnac 2010.
- PANI ERMINI 1976 = L. PANI ERMINI, *Echi e tradizioni diverse nella scultura altomedievale in Abruzzo*, *Abruzzo*, XIV, 1, 1976, pp. 41-60.
- PIERI 2002 = D. PIERI, *Marchands orientaux dans l'économie occidentale de l'antiquité tardive*, in L. Rivet and M. Sciallano (eds), *Vivre, produire et échanger: reflets méditerranéens. Mélanges offerts à Bernard Liou*, (*Archéologie et Histoire romaine* 8), Montagnac 2002, pp. 123-132.
- REAU 2000 = L. REAU, *Iconografia del arte cristiano. Iconografia de la Biblia. El Antiguo Testamento*, Barcelona 2000 .
- REDMAN 2005 = C. REDMAN, *Resilience Theory in Archaeology*, *American Anthropologist*, 107, No. 1, 2005, pp. 70-77.
- RUSSO 1991 = E. RUSSO, *Sculture del complesso eufrasiano di Parenzo*, Napoli 1991.
- SOTOMAYOR 1975 = M. SOTOMAYOR, *Sarcófagos romanos de Espana*, Granada 1975.

- STAFFA 1996 = A.R. STAFFA, *Contributo per una ricostruzione del quadro insediativo dall'età romana al medioevo*, in L. Franchi Dell'Orto (ed.), *Le Valli della Vibrata e del Salinello*, Documenti dell'Abruzzo Teramano, IV, 1, Pescara 1996, pp. 252-331.
- STAFFA 1998 = A.R. STAFFA, *Le produzioni ceramiche in Abruzzo fra fine V e VII secolo*, in L. Saguì (ed.), *Ceramica in Italia: VI-VII secolo*, Atti del Convegno in onore di J. W. Hayes (Roma, 11-13 maggio 1995), Firenze 1998, pp. 437-485
- STAFFA 2006 = A.R. STAFFA, *Da Interpromium a Tocco da Casauria*, Mosciano Sant'Angelo 2006.
- STAFFA 2017 = A. R. STAFFA, *Dall'abitato antico di Interpromium alla grande abbazia altomedievale e medievale di S. Clemente a Casauria. Scavi e ricerche archeologiche 1988-2013*, *Archeologia Medievale*, XLIV, 2017, pp. 235 – 272.
- TULIPANI 1996 = L. TULIPANI, *Da Peltuinum alla Civita Ansidonia*, in A. Campanelli (ed.), *Peltuinum. Antica città sul tratturo*, , Pescara 1996, pp. 50-61.
- TULIPANI 2001 = L. TULIPANI, *Un esempio di continuità fra tarda antichità e medioevo: il complesso culturale di S. Stefani in Rivo Maris a Casalbordino (CH)*, *Archeologia Medievale*, XXVIII, 2001, pp. 323-340.
- VAN DE NOORT 2011 = R. VAN DE NOORT, *Conceptualising climate change archaeology*, *Antiquity*, 85 (329), 2011, pp. 1039-1048.
- VAN OSSEL 2006 = P. VAN OSSEL, *Rural Impoverishment in Northern Gaul at the End of Antiquity: the Contribution of Archaeology*, in W. Bowden, A. Gutteridge, C. Machado (eds), *Social and Political Life in Late antiquity*, Leiden-Boston 2006, pp. 533-565.
- VOLPE 2012 = G. VOLPE, *Per una geografia insediativa ed economica della Puglia tardoantica*, in *Bizantini, Longobardi e Arabi in Puglia nell'alto Medioevo*, Atti del XX Congresso internazionale di studio sull'alto medioevo (Savelletri di Fasano, 3-6 novembre 2011), Spoleto, 2012, pp. 27-57.
- VOLPE 2018 = G. VOLPE, *Storia e archeologia globale dei paesaggi rurali in Italia fra tardoantico e medioevo*, Bari 2018.
- WARD-PERKINS 1980 = J. B. WARD-PERKINS, *Nicomedia and the Marble Trade*, *Papers of the British School at Rome*, XLVIII, 1980, pp. 23-69.
- WARD-PERKINS 1983 = J. B. WARD-PERKINS, *Commercio dei marmi nel mondo romano*, in *L'Adriatico tra Mediterraneo e penisola balcanica nell'antichità*, Atti del convegno (Lecce-Matera, 21-27 ottobre 1973), Taranto 1983, pp. 239-245.
- WILPERT 1929 = G. WILPERT, *I sarcofagi cristiani antichi*, I, Città del Vaticano 1929.





**Fig. 2** Peltuinum (AQ). Aerial view of the temple with the Late Antique workshops in the upper right corner (MIGLIORATI 2011).



**Fig. 3** a- the inscription of the sarcophagus of Campovalano in the records of Gaetano Marini (BUONOCORE 2001); b- the early Christian sarcophagus preserved in Campovalano (photo S. Antonelli)



**Fig. 4** a- the early Christian sarcophagus of Casauria (photo S. Antonelli); b- the early Christian sarcophagus of Barcelona (WILPERT 1929)



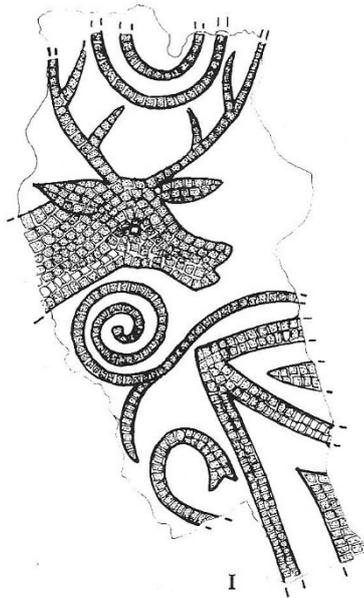
**Fig. 5** The church of S. Pietro in Campovalano (TE) (photo S. Antonelli).



**Fig. 6** The church of S. Maria a Vico (TE) (photo S. Antonelli).



**Fig. 7** S. Maria a Vico. Transenna of window (photo S. Antonelli).



**Fig. 8** S. Stefano in Rivo Maris at Casalbordino (CH). Detail of mosaic floor (TULIPANI 2001).

**Contact to the authors:**

Sonia Antonelli (Università "G. d'Annunzio" Chieti-Pescara)  
e-mail: [sonia.antonelli@unich.it](mailto:sonia.antonelli@unich.it)

Chiara Casolino (Università "G. d'Annunzio" Chieti-Pescara)  
e-mail: [chiara.casolino@unich.it](mailto:chiara.casolino@unich.it)



Dieser Beitrag ist lizenziert unter einer [Creative Commons Namensnennung - 4.0 International Lizenz](https://creativecommons.org/licenses/by/4.0/).