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dans l'Antiquité  
et au Moyen Âge.  
Mobiliers d'équipement  
et d'entretien des véhicules  
terrestres, fluviaux et maritimes**

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Cristina CORSI

## Stop & go. Men, animals and vehicles at Roman road stations in Gaul

### RÉSUMÉ

Les stations routières, souvent incorrectement définies comme des stations de poste ou *mansiones* ou *mutationes*, sont une catégorie particulière de sites archéologiques, qui comprend une grande variété de possibilités, entre de petits bâtiments isolés et de grands complexes. La plupart des identifications de ces complexes avec des infrastructures fonctionnelles pour assister les voyageurs sont basées sur des caractéristiques architecturales (par exemple, la présence de cours accessibles aux véhicules directement depuis la route principale, d'étables et d'autres types d'abris pour animaux, d'abreuvoirs et de mangeoires). Dans quelques cas, les traces d'activités de forge sont considérées comme des indicateurs clairs de réparation des véhicules. La particularité de l'assemblage et la découverte de petits objets liés au harnais, aux véhicules et même aux chaussures sont considérés comme d'autres marqueurs significatifs. Cet article se concentrera sur l'analyse des assemblages, présentant plusieurs études de cas de la Gaule romaine.

*Mots-clés :* Voies romaines, stations routières, aspects pratiques du voyage, Gaule, culture matérielle, analyse de l'assemblage archéologique, objets liés au transport, mobilité dans le monde romain.

## SUMMARY

Road stations, often improperly defined as post stations or *mansiones* and *mutationes*, are a peculiar category of archaeological sites, which includes a large variety of possibilities, from small isolated buildings to large complexes. Most of the identifications of these complexes with infrastructures functional to assisting travellers are based on architectural features (e.g. presence of courtyards accessible to vehicles directly from the main road, presence of stables and other types of animal shelters, watering places and mangers). In a few cases, the presence of a forge or traces of blacksmithing activities are considered as clear indicators of the deeds carried out to repair vehicles. The peculiarity of the assemblage and the finding of small objects related to the harness, to vehicles and even footwear are considered other meaningful markers. This paper will focus attention on the analysis of the combination of these elements, presenting several case-studies from Roman Gaul.

*Keywords:* Roman roads, road-stations, practicalities of travel, Gaul, material culture, analysis of archaeological assemblage, transport-related findings, mobility in the Roman world

## 1. INTRODUCTION

Litres of ink have been spilled about Roman road-stations: juridical and topographical issues have attracted research as much as archaeological and architectural aspects<sup>1</sup>. In this essay, however, we will limit our investigation to the material aspects related to the traces of the presence of men, vehicles and animals in the diversified range of road-stations that were displayed along the Roman roads.

Independently from the category in which the stopping place could have been framed (e.g., a large complex where many amenities were available and an heterogeneous assortment of services was offered, or a humble building where only basic facilities were provided), and disregarding the type of management of the structure (i.e., a public or private structure), it is clear that all travellers—including their animals—had the same need of rest and lodging, food and water, veterinary assistance, entertainment (e.g., prostitution) or other additional services (e.g., vehicle repair).

If properly fed and rested, equines could cover a minimum of 65 km to a maximum of 90 km per day, given that mules could move on heavy terrain at around 7.5 km/h, travelling up to 10-12 km/h without pause<sup>2</sup>. Lower estimations are provided for horses, however, considering that even “a very athletic, eager horse” cannot trot faster than 5 km/h<sup>3</sup>. The average speed of two wheeled carriages is approximated to 8 km/h, taking into account that keeping this average speed requires a very skilled rider<sup>4</sup>.

Besides, these mounts were somehow costly to maintain, since they needed large portions of fodder per day, which ranged from a minimum of almost 7 kg to a maximum of 9 kg<sup>5</sup>.

Obviously, to meet these needs of break and feeding, some parts of the inns were accessible to vehicles and pack and ride animals. Therefore, the presence of stables

and other types of shelters for the animals (e.g., watering places and mangers) is central in any identification of a building as being a facility for travellers.

Of course, at least two different scenarios have to be designed. The predictably more frequent occurrence is that travellers owned draught animals and even a vehicle. Textual evidence of this contingency is very steady. Here, it is sufficient to mention the complaints of travellers that were reported by Pliny the Elder: in the course of a journey through the Arabian Peninsula, travellers were charged for any sort of service, including the *pabulum*; thus, the considerable sum of 688 *denarii* could have been needed for each camel<sup>6</sup>. Even more folkloristic is a stele from Isernia, Italy, reporting the dialogue between a customer and the innkeeper. As pictured on the stele, the innkeeper charges the sum of 2 axes in exchange for the fodder of the mule (Fig. 1, n. 1; Fig. 2\_a)<sup>7</sup>. Pack animals are also well represented in the iconographic repertoire from famous stopping-places, such as the stations at the pass of the Great St. Bernard (Fig. 1, n. 2; Fig. 2\_b)<sup>8</sup>. In the event that the mounts were not changed during the journey, the rest and the breaks for the animals had to be carefully planned to avoid overexertion, which could have driven to permanent damage<sup>9</sup>.

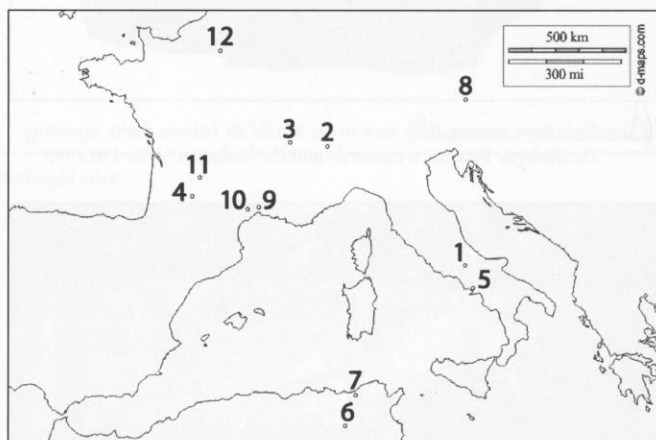


Fig. 1 : Schematic map with location of the sites cited in the text: 1: Isernia, Italy; 2: Great St. Bernard, Italy; 3: Buissières-Panossas, France; 4: Saint-Jean-Poutge, France; 5: Pompeii, Italy; 6: Tebessa, Algeria; 7: Tabarka, Tunisia; 8: Noreia, Austria; 9: Ambrussum, Villetelle, France; 10: Soumaltre, France; 11: Pech Piélat (Séniergues), France; 12 Louvres, Val-d'Oise, France:

On the contrary, when people moved on behalf or in the interest of the state and were awarded the *vehiculatio* (i.e., the right to make use for free or for a convenient rate of the facilities of the state service for transport and logistics), animals were changed at regular intervals

6 Plin., *N.H.*, 12.65. We have to stress that, on the basis of juridical sources, *pabulum* can be translated here as ‘fodder’ better than ‘pasture’: Corsi 2000, 23 (n. 4), 45 (n. 130), 48 (n. 146).

7 *CIL*, IX 2689; Viti 1989.

8 Wiblé 1998, 77: fragment of votive tablet found at the Plan de Jupiter before 1808, featuring a mule or a packhorse. Now at the Musée de l’Hospice du Grand St-Bernard.

9 Haldon 2006, 144 calculates at least one day rest in six for horses and mules, that also regularly need free grazing.

1 One of the most constraining limits of the research is the connection that has been established, almost without exceptions, between the road stations and the *cursus publicus*. The latter, often translated as “postal service”, is better defined as the “imperial information and transportation system”. It is generally considered as the administrative department in charge of the construction, maintenance and management of the road stations but my recent research shows that, mostly until the reform of Diocletian, when the office was called *vehiculatio*, the relationship was not so obvious: Corsi 2020. For the *cursus publicus* see, in general: Kolb 2000 and most recently Lemcke 2016.

