
TRAC Theoretical Roman Archaeology Conference

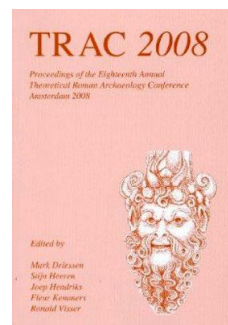
www.trac.org.uk

Paper Information:

Title: The Social World of Roman Fullonicae
Author: Miko Flohr
Pages: 173–185

DOI: http://doi.org/10.16995/TRAC2008_173_185

Publication Date: 17 April 2009



Volume Information:

Driessen, M., Heeren, S., Hendriks, J., Kemmers, F., and Visser, R. (eds.)
(2009) *TRAC 2008: Proceedings of the Eighteenth Annual Theoretical
Roman Archaeology Conference, Amsterdam 2008*. Oxford: Oxbow Books

Copyright and Hardcopy Editions:

The following paper was originally published in print format by Oxbow Books for TRAC. Hard copy editions of this volume may still be available, and can be purchased direct from Oxbow at <http://www.oxbowbooks.com>.

TRAC has now made this paper available as Open Access through an agreement with the publisher. Copyright remains with TRAC and the individual author(s), and all use or quotation of this paper and/or its contents must be acknowledged. This paper was released in digital Open Access format in April 2013.

The Social World of Roman *Fullonicae*

Miko Flohr

Introduction

One of the most basic and significant aspects of any urban society is the socioeconomic position of labour: from the first modest beginnings of human urbanism to the emergence of the post-modern megalopolis, the vast majority of the inhabitants of cities has spent its life working long days to secure an often relatively modest income. The way in which such labour is organized is fundamental to the social position of those involved, to their perception of the world they lived in and, indeed, to the character of urban society as a whole. Such issues are especially relevant in the context of early imperial Roman Italy, where urbanization reached a level without precedence in the Mediterranean and where urban space took forms hitherto unknown. There was, in the first three centuries of our era, a dramatic leap in urban scale that has left clear traces in the archaeological record of Rome itself and port cities like Puteoli and Ostia. This revolutionary, early imperial expansion of urban culture must of course be seen in the context of the relatively stable political situation in the Mediterranean world in this period and was to a considerable degree boosted by the central position of Rome in almost all relevant social, economic and political networks. The consequences of this development for the daily life in cities must have been far reaching, particularly for those involved in the production and redistribution of goods. To understand the impact of the early empire on urban life in central Italy, insight into the changing socioeconomic position of labor is indispensable. Yet, for some reason or another, ‘work’ does not tend to be high upon the scholarly agenda of most scholars studying early imperial Italy.

This paper hopes to contribute to a more lively debate about work in the cities of Roman Italy by proposing a new model for discussing the social roles and positions of craftsmen, in which there is a central role for the social significance of the daily work on the shop floor and for the nature of direct social interaction between colleagues during the work day. After an introduction to the most relevant theoretical and methodological issues, the possibilities of this approach will be explored through a case study focusing on the material remains of *fullonicae*, workshops devoted to fulling. It will be argued that strategies aimed at interpreting these workshops in the light of the social functioning of staff networks are not only able to reveal more than traditional strategies about the world of fullers but also succeed in making considerable differences visible between the lives of the *fullones* in different cities. These differences in turn have significant implications for our ideas about the development of urban culture in early imperial Italy.

From pyramid to sociogram, from individual to social group

Though the last decades have seen an increase of scholarly interest in the meaning of work for the social roles of people (Joshel 1992), and particularly in the professional associations formed by craftsmen (Van Nijf 1997; Zimmermann 2002), it must be argued that much of the discussion focuses on the identity of craftsmen within the wider urban community and on the significance of occupational identity for social interaction outside working hours. The most important aspects

of the life of craftsmen – their daily work on the shop floor and the social interaction that took place there – are barely part of the discussion. Yet, without underestimating the relevance of professional associations, it is obvious that a significant part of the social identity of craftsmen was defined precisely in the place where they spent much of their days: the shop floor. A central role in the construction and evolution of these social identities was played by the everyday interaction between workers on the shop floor.

