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# TRAC Theoretical Roman Archaeology Conference

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## Paper Information:

Title: No Place Like Stone? Assessing Social and Material Networks of Place at Quarries in Roman Anatolia  
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Pages: 23–30

DOI: [http://doi.org/10.16995/TRAC2009\\_23\\_30](http://doi.org/10.16995/TRAC2009_23_30)

Publication Date: 25 March 2010



## Volume Information:

Moore, A., Taylor, G., Harris, E., Girdwood, P., and Shipley, L. (eds) 2010. *TRAC 2009: Proceedings of the Nineteenth Annual Theoretical Roman Archaeology Conference, Michigan and Southampton 2009*. Oxford: Oxbow Books.

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# No Place Like Stone? Assessing Social and Material Networks of Place at Quarries in Roman Anatolia

*Bradley M. Sekedat*

## *Introduction*

This paper originated from a moment of haphazard discovery, a chance encounter. While visiting a site called Fasillar in the province of Konya in south central Turkey, the aspect of the site I was initially aware of – a massive basalt rock carving dating to the Late Bronze Age lying flat on its back – became part of much broader network of social and material interactions at the site. Walking across the site, I encountered Bronze Age carvings next to Classical carvings, such as the Lucianus monument, with a life-size horse standing to the right of an open and inscribed niche, and unfinished Roman sarcophagi next to cut marks in the abundant rock outcrops that appearance would date to multiple periods in the past. Conceptually, the site, for me, began as a monumental Hittite location, but quickly took on many more attributes. Fasillar was quarried extensively in antiquity, bringing practices from different periods in time together in the material of the site itself (Waelkens 1990). Even more significantly for this paper, Fasillar and other Anatolian quarries offer evidence of the ways in which quarries bring together different practices. The unfinished sarcophagi that dot the plateau above the northern slope of Fasillar suggest that material cut here was *moved*, and apparently over great distances, even though the specific destination of the stone is not always knowable. Because of this, it is difficult to assign to Fasillar any sense of an overarching authority under which the stonecutters operated. Quarries are not just resources for other places; they are not separate entities within a landscape, but are, rather, an integrated part of a broad network within landscapes. Quarries expand well beyond their immediate scopes, as the evidence of unfinished Roman sarcophagi, which were transported widely, suggests.

In light of these encounters at one quarry site in central Anatolia, I will use this paper to explore the ways that quarries expose numerous social and material networks. Such an undertaking entails a discussion on the state of quarry studies, evaluating what they emphasize, how quarries are generally studied, and where there are areas for expansion and improvement. Using case studies of three quarries that operated on different scales in central Anatolia, this paper suggests that a more complete understanding of quarries can be gained by considering them within the context of theories of place and materiality, inserting into the equation notions of what happens at quarries, how the social and material networks that arise at them influence what goes on at a broader level, and how these networks necessitate a reconsideration of the role of quarries in the development and maintenance of large-scale institutions such as the Roman Empire. Ultimately, this paper suggests that quarry studies should integrate the existing emphasis on function, technique and economy at quarries with notions of place.

## *The State of Quarry Studies*

For most of the Mediterranean world, scholars who study quarries have privileged certain factors that are readily associated with them. This falls primarily upon, though is not necessarily limited to, functional approaches that consider quarries as resources that are exploited for specific purposes. In the case of the Roman Empire, this generally revolves

around the notion of quarries as resources for construction projects and sculptural programs that enter into frameworks of elite display, imperial benefaction and cultural value. To this end, scholars focus their efforts on studies that source building materials, with the aim of developing a picture of circum-Mediterranean trade patterns in stone. Questions include the degree to which stone resources were controlled by Roman authorities, the scale of extraction at known sources, and the levels of economic dependence between urban centres and quarries. How widely were materials travelling and who controlled that trade? In this model, issues such as the value of stone and its subsequent extraction follow as a secondary condition to ideologically driven efforts to procure such materials. In this vein, Roman social values precede the practices that actually go into the quarrying of stone, so that the choice of stone, and efforts to control stone sources, were determined by such pre-existing social structures. The work at quarries is thus understood as functional, in that it served other geographical needs, which were themselves perceived to be of greater importance than the practices that went into material procurement, or at least that shaped the structures of material procurement. This hierarchy of thought and practice is noticeable with even a cursory look at what is emphasized in the publications on quarries.