2 Haldon 2006, 142.

3 Hyland 1990, 261.

4 Hyland 1990, 261. E.g. to average 13 km/h for a distance of 80 km necessitates to speed up considerably for much of the route. For this reason, the eight day chariot trip by Caesar from the Rhone to Rome is to be considered an amazing achievement (Plut. *Caes.*, 17.4).

5 Haldon 2006, 144-145. The fodder had to be composed of about a third of barley and the rest of hay or grazing. In addition, horses required a minimum of almost 23 litres of water that might have increased up to more than 36 litres, according mainly to temperature and the heaviness of work.



at halt-stations<sup>10</sup>. In this case, then, the rest and care of the animals were arranged at the road-stations<sup>11</sup>.



Fig. 2.a: Stele from Isernia, Italy, now in the Musée du Louvre, Paris, reporting the dialogue between a customer and the innkeeper. After Viti 1989.



Fig. 2.b: Bas-relief carved on a stone slab depicting a harnessed horse found at the Plan the Jupiter (Valais, Switzerland). Now at the Musée de l'Hospice du Grand St-Bernard. After Wiblé 1998.

10 On the role of horses and mules in the framework of the state system of transportation (simplified as *cursus publicus* by the author), on the possibility to individuate imperial breeding-ranches and the ways in which mounts were provisioned and hospitality was provided by means of requisitioning and fiscal impositions on the provincials, see Mitchell 2014.

11 The general framing of these infrastructures that are thought to be part of the state system of transport and communication (the so-called *cursus publicus*) can be found in Corsi 2000.

## 2. ARCHITECTURAL AND TECHNICAL FEATURES

Whatever the case, the buildings where travellers stopped had to offer facilities for animals and vehicles. As anticipated, these facilities consisted mainly of courtyards accessible from the road, shelters for animals and vehicles, provisions for watering and feeding and, eventually, stables for the upkeep of vehicles.

The setting of gates and ramps to access inner courtyards is one of the most easily detectable archaeological evidence, and almost everywhere in the Roman world there are rural complexes—alternatively identified as villas or road-stations—that present these marks. Among the innumerable examples, we can discuss a pair of case-studies from *Gallia*, which are chosen because of their novelty and the relative completeness of the archaeological dossier.

The rural complex of Buissières at Panossas (Département de l'Isère, Auvergne-Rhône-Alpes, Fig. 1, n. 3), interpreted as a large villa or as a road-station, features a large courtyard enclosed by a wall, and it is predictably accessible by means of a large driveway<sup>12</sup>. Several units are scattered inside a large, rectangular perimeter wall. Their setting and furnishing in association with the findings point at agricultural or industrial activities for Buildings E and L, and a more residential function for Buildings F, M and R (Fig. 3). Complex A is a large bath-house<sup>13</sup>. The presence of thermal installations is considered meaningful for the identification of rural complexes with facilities for travellers, since hygienic needs of customers might have been met to increase the attractiveness of the establishment<sup>14</sup>.

In further detail, the range of rooms in Building E is a specialised series of workshops. Built in Late-Republican times, it was replaced during the course of the Julio-Claudian age by a large granary (H). As a result, the metallurgic activities would have then moved to Building L. The latter, even if labelled as an *auberge*, hosted industrial activities connected with blacksmithing. Building B reached the typical shape of a *stabulum* throughout the course of the first century AD. With three portico wings displayed in a U-shape around a central court, it seems to have played the role of road-house until the fourth century AD: when it was also converted in a productive structure. Its rooms were then occupied by fireplaces and industrial or domestic ovens, since the abandonment levels were full of iron ores, furnaces waste and semi-finished products. We will see later how the findings are considered to concur with the identification of a complex devoted to assisting travellers.

The other settlement identified as a road-station is located along the road linking Bordeaux and Toulouse, via Éauze (*civitas Elusa*) and Auch (*civitas Auscius*).

12 Poux, Borlenghi 2016, 147.

13 Poux, Borlenghi 2016, 148-150.

14 Medri 2016.



Fig. 3: Plan of the rural complex of Buissières at Panossas (Isère, France). After Poux, Borlenghi 2016.

This itinerary is pictured in the *Tabula Peutingeriana*, and it is partially followed by the Pilgrim of Bordeaux (*It. Burd.*, 550, 6-8). In relationship with the latter source, the complex excavated at Saint-Jean-Poutge (Département Gers, Occitanie, Fig. 1, n. 4) on the bank of the river Baise, tributary of the Garonne, has been identified as the *mutatio Vanesia* (*It. Burd.*, 550, 7)<sup>15</sup>. At the site of la Molère, a complex—*soigné et bien équipé*—was built at the end of the first century AD. Its planimetric and architectural features—including the driveways I and II flanked by symmetrical rooms (IV-VII) and an access to the inner court (III)—clearly point at an infrastructure that was functional enough to assist travellers (Fig. 4)<sup>16</sup>. The fact that the inner court (III) was heavily travelled by vehicles is shown by the cart ruts still preserved on the floor<sup>17</sup>.

The same sort of driveways had to be set up in an urban context for those premises devoted to the hospitality of travellers. Predictably located at the edge of town or in the

suburbs, this sort of inn is usually identified thanks to the presence of large courtyards that were made accessible to vehicles by way of paved ramps, which often show the typical cart-ruts.

Even if the work of Marie-Adeline Le Guennec about hospitality in the Roman world nuances what has been so far stated about inns<sup>18</sup>, recent research allows us to draw a much more detailed picture of how wheeled traffic was streamed in *Pompeii*<sup>19</sup> (Fig. 1, n. 5). Indeed, in such a bustling town with intensive traffic, a large availability of spaces for the storage of wheeled vehicles was required. Since mules and human porters, which likely bore the greatest load, do not leave behind manifest archaeological evidence (e.g., cart-ruts and other traces of wear and tear of road-pavements), and because the occurrence of mangers in *tabernae* cannot be unequivocally attributed to guest-houses and inns, research has to focus “on those locations where carts can be observed to leave the space of the streets (such as ramps) and the spaces to which they led, to be considered then as stables”<sup>20</sup>.

15 Colleoni 2016b, 71-2. The site was discovered in the 1990s, and was soon prospected, while excavations were started later. In the *Itinerarium Burdigalense* the *mutatio* is said to be at a distance of 12 Gallic leagues from Éauze and 8 from Auch.

16 Colleoni 2016b, 75.

17 Colleoni 2016b, 86.

18 Le Guennec 2016, 2019.

19 Poehler 2011, 194.

20 Poehler 2011, 195.

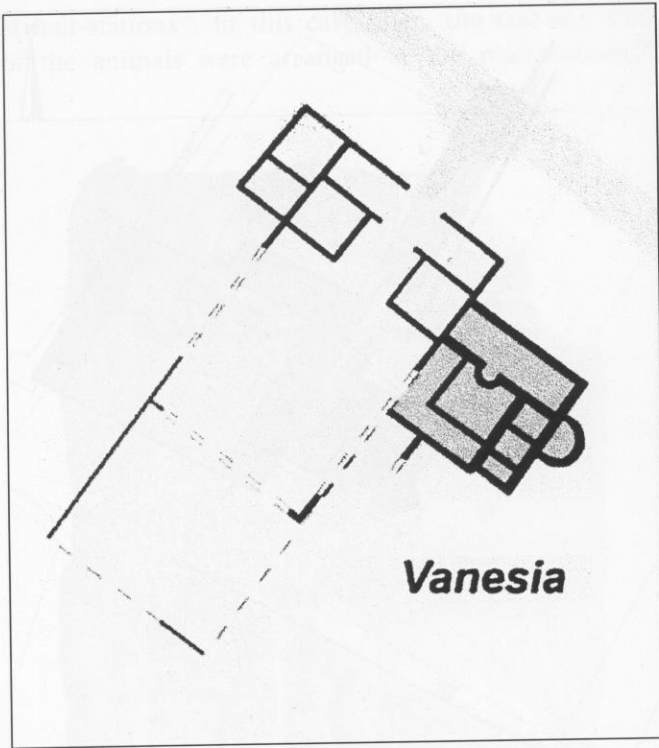


Fig. 4: Saint-Jean-Poutge (France). Plan of the complex identified with the mutatio Vanesia. After Colleoni 2016b.