The reason for this somewhat biased state of scholarship concerning craftsmen has probably to do with the methodological framework commonly used by scholars studying social history in the ancient world. The traditional paradigm, which was designed for and through the study of social elites, put an heavy emphasis on the role of individual status – legal, social, political or economical – and encouraged scholars to define the statuses more or less hierarchically, visually representing society as a pyramid with a small and clearly stratified elite at the top and a large amorphous mass below it (see e.g. Alföldy 1975: 130–131). While a lot has been done during the last decades to move beyond these ideas, most recent work on craftsmen still departs from their socially ‘marginal’ position, which is thought to be the result of their modest legal status as slaves and freedmen (Joshel 1992; Mouritsen 2001; Papi 2002). However, without denying the existence of social hierarchy, and without claiming that craftsmen were the centre of social and economic power in their urban communities, the question is justified to which degree ‘class’ and ‘status’ are sensitive ways to discuss the social roles of craftsmen, and, indeed, of most common people. The danger is that these people end up defined negatively on the basis of what they were not: not rich, not politically influential, no part of the elite and, in general, no freeborn Roman citizens. Indeed, there have been scholars who have maintained that Roman society consisted of the ‘elite’ and the ‘non-elite’ (Clarke 2003: 4–7). In such a binary opposition, the elite tends to become the norm and the rest of society the deviant ‘other’ that ‘lacked’ something that was normal to have (cf. Clarke 2003: 4). It sometimes seems as if scholars really believe that craftsmen were the ‘have-nots’ of Roman society, ‘social outsiders’, living short, dependent and miserable lives somewhere in the social periphery, derided by the ‘real’ Romans, who turned their nose up at manual labour, and waiting for the day their unhappy fate would suddenly change (because of elite mercy or pure chance), though even then, they would remain forever stigmatized by their lowly origins (Burford 1972: 124–152; Finley 1973: 35–61). This, of course, is a caricature, but even if it were true, it would only tell history from the perspective of the Roman elite. It does not reveal anything about the world of the craftsmen themselves.

The point is, thus, to move away from the static and hierarchical notions attached to the concept of individual status towards a model that gives more room to the direct social environments in which craftsmen lived their daily lives. Instead of focusing on the position of individuals on a macro-level, we must thus analyze the functioning of social groups on a micro-level. This also means that we need to think of society more as a complex system of intertwined social networks than as a roughly stratified mass of individuals. Visually, it involves a shift from Alföldi’s social pyramid to the social network diagram, which is a common asset of the social sciences and records the direct social ties between individual members of a certain social group (Wasserman and Faust 1994). In the case of craftsmen at work, this social group is constituted by the staff of the workshop. The internal dynamics of this group and the position of its individual members are defined and constantly redefined on the shop floor.

In the social processes on the shop floor, three factors seem to play a key role. In the first place, there are the size of the work force and the spatial organization of the place in which

the work was done, which determine the patterns of communication on the shop floor that are highly relevant in the continuously ongoing process of defining and redefining social relations. Secondly, the social functioning of the work force depends on the social background of the ties between workers. It makes a difference whether people were only colleagues and had independent private lives or, alternatively, were part of the same household and shared more together than just their daily work. Also, family-based households are generally composed differently from work groups in that there necessarily are men as well as women involved and there may be two or more generations working side by side. Finally, the division of labour is not only of significance in the sense of 'who did what' but also, and maybe more, in terms of the way in which task allocation and the spatial position related to a certain task structured the social traffic within the work force: different tasks were related to different communicative positions and brought different responsibilities, which may have influenced the role of people performing certain tasks within the staff network.

It may be noticed that these three factors all have a significant spatial component: communication is limited and guided by the space in which it takes place and the communicative position of workers depends on their physical location with respect to others. Whether the staff of a workshop must be seen as a household or primarily as a work group was for a large part determined by the spatial relation between working and living – whether or not the two took place in the same spatial environment. Hence, if we want to explore the possibilities of the daily functioning of staff networks in workshops, the best way to start is by studying the material remains of workshops. This also is a difference with the most common ways of studying crafts and craftsmen: thus far, information about the social position of craftsmen has mainly been distilled from literary texts and epigraphic sources (Joshel 1992; Van Nijf 1997; Zimmermann 2002), whereas the material remains of workshops generally have not been thoroughly studied except for understanding the production process and the economic significance of workshops (e.g. Moeller 1976; Mayske 1988; Bakker 1999; De Ruyt 2002; Borgard, Brun and Leguilloux 2003).

Introducing the fullonica

A workshop type that may serve well as a case study to explore the possibilities of the approach outlined here is the *fullonica*. *Fullonicae* were workshops devoted to fulling, which was a procedure that aimed at refining or recovering woollen clothes and consisted of three principal phases: soaping, rinsing and finishing (Flohr 2006: 193–194). The first phase, soaping, was done in niches surrounded by low walls, so-called 'fulling stalls'. The workers in these stalls used a mixture of water and alkaline chemicals and trampled the clothes with their feet and wrung them out with their hands. The second phase, rinsing, was done in basins with fresh water, often directly connected to the urban system of water supply. While this phase is not attested in many small *fullonicae* at Pompeii and modest establishments elsewhere have only one basin, larger workshops may have up to four large inter-connected basins, often with a very central position in the workshop. The last phase, finishing, consisted of several treatments, including drying, brushing, shearing, sulphuring and pressing. These treatments aimed at further refining the surface of the cloth and removing irregularities.