Of note is that most of the literature on quarries focuses on the large-scale and imperially controlled sources, though it is not uniformly limited to this. Studies of this type in Anatolia include the quarries at Docimium, Haut-Tembris, Ezine, Teos and Marmara; although work has been done on many others, these often do not appear in publications. Quarries that were not imperial owned, yet which have received significant attention due in large part to their role in the construction of major urban centres, include the quarries outside of cities such as Aphrodisias (Rockwell 1992; Ponti 1992). Binding these studies together is the strong emphasis that scholars place on understanding how broader patterns of administration relate to extraction at these sites. Thus, much of the scholarship on these quarries focuses on evidence for the hierarchy and standardization of stonecutting practices, and on evidence that pertains to the quarry's administration, such as that offered by inscriptions (see especially Fant 1989a). Efforts are also made to link the stones found in urban structures with these practices of extraction, which highlights the functional role that quarries play in construction projects located elsewhere, such as Fant's study of the Teos marble quarries (Fant 1988). Here, literary references to the amount of Teos marble used in imperial construction are used to support the apparently small size of the quarries themselves, which Fant (1989b: 212–213, 217) used to argue for minimal interaction between the city of Teos and the quarries in its immediate vicinity. In other words, the question is framed in the following sequence: how do the desires of those in charge of constructing the city play out in practices at the quarry, and what evidence do we have for this? Fant (1993), who wrote extensively about the quarries at Docimium, placed this sequence of investigation into the broader context of Roman economic practices writ large, and particularly those that were driven by imperial demand. The standardization of practices was taken to stand in for broad patterns of economic activity and control. The effect is that quarries are reduced to resources that are subservient to other social mechanisms whose roots are inevitably located at a distance. The specifics of the quarry lose ground to broad social and economic patterns.

Good examples of this are the studies done by Waelkens (1985; 1990) and Fant (1989a) at the Docimium quarries in Phrygia. Waelkens, who Fant draws upon, delivered a picture of the quarries that neatly aligned with the view of site-specific practices within broad social and economic frameworks. While both authors note that Docimium was likely used as a quarry during the pre-Roman period, their interest in the quarries there largely revolved around

documenting the scale of extraction, the tools used in the extraction process, and why technologies and policies changed over time. In this vein, Waelkens (1990: 63) noted that 500,000 cubic metres of stone were removed from the various extraction *bracchia* (branches or arms of the quarry) during the Roman imperial period. Furthermore, there was a marked change in the scale of production at the site over time. Waelkens (1990) discussed the significant transformation of quarry practices that occurred once Docimium was brought under some form of direct imperial authority during the Augustan period, and proceeded to note changes in the scale, location and tools of extraction along a documented chronological and historical trajectory. Much of this information was gathered through intensive investigation of the site for changes in cut marks and in the size of the blocks cut. These lines of evidence indicated changes in the modes of resource procurement to both Waelkens and Fant. Different marks, for instance, showed that different tools and techniques were in place at various points in time, with the evidence literally etched into the extant stone. What is particularly interesting, at least for this paper, is the overarching explanation that Waelkens and Fant used to interpret the causes of these changes: these two scholars both pointed to different forms of evidence to link these quarrying practices to changes in demand produced by the flourishing economic conditions of the principate and imperial periods at Docimium. Waelkens (1985), in particular, was able to develop a picture of Docimium's multiple quarries, and their associated workshops, as being elaborately controlled from a centralized point.

Waelkens (1990) noted that, in addition to evidence for changes in tool use, the size of the blocks that were cut indicated changes in demand from imperial centres, notably Rome, where numerous monuments used the *pavonazetto* marble for architectural adornment, especially in the late first and early second centuries A.D. He situated this change within the sporadic impulses that characterized imperial needs. During periods of large-scale building campaigns, certain quarries were exploited more intensively than others, depending on the needs of the state. As architectural styles and influences changed, so too did the shape and size of cut stones, which also had an impact on the stone extraction process. Indeed, it was possible in some instances to recognize different chronological phases of quarrying (Fant 1989a). The demands of the state are also shown by Waelkens (1990) as a reason for technological change: as demand for more marble from Docimium grew, workers had to modify the means of extraction. This resulted in a shift from smaller, lighter pickaxes to a heavier pickaxe that could more readily cut the stone. In these accounts, the quarries at Docimium simply respond to outside needs. My point of contention is not with the efforts to tie specific extraction phases to historical and economic trends. Rather, the issue becomes significant when we stop there. Explaining the quarry in terms of broader developments diminishes our ability to explain the significance of the quarry as a place in its own terms, with actions occurring that are not dependent on state level demands.

Fant (1989a), who commented on Waelkens's earlier work on Docimium, took a similar position on the hierarchy of activities that occurred there, but reached this conclusion by following the inscribed record rather than the evidence for stonecutting. Fant provided an extensive list of recorded examples of stone inscribing that occurred during the extraction process, summarized within three general categories for all of the markings he found during 4 two-week seasons of surveying the Docimium quarries. Briefly, the markings recorded several important aspects of the quarrying process, including the 'slave' who cut the stone, the *bracchium* (region) within the quarry in which the stone was cut, levels of administration at the quarry, and the consular date. Fant was able to discern a change in what was recorded on the cut blocks over time, which enabled him to postulate that the quarry underwent a process of

standardization and monopolization. In the imperial context articulated through the inscriptions, Fant (1993: 146, 155) argued, the workers, their techniques, and their modes of recording became highly regulated and subject to the whim of an imperial monopoly.