Obviously, as much as “a ramp signals the specific need for a large volume of material to be brought into and/or out of the property or for a high number of vehicles to be staged within the property... [and] all ramps lead to a stable area”<sup>21</sup>, this is not a unmistakable indication of an hostel.

21 Poehler 2011, 196.

We have to take into account that in urban areas the high costs of real-estate brought an accurate estimation of cost-benefit. Therefore, stables could have been profitable, providing valuable services and housing for the vehicles and animals of the guests, as well as parking lots for vehicles and animals of owners of productive and commercial enterprises. Nevertheless, in Pompeii, these ‘transport properties’ (i.e. properties with ramps and stables) are usually associated with inns<sup>22</sup>.

In many of these buildings, both in the urban and rural context, other markers can point to the function of ‘service area for traffic’, such as the presence of many mangers and troughs.

Some of the best-preserved examples of watering facilities come from *Africa Romana*, specifically from the so-called Christian Complex in the suburb of the ancient town of *Theveste*: nowadays Tebessa, Algeria (Fig. 1, n. 6). The vast sanctuary is located just outside the town walls, along the road heading to Haidra (*Ammaedara*) in Antiquity. The complex was built around a monumental church, attracting pilgrims, who were hosted in at least two large buildings, located next to some big water pools. The buildings, especially the largest one, are thought to have had a second floor, where the bedrooms were located (Fig. 5); however, the ground floor was entirely devoted to stable the horses, as is clear from the large number of mangers<sup>23</sup>.

22 Poehler 2011, 196.

23 Christern 1970, 103; Christern 1976, 90-94.

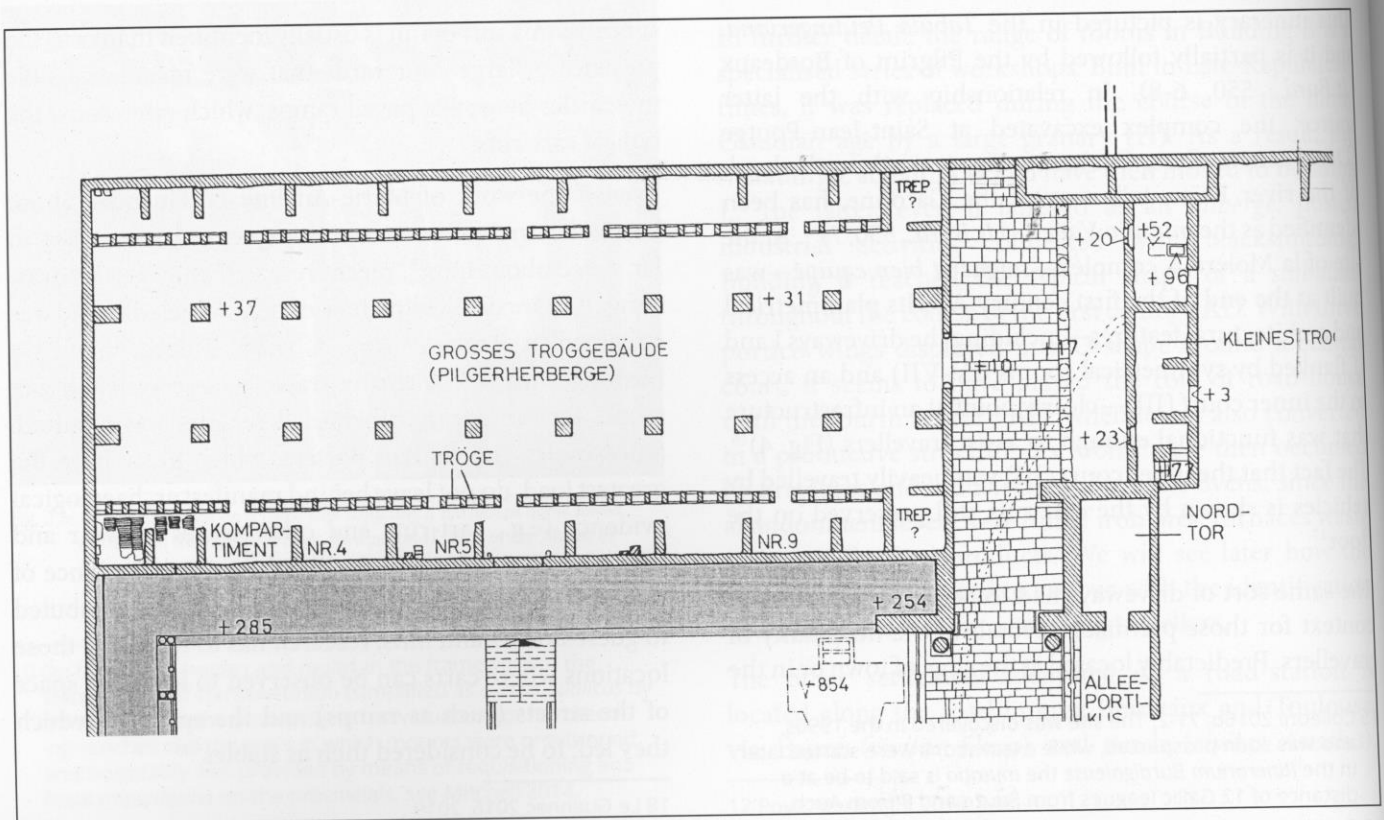


Fig. 5: Tebessa, Algeria. Plan of the so-called Big Stables, in the hospitalia of the Christian Complex. After Christern 1970.

The reconstructions of the architectural type of the stables is based also on some iconographic evidence of stables connected to riding facilities. These are often provided in large private or imperial estates, such as those depicted on the mosaic of Tabarka, in Tunisia (Fig. 6)<sup>24</sup>. They consist of a large self-contained stable block, with a single horse tethered to the door functioning as 'caption'. The building clearly features a courtyard, a portico and an upstairs loft (*faenilia*), where hay and fodder were likely stored<sup>25</sup>.

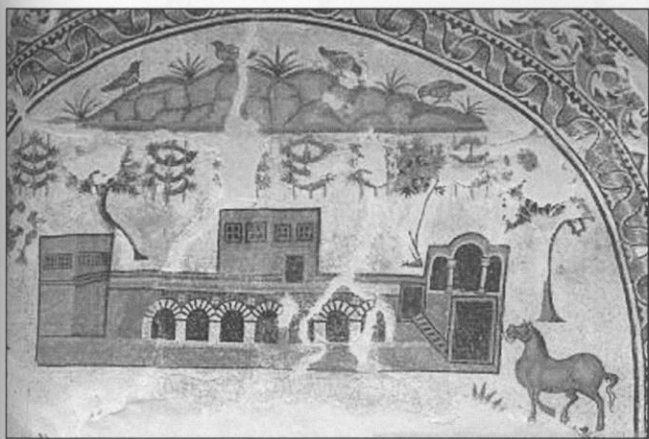


Fig. 6: Tunis, Bardo Museum. The stables pictured in the mosaic from Tabarka, Tunisia. After Yacoub 1993.

Other factors can be taken into account to support the identification of a building as a facility for travellers. Indeed, in a few cases, the presence of a small forge, metal furnaces or traces of blacksmithing activities are considered as clear indicators of the deeds carried out to repair vehicles and assist travellers.