The reasons that *fullonicae* constitute an interesting case study, perhaps more so than bakeries, have not only to do with the very explicit nature of their material remains, which allow us to

reconstruct the spatial position of workers in great detail, but also with the differences in scale and context in which *fullonicae* have been found. Within Italy, eleven complete fulling workshops have been identified in Pompeii (Spinazzola 1953; Moeller 1976; Flohr 2008a; 2008b) and six in Ostia (Pietrogrande 1976; De Ruyt 2001). Other *fullonicae* have been found in Herculaneum, Florence, Rome and, in the adjacent part of France, in Fréjus (Maiuri 1958; De Marinis 1997; Rivet 2000). The number of fulling stalls, which gives an indication of the scale on which the workshop operated, varies from two or three in most small establishments, to more than ninety in the large *fullonica* currently under excavation in the Roman *suburbium* (see for a preliminary report Musco 2001: 163–164). Most small fulling workshops were established in *tabernae*, while the medium-sized *fullonicae* of Pompeii were incorporated in *atrium* houses. The large establishments of Ostia, Firenze and Rome were housed in buildings designed specifically for the purpose: typically, the roof construction of these establishments is based on the position of the complex of rinsing basins. This variation in scale and context is likely to have caused significant differences in the ways in which staff networks functioned and, as a consequence, in the ways individual staff members constructed and perceived their social world.

The social hierarchy of a production process

Before discussing the social landscape of *fullonicae* it is useful to consider shortly the hierarchy of tasks that is intrinsic to the production process: as the fulling process consisted of several phases there was a certain variety of tasks that needed to be done and it is likely that there were differences in the degree to which certain tasks were desirable or attractive for certain workers. It may be argued that there are three factors determining the social profile of a certain task:

1. The amount of responsibility attached to it: more responsibility meant a more central position in the staff network. There are two aspects of a task that may influence the amount of responsibility attached to it. In the first place, with each step in the production process, the amount of people that will be able to control the result of a certain treatment decreases. People working in the basins may check the quality of the work of the people working in the stalls and send clothes back. The same is true for the people involved in finishing. This gives people involved in a later phase automatically more responsibility than people doing tasks related to previous phases. Further, it matters whether a task was being performed by many people or by a few. Tasks performed by few people are more exclusive and responsible than one that is performed by many workers. In most *fullonicae*, there must have been (many) more workers in the stalls than workers doing other activities.
2. The amount of skill required to carry out the task. This is partially related to the amount of risk that a worker inflicts damage to the cloth, and partially to the complexity of realizing the effect desired. The damage risk is higher in the last phase of the process, where use is made of several kinds of metal instruments such as shears and brushes that may cause tears and holes. Likewise, soaping clothes with chemicals and rinsing it out require muscles more than skill and, in any case, considerably less skill than brushing and shearing.
3. The bodily involvement related to a task: physically more demanding or dirtier tasks generally are less desirable than physically less demanding tasks. The most demanding and dirty task is the first phase, which involved continuous movement of arms and legs while standing with both feet in a mixture of chemicals including urine. Working in the rinsing

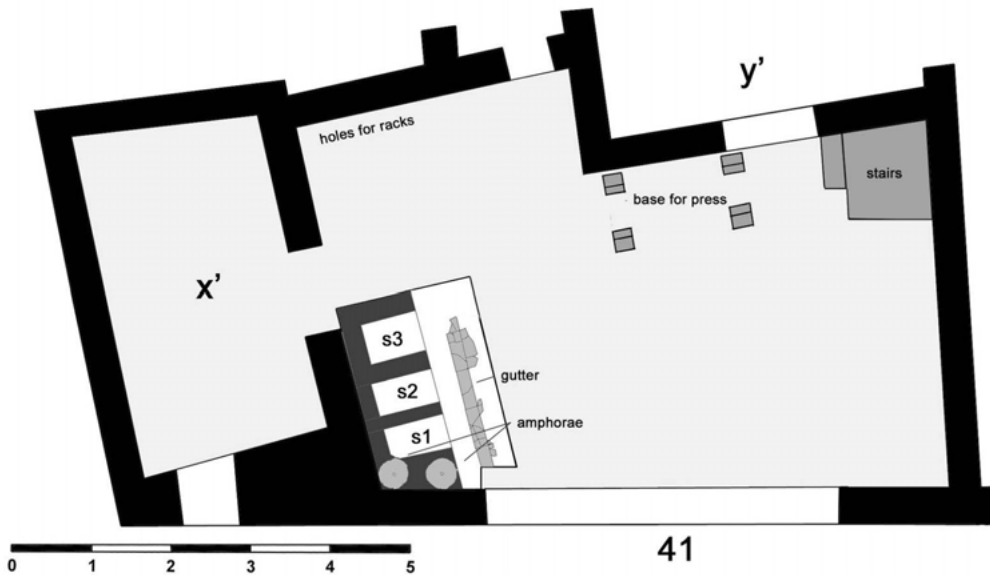


Figure 1: Pompeii, fullonica VII 2, 41, plan (after Flohr 2008a, Fig. 23).

basins may have required workers to stand in the water but, compared to the contents of the tubs in the fulling stalls, this water was relatively clean. Further, while some muscular power was needed to brush or shear clothes, this was not comparable to the effort involved in the work in the stalls.