Such is the case of a building excavated at Noreia in Styria (Fig. 1, n. 8), Austria. It is a two-storey, elongated building: on one side of which is a large yard to park vehicles. One of the rooms of the ground floor has been identified with a stable, which could host up to twelve animals; while a series of rooms, in a second phase provided with a heating system, has been recognised as the living quarter: with a kitchen, a sort of bureau-reception and a dining room. A blacksmith workshop with the smelting oven and a full set of tools was found in perfect state, in the southwest corner of room 5 (Fig. 7). The upper floor, entirely built in wood, has been lost but is thought to have encompassed the bedrooms. This complex was built in Augustan age and was operational for three centuries<sup>26</sup>.

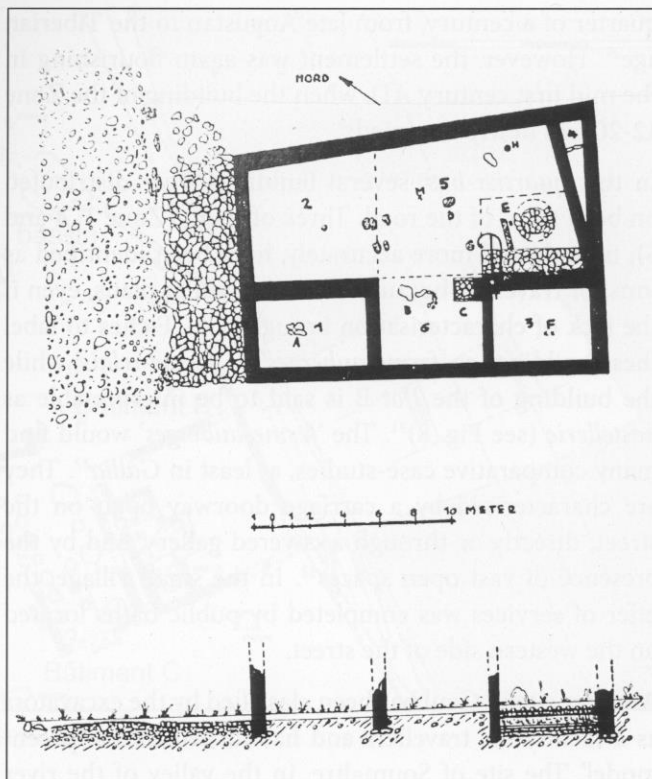


Fig. 7: Noreia (Styria, Austria). Plan of the building identified as road-station. After Schmid 1932.

With the final example, we move to a well attested category of guest-houses that were inserted in a small urban settlement or village; the spatial and economic connotation of which is heavily affected by the presence of a well-travelled road.

The renown archaeological site of *Ambrussum*, along the Domitia Way in *Gallia Narbonensis*, can be pointed at as one of the most characteristic *village-rue* in *Gallia* (Fig. 8). The village, originally an *oppidum* settled by Gauls of the tribe of Volques Arécomiques, was well positioned at the crossing of the river Vidourle, between *Sextantio* and Nimes, nowadays in the territory of the municipality of Villetelle (Département Hérault, Occitanie, Fig. 1, n. 9). It, therefore, developed into a stopping place, where several facilities for travellers were offered, and is mentioned in most of the ancient itineraries, including the silver beakers from Vicarello<sup>27</sup>.

Mainly with the investments done in Augustan times to improve the road network, in addition to the construction of a bridge that is still known as Pont-Ambroix, a brand new sector was settled on the terrace at the foot of the hill where the oldest village, delimited by walls, was perched<sup>28</sup>. The setting of this large platform on the bank of the river implied consistent works, aiming primarily at protecting the terrace from the flooding of the river. The operations were not too successful, since around 10 BC a flood caused the desertion of the area for at least a

27 It is mentioned with different spelling: *Ambrussum* in *It. Ant.* (389, 1; 396, 6), *Ambrussum* (1-3) and *Ambrusio* (4) in the Vicarello beakers, *Ambrusum* in the *Tabula Peutingeriana*, *mutatio Ambrosi* in *It. Burd.* (552, 7); Fiches 1998, 239.

28 Fiches 1998, 250.

24 Now at the Bardo, 10; Yacoub 1982; Yacoub 1993.

25 Rossiter 1992, 44-46.

26 Schmid 1932; Casson 1974, 201.

quarter of a century, from late Augustan to the Tiberian age<sup>29</sup>. However, the settlement was again flourishing in the mid first century AD, when the building of the Zone 12-20 was newly occupied<sup>30</sup>.

In this *quartier-bas*, several buildings were distributed on both sides of the road. Three of them (Zone 1, 4 and 5), investigated more accurately, have been identified as inns for travellers because of their peculiar plans, even if the lack of characterisation brought J.-L. Fiches to label these buildings as '*ferme-auberges*' or '*ferme-relais*', while the building of the *Ilot B* is said to be interpretable as *hostellerie* (see Fig. 8)<sup>31</sup>. The '*ferme-auberges*' would find many comparative case-studies, at least in *Gallia*<sup>32</sup>. They are characterised by a carriage doorway open on the street, directly or through a covered gallery, and by the presence of vast open spaces<sup>33</sup>. In the small village, the offer of services was completed by public baths located on the western side of the street.

Another site in Gaul has been classified by the excavators as a facility for travellers and has turned into a 'parent model'. The site of Soumaltre, in the valley of the river Hérault (Fig. 1, n. 10), is indeed located along the Roman road that connected *Cessero* (Saint-Thibéry) with *Segodunum* (Rodez) and *Luteva* (Lodève), pictured in the *Tabula Pentigeriana*. The site is described as a *village-rue*, and one of the buildings partially brought to light

(i.e., the so-called *établissement occidental*) has been labelled as *ferme-auberge*<sup>34</sup>.

Indeed, in the Augustan period, this building was configured as a compact edifice spread over ca. 450 m<sup>2</sup>, and built on the western side of the newly structured road<sup>35</sup>. In the period between 20 AD and 70 AD, with the addition of two more structures, the complex reached a total surface of 750 m<sup>2</sup> (Fig. 9)<sup>36</sup>. A consistent investment would have allowed the owner(s) (i.e., private investors) to meet the needs of travellers, thanks to the construction of a small thermal bath and a large drinking trough with running water<sup>37</sup>. The fact that this was a private enterprise would explain why the building was already abandoned before 70 AD, having been in use no longer than 50 years<sup>38</sup>.

The intensity of the traffic along the road would be proven also by the finding of a fragment of hipposandale, a chariot hub fret and a harness pendant<sup>39</sup>. At the same time, the peculiar assemblage with a dominant percentage of tableware in *sigillata* from the *ateliers de la Graufesenque*, the many fragments of glass cups, the rich and varied composition of food waste and the wide and diversified origin of the goods consumed here would prove the attendance of a large number of customers<sup>40</sup>.

29 Fiches 1998, 251.

30 Anyway, environmental or economic factors kept on affecting this sector, where buildings underwent several important restructuring works. In addition, the numismatic record shows a crisis in the second half of the third century: Fiches 1998, 253.

31 Fiches 2016, 26.

32 See, e.g., Thernot *et al.* 2004, 101-102, 365-366.

33 Fiches 1996, 24.

34 Thernot *et al.* 2004, 363.

35 Thernot *et al.* 2004, 61-69.

36 Thernot *et al.* 2004, 71-103.

37 Thernot *et al.* 2004, 71-103.

38 Thernot *et al.* 2004, 366.

39 Thernot *et al.* 2004, 170-171, 363.

40 Thernot *et al.* 2004, 365.

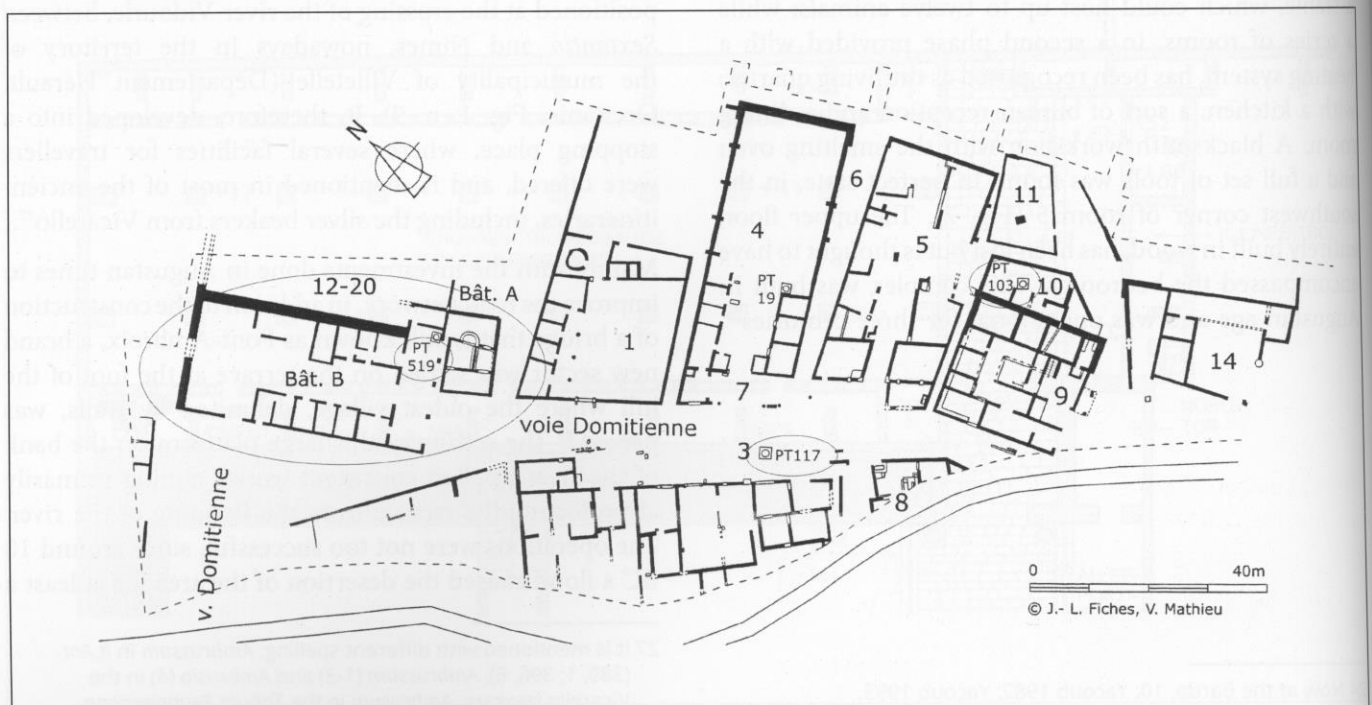


Fig. 8: Villetelle (Hérault, France). Plan of the quartier bas of the village routier of Ambrussum, with indication of the location of the *Ilot B* and of the wells. After Fiches 2012.

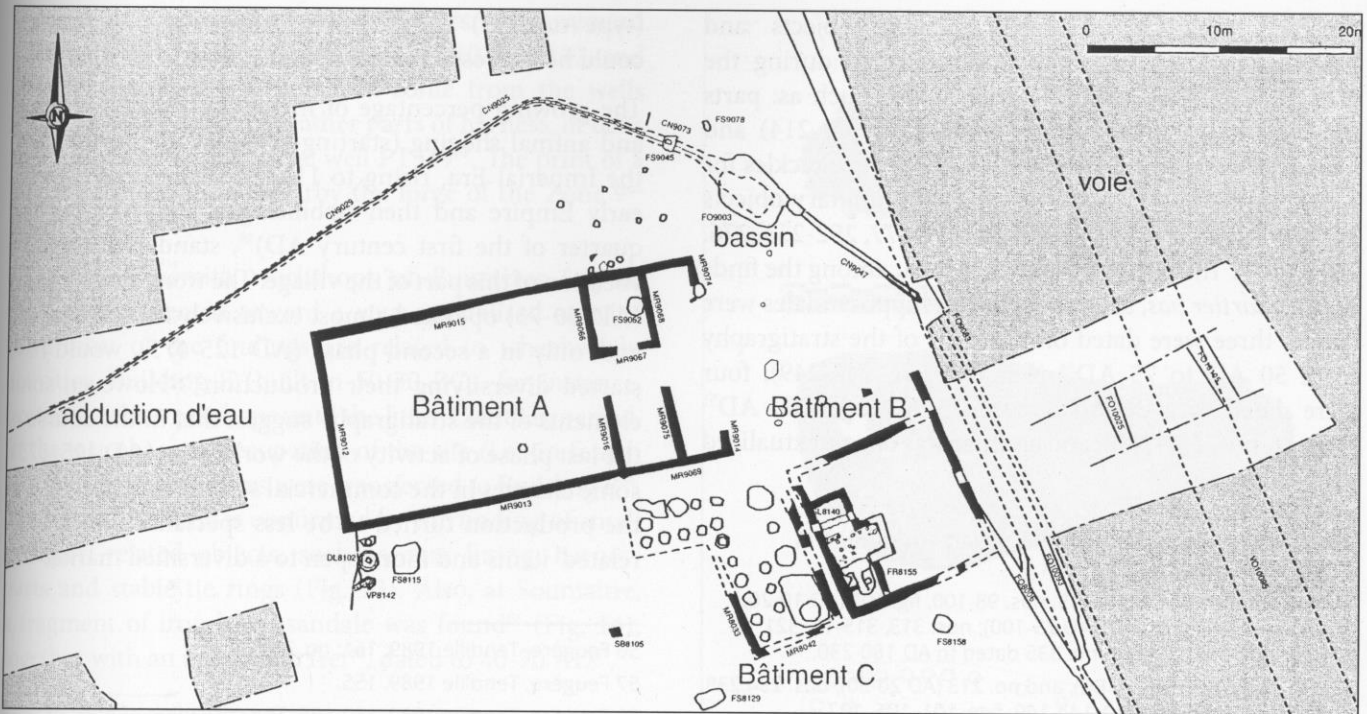


Fig. 9: Soumaltre (Herault, France). Plan of the building identified as road-station. After Thernot et al. 2004.

### 3. FINDINGS AND MATERIAL CULTURE

Aside from planimetric features and the presence of facilities for feeding or watering the animals, we wish to address the material evidence and the findings that can be directly related to the presence of mounts, draught animals and vehicles to support the identification of a rural complex with a road-station or a small infrastructure for assisting traffic. Some of the most meaningful finds are predictably related to the harness of animals and vehicles. Wheel rims, hipposandales<sup>41</sup>, pieces of carriages and wagons and tacks for footwear are certainly markers of activities related to transport<sup>42</sup>. We can start our review from the same site of *Ambrussum*,

41 Following the first essay by Lefebvre des Noëttes (1931), this peculiar type of devise to protect the hoofs of horses and other equines is connected to the presence of a Roman road or a road-station (e.g.: Coulon 2007, 34, following Fustier 1968. The map with the finds of hipposandales that was available at the beginning of the 1930s suggested a connection with the army deployed along the Rhineland (Lefebvre des Noëttes 1931, 143-44), while more recent research has shown that they were relatively common in Languedoc (Feugère, Tendille 1989, fig. 109). They are rarely found in rural sites but increase in settlements crossed by important roads. This device, that can be described as a metal trim, an accessory held by flaps on the front and the rear of the hoof, secured by a soft leather strap, is occasionally mentioned in ancient sources with the Latin name of *solea* (e.g. Suetonius reports about the weirdness of the emperor Nero who used to shoe his mules with silver *soleae*: Suet., *Ner.*, 30.3), but has never been described in detail. It is, however, depicted in some ancient bas-relief such as the one featuring a *mulomedicus* in the Museum of Nancy; Lefebvre des Noëttes 1931, 188-189. Hipposandales are thought to have been used only when animals were suffering from lameness, or to protect the hoofs of equines from excoriations and excessive worn on rough pavements (Coulon 2007, 34). Lawson 1978 argues for a therapeutic use.