It may be argued there seems to be a hierarchy of responsibility, skill and desirability, in which the work in the stalls held the lowest position, while the basin work was slightly more desirable and the tasks related to the finishing procedure had the highest position in the hierarchy. However, it must be emphasized that the social profile of a task is not only a matter of hierarchy. The specific profile of a certain task may also make it fit or unfit for certain categories of members of the staff network, such as women and children; this is especially relevant if a family formed the basis of a workshop. For example, paintings from *fullonica* VI 8, 20–21.2 at Pompeii show men, women and children performing various tasks related to the fulling process (Fröhlich 1991; Clarke 2003). Three women and a girl are shown performing relatively light tasks in the finishing phase, such as checking the quality of the work done and folding clothes, while three of the four stall workers seem to be little boys (contra Clarke 2003). This may seem to fit well with the logical position of these boys within the staff network in terms of skills and responsibility.

An important issue – if we want to draw conclusions based on the social profile of tasks and their spatial disposition – is the degree to which workers tended to perform the same task every day again and again. Unfortunately, there are no data that may help us to reconstruct the flexibility of task allocation. Of course, there is no reason to assume that people necessarily performed only one task from their first day in the workshop to the last. On the other hand, it would also be contrary to logic to believe that the division of labour was completely random

and differed from day to day and from moment to moment. Based on their individual qualities, their sex and age and their status within the staff network, workers probably had a certain range of activities that they regularly performed. It may be suggested that the scale of the workshop, the amount of work to be done and the related amount of management needed to keep things going had a crucial influence. In small workshops, the range of activities performed by one person may often have been wider than in a large fulling factory. Likewise, at quiet moments, there may have been more room for variation than at peak hours. In any case, given the large differences between the tasks in their social desirability, it is likely that the division of labour was an important element in the construction and maintenance of the social position of individual workers within the staff network. This will become even more apparent if we consider the communicative situation on the shop floor, for there could be significant differences between the communicative position related to the various tasks.

Social networks on the shop floor

At the basis of the social functioning of staff networks lies communication – either in verbal or in non-verbal form. Hence, it is highly relevant whether or not people can look each other in the eyes, whether two people can have conversations without others overhearing, and whether the spatial organization of the work area integrates or disintegrates the network. To illustrate the impact of such issues, the spatial landscape of three rather different *fullonicae* will be discussed: the small *taberna* VII 2, 41 and the well-known *fullonica* of Stephanus (I 6, 7) at Pompeii and, at Ostia, the large *fullonica* V viii, 3.

Pompeii, taberna VII 2, 41

Fullonica VII 2, 41 at Pompeii is one of the few fulling workshops in a *taberna* of which more has been preserved than the fulling stalls (Fig. 1). There were beams in the northwest corner that maybe were used for drying or carding and along the north wall was the base for a press or a stretcher (Flohr 2008a). Like in many Pompeian *tabernae* used as a workshop, facilities seem to have been concentrated along the walls, leaving the central part of the shop floor open for circulation (Flohr 2007: 134). It is clear that not all facilities provided the workers equal opportunities for communication with others. For example, somebody working at the installation along the north wall most likely stood with their back to the rest of the workshop and could not see anything but the garments under treatment, the press (or stretcher) and the wall behind it. If this person wanted to reach one of the others verbally, it would have been necessary to speak on a level that could be heard by all present in the workshop. Similarly, people working in the northwest corner could not see what happened along the north wall and may have had to turn their heads to see the fulling stalls. By contrast, workers in the stalls stood directly next to each other and could easily communicate in whispers or even non-verbally, without the others being able to hear or see it. Further, as they could choose to work with their face towards the rest of the shop, they were able to see the other workers in the room. This may have given them a privileged position in communication with their peers. On the other hand, they were severely limited by the fact that they were not free to walk around: they had to keep their feet clean from sand or dust and the rest of the workshop probably had to be kept dry.

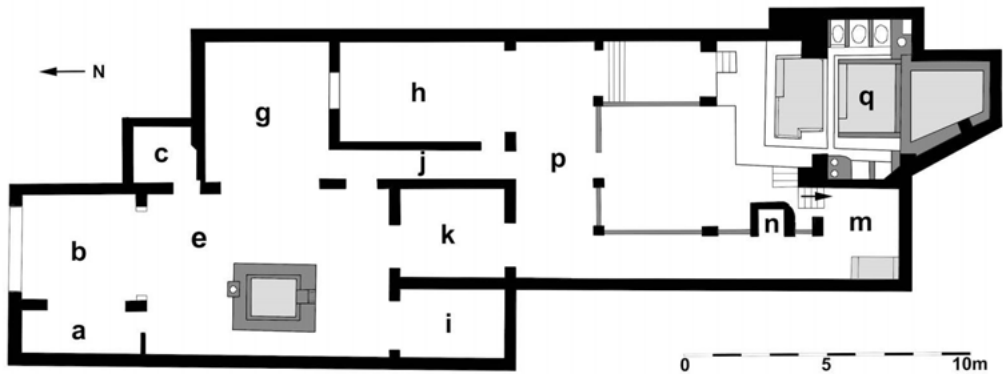


Figure 2: Pompeii, fullonica I 6, 7, plan (after Spinazzola 1953).