42 Hyland 1990, 259. However, this kind of finds can as well be considered typical of farms and production and/or distribution centres. Indeed, the prove that some crafting activity was carried on-site can be as well not meaningful as long as the metalworking is not unambiguously connected to transport.

since the qualification as inn of the buildings described above seems to be confirmed by the finding of hipposandales, harness clips, instruments, tools and other pieces of vehicles and footwear<sup>43</sup>. More than 900 iron ores (for a total of around 23 kg, of which 12 kg, 97 pieces, are identified as bloom), more than 3000 iron objects (a total of 53 kg) and some instruments for metallurgy come from the so-called *Ilot B* (i.e. the northern sector of the excavated area)<sup>44</sup>.

In the course of the so-called 'phase C' (50-75 AD) there were at least two areas where metal processing took place: one in open air (*secteur 25*) and one inside a room (room 29)<sup>45</sup>. Most waste from room 29 has been identified as fragments of iron tyres (i.e., the iron hoop that is fitted around the wheel rim), suggesting that this workshop was mainly devoted to the upkeep of wagons and carts<sup>46</sup>. Still, it is worth noticing that in this context no other element related to the vehicles' hardware (e.g., *clavettes*, *volubilis* and hubs of wheels) has been found<sup>47</sup>, while this type of find was relatively common during the excavations of 1980s in the same area (*infra*). Strangely, also no hipposandale was found in the course of the most recent excavations of the *Ilot B*<sup>48</sup>, suggesting that the pieces were fabricated in the indoor forge and assembled in the outdoor workshop<sup>49</sup>.

43 Fiches 1996, 25; Fiches 2009, 317-352.

44 Fiches 2009, 317.

45 Fiches 2009, 322-324. It is argued that the two workshops stood for different specialised manufacturing, the indoor devoted to permanent standard production, the outdoor for more occasional although precision works.

46 Fiches 2009, 325.

47 Fiches 2009, 326.

48 Feugère 1992, 87-89.

49 Fiches 2009, 332-333.

On the other hand, many metallic objects and fragments related to traffic were collected during the earlier excavation in the quartier Sablas, such as: parts of wheel sets (e.g., hubs<sup>50</sup> (Fig. 10, nos. 97, 214) and bronze *clavettes*<sup>51</sup> (Fig. 10, nos. 98-100); a few tackles for footwear (Fig. 09, nos. 213, 234, 238)<sup>52</sup>; military objects and parts of harness (Fig. 10, nos. 174-177, 252-253, 276, 281-284)<sup>53</sup>. The most relevant fact is that among the finds of the *quartier bas*, at least eight iron hipposandales were found: three were dated on the basis of the stratigraphy from 50 AD to 75 AD<sup>54</sup> (Fig. 11, nos. 247-249); four were dated to a period between 75 AD and 100 AD<sup>55</sup> (Fig. 11, nos. 277-280); and another was decontextualized

(type Aubert 3)<sup>56</sup>. At the time of the finding, this collection could be addressed as the largest in southern Gaul<sup>57</sup>.

The growing percentage of materials related to harness and animal shoeing (starting at 4% at the beginning of the Imperial Era, rising to 11-24% in the course of the early Empire and then stabilising at 22% in the third quarter of the first century AD)<sup>58</sup>, stands for a special vocation of this part of the village. The workshops initially (AD 50-75) operated almost exclusively for wheelwright and, only in a second phase (AD 125-175), would have started diversifying their production<sup>59</sup>. However, some elements of the stratigraphy suggest that in the course of the last phase of activity of the workshops (AD 125-175), some changes in the commercial strategies occurred, and the production turned to be less specialised on 'traffic-related' items and more open to a diversified market<sup>60</sup>.

50 Feugère, Tendille 1989, 145: no. 97 (AD 10-20), no. 214 (AD 20-50), figs. 102, 106.

51 Feugère, Tendille 1989, 145: nos. 98-100, fig. 102 (AD 10-20); 157: nos. 264, figs. 108 (AD 75-100); nos. 313, 315-16, 321 (AD 120-180); 159-161: no. 335 dated to AD 180-230.

52 E.g., nos. 32-36 (30-10 BC), and no. 213 (AD 20-50); nos. 234, 238: Feugère, Tendille 1989, 144-149, figs. 101, 106, 107.

53 Nos. 174-177, dated to phase III (AD 10-20); nos. 252-253 (AD 50-70); nos. 276, 281-284 (AD 75-100); nos. 337-339 (AD 180-230): Feugère, Tendille 1989, 147, 150-155, 159-161, figs. 104, 107, 111.

54 Feugère, Tendille 1989, 150-154: nos. 247-249, fig. 107.

55 Feugère, Tendille 1989, 155: nos. 277-280.

56 Feugère, Tendille 1989, 161: no. 361.

57 Feugère, Tendille 1989, 155.

58 Feugère, Tendille 1989, 162-165. The spreading of finds of hipposandales is much larger than what was estimated at the time of the study of Aubert (1979), but it is confirmed that this sort of protection and reinforcement of the horse's hoof was used almost exclusively on cobbled roads.

59 Fiches 2009, 322-342.

60 Fiches 2009, 341-2.

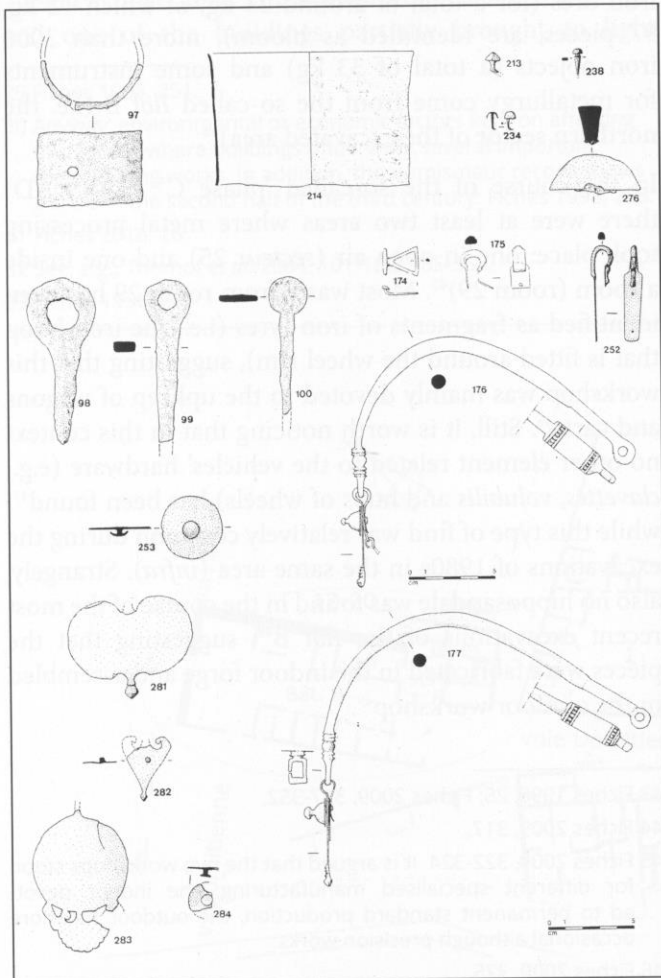


Fig. 10: Villetelle (Hérault, France). Metal objects from the excavations of Ambrussum that can be related to vehicles and harness. Elaboration Author after Feugère, Tendille 1989.

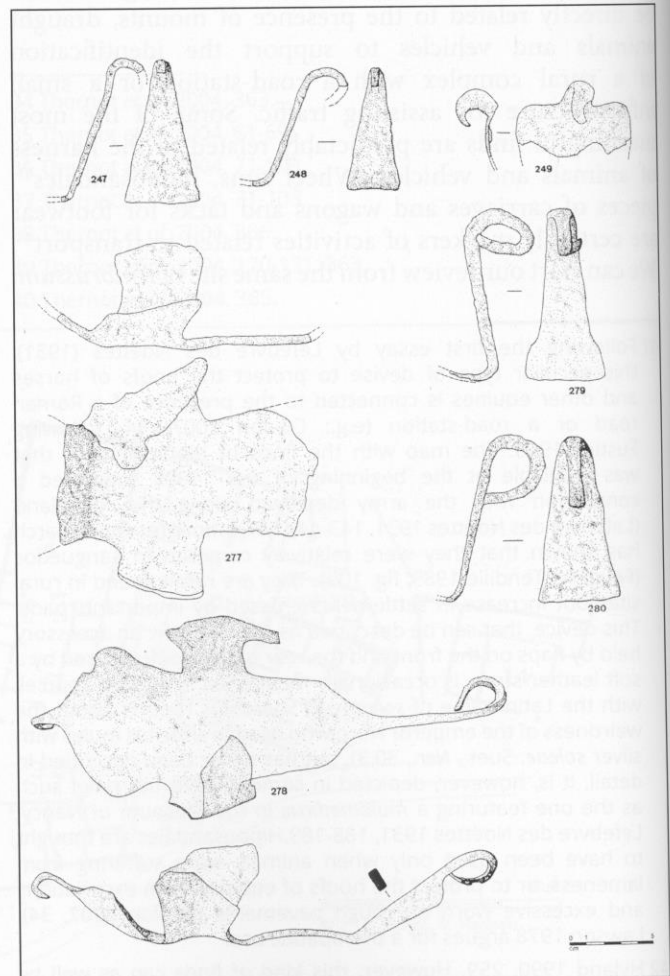


Fig. 11: Villetelle (Hérault, France). Metal objects from the excavations of Ambrussum that can be related to vehicles and harness. Elaboration Author after Feugère, Tendille 1989.

Materials related to vehicles and travel have been found in fair quantity also inside the wells PT103, PT117, and PT519<sup>61</sup>. Pieces of leather shoes come from the wells PT103 and PT117, while leather parts of harness, of belts and sacks were found in the well PT519<sup>62</sup>. The print of a sandal has been found nearby the forge of the Zone 9<sup>63</sup> (Fig. 12).

Also the blacksmith workshops of Buisnières (*supra*) seem to be oriented toward a very specialised activity, since most of the findings are related to wheelwright activities. Building E (built in 50-30 BC), for instance, hosted smithy workshops until the Julio-Claudian period. In the last phase of occupation of the site (i.e., in fourth century AD), the ateliers were transferred to Building B<sup>64</sup>. The link with traffic is confirmed by the finding of small transport-related objects, such as char lining, harness parts and stable tie rings (Fig. 13). Also, at Soumaltre, a fragment of iron hipposandale was found<sup>65</sup> (Fig. 14), together with an iron a hub fret<sup>66</sup>, dated to 40-70 AD<sup>67</sup>.

61 Fiches 2012, 256.

62 Fiches 2012, 256.

63 Fiches 2012, 259, fig. 170.

64 Poux, Borlenghi 2016, 151-156.

65 Thernot *et al.* 2004, 169-173, fig. 163, n. 25 (40-70 AD): type Aubert 2, very common in the region: see, e.g. the fragments from Peyre-Platade, another site along the Autoroute 75, north of Soumaltre.

66 Poux, Borlenghi 2016, 156.

67 Thernot *et al.* 2004, 169-173, n. 26.

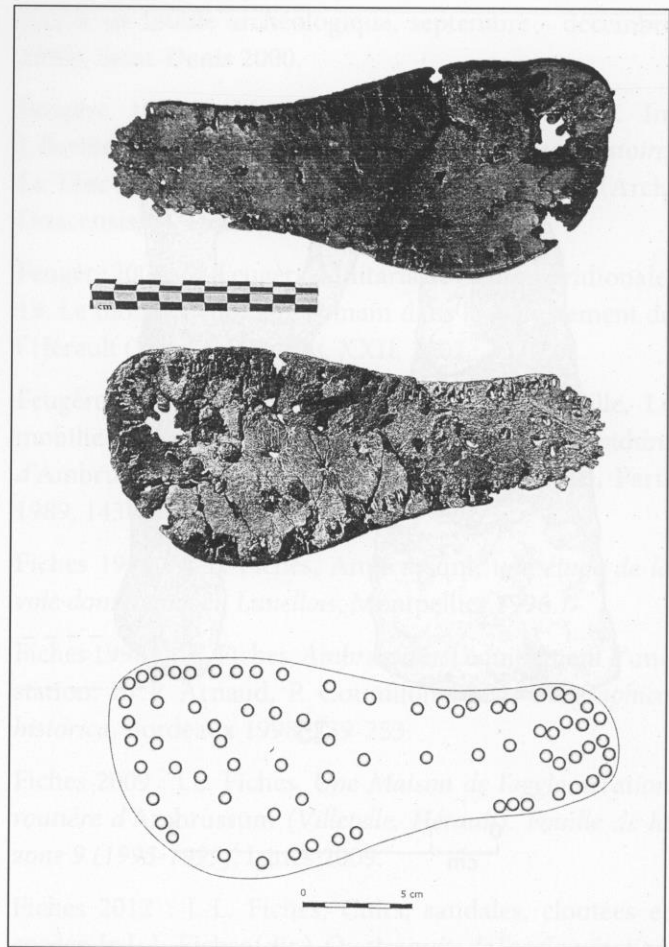


Fig. 12: Villetelle (Hérault, France). Print of a sandal from the excavations of Ambrussum. After Fiches 2012.