As for the stall-workers, the social impact of working directly next to each other must not be underestimated. The workers may have been slaves, but they were not robots. They must have understood aspects of the physical and mental condition of their neighbours even without it being explicitly discussed. Signs of fatigue, pain, illness, anger or happiness are less easily hidden from people standing for some time within a distance permitting direct bodily contact. However, there was also differentiation between the workers in the stalls: as this fullery had a set of three stalls in one row, the person in the second stall had a central position. The workers on either side could not have a conversation without the person in the central position being involved, while they, by the orientation of their body, were able to include either of the persons to their left or right in the conversation or to exclude them from it. On the other hand, the other two positions also had specific social properties. The persons in the southernmost fulling stall had control over the storage pots at their right hand. Whenever the others needed some of the stuff stored in there, they would have to come to this place to get it, or to have the person working there pass it on. The northernmost fulling stall was situated close to the racks in the northwest corner and the installation along the north wall, so that it was relatively easy for the worker to make contact with the persons working there. Moreover, anyone entering the vaulted room west of the shop passed directly next to this place. Thus, while the spatial landscape of this *fullonica* is certainly not inarticulate, it is hard to discern a clear spatial hierarchy: most spatial positions had advantages as well as disadvantages. This is not contrary to logic if we consider the relatively small size of the staff networks and the small surface on which the work was done: it would not only have been rather hard to create a clear spatial hierarchy in these shops, it also was not strictly necessary, as the number of workers probably was low enough to run the business by direct management.

Pompeii, house I 6, 7 (fullonica of Stephanus)

The *fullonica* of Stephanus was a private house with an *atrium* surrounded by living rooms and a peristyle with a fully equipped kitchen (Fig. 2). In the artefact assemblages found in this house, there is ample evidence for the presence of women. It is most likely that the household occupying the house was a family (Flohr 2007; forthcoming). The fullery had two separate



Figure 3: Pompeii, *fullonica* I 6, 7. Overview of work area in the back of the house.

work areas at both sides of the house: there was a shop in the front part of the house and there was a large fulling establishment in the back part of the garden with three rinsing basins and five fulling stalls. The staff network of this workshop thus was considerably larger than that of *taberna* VII 2, 41. It seems to have been more clearly structured as well.

In the back part of the house, there seems to have been places for seven workers: five in the fulling stalls and two in the lower rinsing basins B2 and B3; the higher basin B1 was not accessible (Fig. 3). If we imagine a situation in which all work positions are occupied and maximum use is made of the capacity of the *fullonica*, it becomes clear that the communicative landscape of the area was rather accentuated. The three workers in the stalls east of basin B2 were standing very close to each other. Like in *taberna* VII 2, 41, they could easily communicate non-verbally and most likely almost automatically noticed how their neighbours were doing. It was also easy for them to make visual and verbal contact with their colleagues in the two stalls on the opposite side of the basin and to maintain a conversation within which all workers participated. The two workers in the basins had a central position, especially the one in basin B2. Though they probably frequently looked downward towards the working bench scrubbing the cloth (Flohr 2006), they could hear everything and were literally in the middle of the conversation. The worker in basin B3 may have had a less central position with respect to the others in the room, but was not too distant. Moreover, they were closer to the peristyle than the others and, as the working bench was situated along the north side of the basin, they were oriented towards the eastern portico where people coming from elsewhere would approach the fullery. Consequently, they had a privileged position in the communication with the outside world. Thus, while the overall communicative climate may be characterized as rather intimate, there is a communicative hierarchy that favours the two workers in the basins. As has been argued above, these people already performed a job that was more attractive and responsible than that of their colleagues in the stalls. Of course, it is not said that there were always seven people working in this part of the workshop, but then again, the communicative landscape would not change drastically if some of the positions were

vacant, as long as there were both people in the stalls and in the basins, which probably usually was the case: the most efficient way to operate this rationally organized workshop is to maintain an uninterrupted production chain from soaping to finishing.

The spatial division of the shop in the front part of the house was less clear than that of the *fullonica* in the garden. With the help of excavation reports it is possible to reconstruct some of the activities that took place there. Along the east wall stood a fulling press, the remains of which are still visible on site. Several other instruments were found next to the press including two different brushes and a pair of shears (Della Corte 1912: 248–250). The finds indicate that the focus in this area was on the finishing stages of the fulling process. Though it is impossible to determine the number of people usually working here and their exact position, the size of the work area requires that it was low – with four people, the shop would have been fairly crowded. The nature of the work required people to be visually concentrated on the cloth, so they could not see each other unless they briefly interrupted what they were doing, but the size of the room and the relative absence of noise produced by the work still made the social atmosphere rather intimate.

Of central importance for our understanding of the functioning of the staff network during working hours is the fact that direct communication between the two work areas in this *fullonica* was impossible: one had to walk through the house to deliver messages. While both working areas thus had an intimate character, there was a sharp spatial dichotomy. This had hierarchical consequences: the people in the shop did not only do more responsible work, they were also responsible for the interaction with customers and thus had a representative function as well as informational advantages. In the contact between the two groups, the workers from the shop will often have had the initiative, bringing new clothes that had been brought and communicating what did or did not need to be done and how quickly. They gave the orders; the others had to carry them out. This makes it also likely that the person or people in charge of the workshop operated from the shop or its direct environments and not from the work area in the back of the house – which would also be rather impractical given the fact that workers in stalls and basins could not easily move around given their wet feet. As a consequence, the group of workers in the back of the house cannot have been continuously under the direct command of their boss or bosses, though these may have passed by every now and then to inspect the speed and quality of the work. Yet, it is probable that, when they were in the front part of the house, one or two of the workers in the back were made responsible for maintaining the pace of work in that part of the workshop. There thus possibly was a trapped hierarchy in the organization of the daily work.

Ostia, fullonica V viii, 3

If we compare the two Pompeian *fullonicae* discussed here with one of the large Ostian *fullonicae*, it becomes clear to which degree analysis of the daily functioning of the staff network in fulling workshops is a useful strategy not only to build up a picture of daily life, but also to understand the differences between the lives of people that basically did the same job but in completely different urban contexts.

The *fullonica* of the Via degli Augustali in Ostia was as large as all excavated Pompeian *fullonicae* put together (Fig. 4). Like the other two large Ostian *fullonicae* (II xi, 2 and III ii, 2), it completely lacks a domestic context: there were no living quarters attached and there were no stairs to an upper floor. The staff slept elsewhere – and probably not all in the same place.

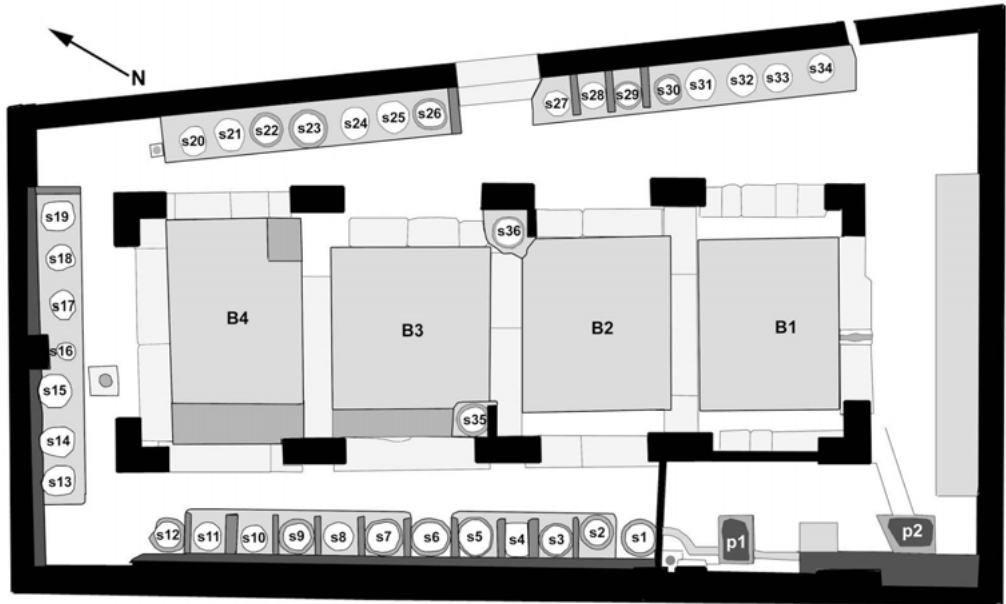


Figure 4: Ostia, *fullonica della Via degli Augustali* (V VIII, 3), plan (after Pietrogrande 1976).

The situation suggests that workers – it is impossible to determine whether these were slave or free – were hired individually or in small groups to do the job and did not necessarily see much of each other outside working hours. Though workers could have socialized on a regular basis and though they may have lived near to each other, the social basis of the workshop thus is fundamentally different from the two Pompeian *fullonicae*. Moreover, it is also clear that the communicative landscape on the shop floor is completely unlike that of the workshops discussed thus far. The fulling stalls were organized in long rows so that individual workers saw few of their colleagues and could only communicate easily with the small number of workers directly next to them (Fig. 5). It was almost impossible for anyone to reach more than, say, 20% of the work force verbally without help from others. Many conversations could be going on at one time and the colleagues one worked next to may have differed from day to day. The situation for workers around the rinsing complex was also different. Except for the fourth basin (B4), the rinsing complex was not accessible and work was done standing on the edges of the basins. Basin workers thus were mobile and they could (and needed to) walk around. However, communicative lines were much longer than at Pompeii and basin workers were more clearly separated from the workers in the stalls: though they could easily approach them if they wanted something, this was much less so the other way around. Moreover, there were large pillars around the rinsing complex that visually separated the two groups. The only space that could be devoted to finishing was along the south side of the workshop. Probably only part of the finishing procedure was done here. Remarkably, the area of the presses was surrounded by a wall which prevented direct social interaction between the stall workers and the people around the press. At the same time, the finishers had the best overview of the workshop and controlled the water tap of the rinsing complex. In the other two large Ostian *fullonicae*, a finely plastered



Figure 5: Ostia, fullonica della Via degli Augustali (V viii, 3). Long row of fulling stalls along the east wall.

niche was built near the mouth of the water supply in the finishing area. This may have had a symbolic or religious role, which suggests that the people involved in finishing had a more prominent position in this respect as well.