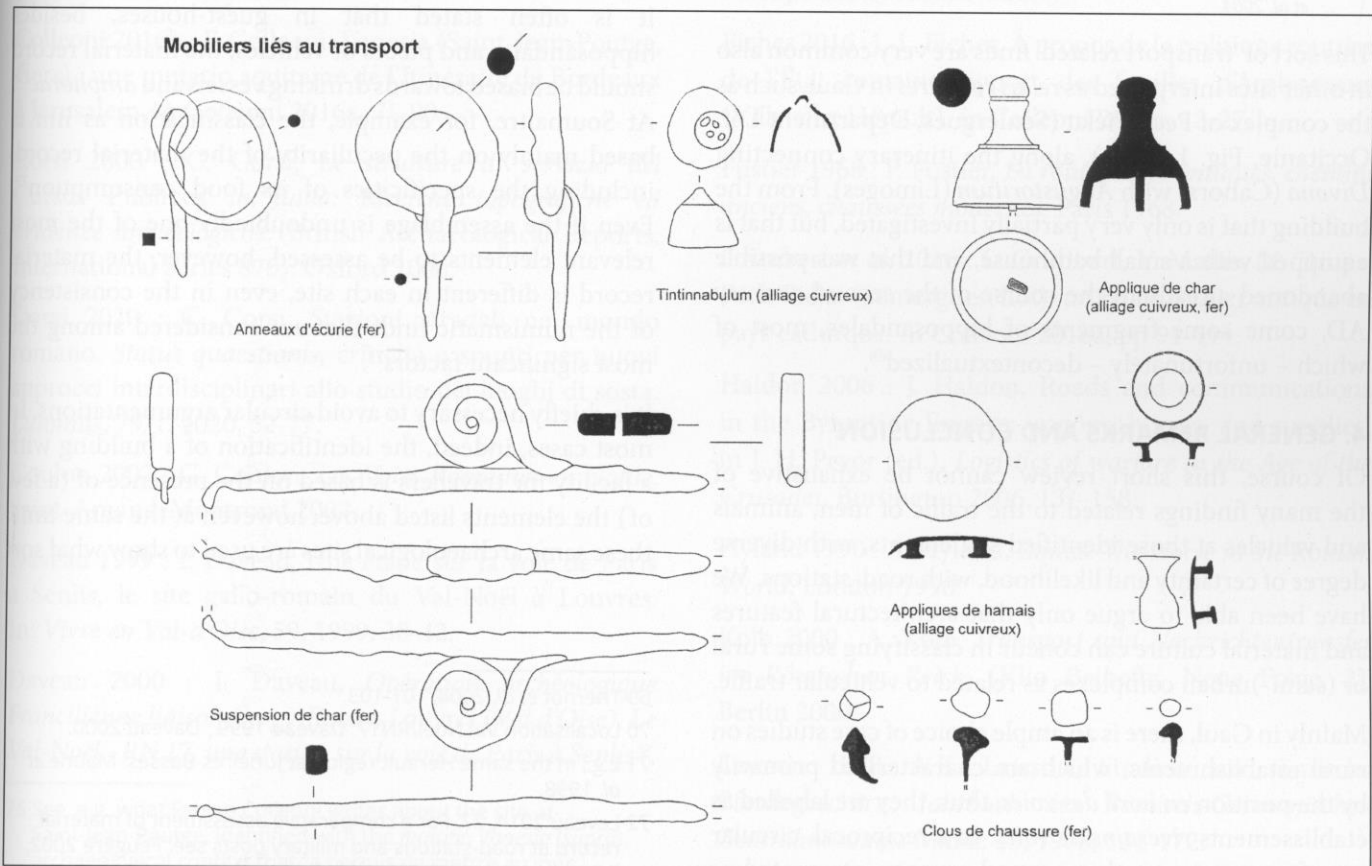


Fig. 13: Buisnières at Panossas (Isère, France). « Transport-related » small findings from the excavations of the building identified with the road-station. After Poux, Borlenghi 2016.



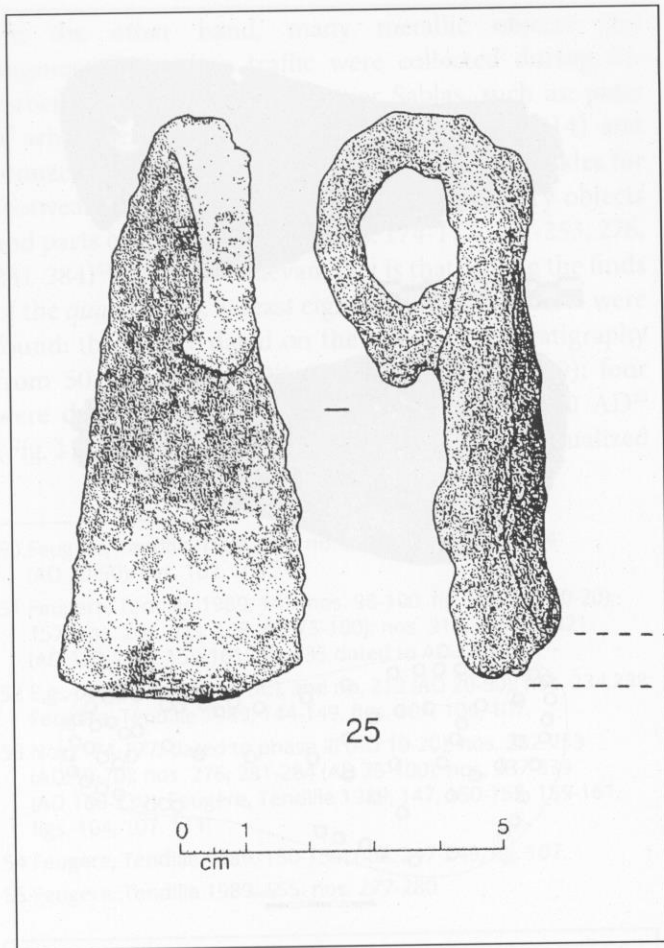


Fig. 14: Soumaltre (Hérault, France). Fragment of hipposandal found in the excavations of the building identified as road-station. After Thernot et al. 2004.

This sort of 'transport related' finds are very common also in other sites interpreted as *relais routières* in Gaul, such as the complex of Pech Piélat (Séniérgues, Département Lot, Occitanie, Fig. 1, n. 11), along the itinerary connecting *Divona* (Cahors) with *Augustoritum* (Limoges). From the building that is only very partially investigated, but that is equipped with a small bathhouse, and that was possible abandoned already in the course of the second century AD, come some fragments of hipposandales, most of which – unfortunately – decontextualized<sup>68</sup>.

#### 4. GENERAL REMARKS AND CONCLUSION

Of course, this short review cannot be exhaustive of the many findings related to the traffic of men, animals and vehicles at those identified settlements, with diverse degree of certainty and likelihood, with road-stations. We have been able to argue only that architectural features and material culture can concur in classifying some rural or (semi-)urban complexes as related to vehicular traffic.

Mainly in Gaul, there is an ample choice of case studies on rural establishments, which are characterised primarily by the position *en bord des voies*; thus, they are labelled as établissements *riverains de voies*. In a reciprocal, circular set of comparisons, these complexes are interpreted as *auberge* or *relais*, and the same elements that are used to

68 Grimbert et al. 2016, 96-108.

delineate this classification *ex-ante*, are later pointed out as 'interpretative tools' to identify the spatial, functional and material markers<sup>69</sup>.

In all these buildings, for instance, the presence of an inner courtyard—accessible to vehicles by means of a large drive way (e.g., Brune d'Arles, Bourbousson, Alle, *Ambrussum*)—is considered as a key-factor for any identification.

The orientation of the buildings is often different from the one of the road, and both possibilities (i.e., one compact building or several constructions) are attested.

In a few cases, there are small thermal installations that complement the offer. Large basins to be used as drinking trough are rarer, although the fountain-drinking trough of Soumaltre finds a comparison in a similar structure excavated at Louvres, in Val-d'Oise<sup>70</sup> (Fig. 1, n. 12).

In the complex process of identification of the function of road-settlements as being inns, taverns and guesthouses, the findings of pieces of vehicles, hipposandales and even tacks of footwear are as important as the rest of the assemblage (e.g. pottery and architectural materials).

Nonetheless, it should not be forgotten that the finding of these complements of vehicles and harness is connected, in general, to places where vehicles were parked and repaired and where animals were stabled, and these activities were also ordinarily carried out at rural productive sites<sup>71</sup>.

It is often stated that in guest-houses, besides hipposandales and pieces of vehicles, the material record should be biased towards drinking vessels and *amphorae*<sup>72</sup>. At Soumaltre, for example, the classification as inn is based mainly on the peculiarity of the material record, including the specificities of its food consumption<sup>73</sup>. Even if the assemblage is undoubtedly one of the most relevant elements to be assessed, however, the material record is different in each site, even in the consistency of the numismatic finds that are considered among the most significant factors<sup>74</sup>.

It is chiefly necessary to avoid circular argumentations. In most cases, indeed, the identification of a building with a facility for travellers is based on the presence of (a few of) the elements listed above; however, at the same time, these same archaeological sites are used to show what sort

69 Thernot et al. 2004, 101-103.

70 Localisation Val Noël/RN17: Daveau 1999; Daveau 2000.

71 E.g., in the same Hérault region at Jurières-Basses: Mauné et al. 1998.

72 Leveau 2014, 27. For a comparative assessment of material record at road-stations and military posts see: Feugère 2002, 73-126.

73 Thernot et al. 2004, 365.

74 At Soumaltre, for instance, the numismatic record is singularly poor: Thernot et al. 2004, 103.

equipment was characteristic of road-stations<sup>75</sup>. As further shown by the evidence presented in this volume, testing the huge variety of contexts in which transported *instrumentum* can be found, extreme prudence could be used in adopting comparative schemes, as long as the parameters that are used for comparisons are proven on partial, incomplete or not diachronically analysed datasets.

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