Despite the fact that *fullonica* V viii, 3 was completely different in character from the *fullonica* of Stephanus, there seems to have been a similar hierarchy in the communicative positions that overlaps with the hierarchy of tasks intrinsic to the fulling process. Because of the size of the staff network and the spatial organization of the work room, the communicative landscape in the workshop was much more dispersed than in the *fullonica* of Stephanus at Pompeii and, as the workers in Ostia probably did not belong to one and the same household, the ties within the staff network were probably much looser. As people shared less together, the work environment may also have been rather anonymous. For newcomers, it must have taken considerably more time than at Pompeii to get used to the atmosphere on the shop floor and to conquer a stable position within the staff network.

Conclusions

The three *fullonicae* discussed here are more or less typical examples of the three basic types of fulling workshops that can be identified in Roman Italy. Approaching their layout from a social network perspective makes it possible to construct a story about the daily social life of the workers that is certainly not all-encompassing, but goes beyond the traditional models that only define such workers as ‘low status slaves or freedmen’. Even if they technically were, there was more to their lives than that. The data and the approach highlighted here put an emphasis on the often neglected role that these people themselves actively played in constructing and maintaining their social position and identity. This adds an important new dimension to our understanding of the world in which fullers and other craftsmen operated on a daily basis.

Moreover, the use of archaeological material allows us to see the sharp differences between Pompeii on the one hand and Ostia on the other and, more importantly, their social implications. This brings us back to the historical context mentioned at the beginning of this paper. Arguably, the social situation of workers in *fullonicae* in both sites reflects, at least to some degree, the socioeconomic nature of the city they lived in. In that respect, Pompeii may be thought of as the prosperous, yet not-so-urbanized medium-size town, where work was done in intimate circumstances and the staff networks of *fullonicae* generally consisted of the members of one household. While it is hard to maintain that Pompeii was an ‘average’ Italian city, it may be suggested that the general domestic embedding of production and the intimate scale on which it took place was the natural way of doing things in most ancient towns of imperial Italy. In many cases, this never changed during antiquity. Ostia, on the contrary, may be a symbol of the leap of scale that took place in some cities in central Italy during the first three centuries of our era. The social consequences for the workers in the Ostian *fullonicae* have, it may be noted, some remarkable parallels with those of the Industrial Revolution in late 18th century and early 19th century England. Spatial and social ties between work environment and living environment were cut through and, at the same time, the size of the social network in which workers operated during working hours increased significantly, at the expense of the cohesion within the staff network. The atmosphere at work was anonymous, with people probably having a hard time to get to know each other very well. Though it obviously would go much too far to equate the situation in early imperial Ostia with, for example, that in late 18th century Manchester, the comparison serves to illustrate that the early imperial expansion of urbanization not only created urban space on a scale that had never existed before, but also, at least for some, a social landscape that was a historical *novum*. In any case, it is an aspect of Roman social history that merits further scholarly exploration.

Bibliography

- Alföldy, G. 1975. *Römische Sozialgeschichte*. Wiesbaden: Steiner.
- Bakker, J. T. 1999. *The mills–bakeries of Ostia: description and interpretation*. Dutch monographs on ancient history and archaeology 21. Amsterdam: Gieben.
- Borgard, P., Brun, J. P and Tuffreau Leguilloux, M. 2003. Le produzioni artigianali a Pompei. Recherche conduite dal Centre Jean Bérard. *Rivista di Studi Pompeiani* 14: 9–29.
- Burford, A. 1972. *Craftsmen in Greek and Roman Society*. Ithaca, NY: Cornell University Press.
- Clarke, J. 2003. *Art in the lives of ordinary Romans. Visual representation and non–elite viewers in Italy, 100 B.C.–A.D. 315*. Berkeley: University of California Press.
- De Marinis, G. 1997. Archeologia Urbana a Firenze: Piazza della Signoria. In G. Capecchi (ed.) *Alle origini di Firenze. Dalla preistoria alla città romana*. Firenze, i musei del comune 5. Firenze: Edizioni Polistampa: 49–53.
- De Ruyt, C. 2001. Les Foulons, artisans des textiles et blanchisseurs. In J. P. Descoedres (ed.) *Ostia, Port et porte de la Rome antique*. Genève: Musée Rath: 186–191.
- De Ruyt, C. 2002. Boulangers et Foulons d’Ostie à L’epoque imperiale: quelques reflexions sur l’implantation de leurs ateliers et sur leurs fonctions precises dans la ville portuaire. In J. C. Béal and J. C. Goyon (ed.) *Les Artisans dans la ville Antique*. Collection Archéologie et histoire de l’Antiquité 6. Lyon: Université Lumière–Lyon 2: 49–54.
- Della Corte, M. 1912. Continuazione dello scavo di via dell’Abbondanza durante il mese di luglio 1912. *Notizie degli Scavi di Antichità*, Series 5, 9: 246–259.

- Flinley, M. 1973. *The Ancient Economy*. London: Chatto and Windus.
- Flohr, M. 2006. Organizing the Workshop. Water Management in Roman Fullonicae. In G. Wiplinger (ed.) *Cura Aquarum in Ephesus. Proceedings of the 12th International Congress on the History of Water Management and Hydraulic Engineering in the Mediterranean Region, Ephesus/Selçuk, October 2–10, 2004*. BABesch Supplement 12/Österreichisches Archäologisches Institut Sonderschriften. 42. Leuven/Wien: Peeters/Österreichisches Archäologisches Institut: 193–200.
- Flohr, M. 2007. Nec quicquam ingenum habere potest officina? Spatial contexts of urban production at Pompeii, AD 79. *BABesch* 82: 129–148.
- Flohr, M. 2008a. Cleaning the Laundries II. Report of the 2007 fieldwork season. *FastOnLineDocument s&Research* 111: 1–7.
- Flohr, M. 2008b. Cleaning the Laundries. Report of the 2006 season. *Rivista di Studi Pompeiani* 18: 131–136.
- Flohr, M. forthcoming. Reconsidering the atrium house: domestic fullonicae at Pompeii. In K. Cole, M. Flohr and E. Poehler (ed.) *Urban life in a seismic land. Art, industry and infrastructure in Roman Pompeii*.
- Fröhlich, T. 1991. *Lararien- und Fassadenbilder in den Vesuvstädten. Untersuchungen zur "volkstümlichen" pompejanischen Malerei*. Mitteilungen des Deutschen Archäologischen Instituts. Römische Abteilung. Ergänzungsheft 32. Mainz: Phillip Von Zabern.
- Joshel, S. R. 1992. *Work, Identity and Legal Status at Rome*. Oklahoma series in classical culture 11. Norman: University of Oklahoma Press.
- Maiuri, A. 1958. *Ercolano. I nuovi scavi (1927–1958)*. Roma: Istituto Poligrafico dello stato.
- Mayeske, B. J. 1988. A Pompeian Bakery on the Via dell'Abbondanza. In R. I. Curtis (ed.) *Studia Pompeiana & Classica in Honor of Wilhelmina Jashemski*. New Rochelle, NY: Orpheus: 145–159.
- Moeller, W. O. 1976. *The Wool Trade of Ancient Pompeii*. Studies of the Dutch Archaeological and Historical Society 3. Leiden: Brill.
- Mouritsen, H. 2001. Roman freedmen and the urban economy: Pompeii in the first century AD. In F. Senatore (ed.) *Pompei tra Sorrento e Sarno: Atti del terzo e quarto ciclo di conferenze di geologia, storia e archeologia, Pompei, gennaio 1999–maggio 2000*. Roma: Bardi: 1–27.
- Musco, S. 2001. L'attività della Soprintendenza Archeologica di Roma in un settore del Suburbio orientale. In S. Musco, L. Petrassi and S. Pracchia (ed.) *Luoghi e paesaggi archeologici del suburbio orientale di Roma*. Roma: Bibliotheca Land: 149–237.
- Papi, E. 2002. La turba inopia: artigiani e commercianti del Foro Romano e dintorni (I sec. a.C. – 64 d.C.). *Journal of Roman Archaeology* 15: 45–62.
- Pietrogrande, A. L. (ed.) 1976. *Le Fulloniche*. Scavi di Ostia 8. Roma: Libreria dello Stato.
- Rivet, L., Brentchaloff, D., Roucole, S., and Saunier, S. 2000. *Atlas topographique des ville de Gaule Méridionale. 2. Fréjus*. Revue Archéologique de Narbonnaise Supplement 32. Montpellier: Association de la Revue archéologique de Narbonnaise.
- Spinazzola, V. 1953. *Pompei alla luce degli Scavi Nuovi di Via dell'Abbondanza*. Roma: Libreria dello Stato.
- Van Nijf, O. M. 1997. *The Civic World of Professional Associations in the Roman East*. Dutch monographs on ancient history and archaeology 17. Amsterdam: Gieben.
- Wasserman, S., and K. Faust. 1994. *Social Network Analysis. Methods and Applications*. Structural analysis in the social sciences 8. Cambridge: Cambridge University Press.
- Zimmermann, C. 2002. *Handwerkervereine im griechischen Osten des Imperium Romanum*. Monographien des Römisch–Germanischen Zentralmuseums Mainz 57. Mainz: Verlag Römisch–Germanischen Zentralmuseums.