Quarries near urban centres such as Aphrodisias, though smaller in scale, are discussed similarly in the scholarship on ancient stonecutting. In this case, however, the discussion turns more explicitly to how quarries are defined and perceived. As with much of the original work done for the Docimium quarries, the quarries in the immediate proximity of Aphrodisias are described in terms of their geological condition, orientation and material characteristics, although more complete publication of the recent quarry survey at Aphrodisias could add to this (Ponti 1992; Rockwell 1992). There has been some discussion of the proximity of these quarries to the urban centre, but the interplay between these locations has not been discussed. Instead, the quarry is situated in the literature as something distinct, something isolated and something self contained. The surveyors at Aphrodisias, in discussing where discard piles are placed, locate this feature as something outside of the quarry. This speaks to a general consensus that quarries are to be considered for their functional attributes. Under this definition, a quarry is merely a stone resource.

### *Potential Ways Forward*

As in other areas of archaeology, such as pedestrian survey of ploughsoil assemblages, this definition raises the question of how to define boundaries. In the case of quarries, challenges to the functional definition are easily raised, particularly when one accounts for the broad array of practices related to the initial step of stonecutting. Multiple stages of operation are attested for the quarries at Marmara and Docimium, for instance, where some of the finishing steps were done very near to the locations where the stone was initially cut. As Waelkens (1990; Waelkens *et al.* 1988) pointed out, tools and their production are related to quarrying. So too are the markings and changes brought to a quarry as the result of long-term or intermittent use over many years. Every act of stone extraction physically alters the terrain of the quarry. But the association of networks that is being developed here can be extended to things such as discard piles, areas of primary cutting and secondary cutting, finishing workshops, the pathways on which quarried stones were carried, and the locations at which the cut materials arrived. Therefore, a quarry is not so easily defined when one begins to trace the depth of interrelationships at work in any given situation.

Also of significance here is the awareness that not all Anatolian quarries in the Roman period were subject to the same levels of oversight and control as the grand imperial quarries. It is critical not to lose sight of the variety of quarrying that occurred in Anatolia and other regions. As above, Waelkens (1985) and Fant (1989a) both mentioned the existence of a town near Docimium. Fant (1989a: 4) suggested that the quarry workers probably lived in the town, commuting daily to the site for work. In this instance, it is possible to expand a network of quarrying-related practices to the towns as well, since activity within the town was, in certain ways, related to activity at the quarries. For example, roads were built or paths created that led to and from towns. Workshops were sometimes located within the towns close to, but away from, the actual source of the material. In small-scale, more opportunistically situated, quarries, such as that of Fasillar mentioned at the beginning of the paper, the practices related to quarrying took the material well beyond the confines of the source, implicating the quarrying of particular blocks in numerous non-functional associations. Local populations were involved in extraction, carrying some of their social networks between the settlements and the quarries.

Furthermore, quarries, because they are places of social and material interaction, often exhibit construction for the temporary populations that live at them. Sanctuaries and temples, for instance, were constructed at quarries in Egypt (Rothenberg 1988). This intersection of stone source, materials from related industries, and social interaction blurs the line between the quarry (as a strictly defined and bounded thing) and the extended networks within which stone circulates. The point is not that all of these points in the network were quarries, but that all of them were involved in the process of quarrying on some level, in terms of labour, community formation, tool manufacture, distribution, consumption, etc. In this sense, exactly what a quarry was depended on the kinds of associations that developed in synchronicity with it.

This, then, brings me to the crux of this paper. Having outlined some general observations about quarry studies in Anatolia, it appears that there are several ways to enhance and expand quarry studies. The position advocated here is that an understanding of the networks that quarries comprise, including the development and running of something as large as imperial Rome, brings quarries into fruitful discussions of ‘place’ and reinserts a sense of quarries as significant for reasons beyond their functional roles. What follows expands upon what is meant by this.

Edward Casey (2001: 406), a prominent theorist on the issue of ‘place’, argues that:

‘[A]ny effort to assess the relationship between self and place should point not just to reciprocal influence (that much any ecologically sensitive account would maintain) but, more radically, to constitutive co-ingredience: each is essential to the being of the other.’

Casey is, in essence, arguing that actions in a location are predetermined by neither the human agent nor the location itself. Rather, the form, meaning and essence of a location is derived from the mutual actions of agents and terrain. This provides an exciting metaphor for work on quarries precisely because quarries are, in all of their forms and varieties, changing aspects of the landscape by means of a complicated and co-constitutive mechanism of human/material relationships.

This is best seen when we consider the long-term use of quarries. Again, in the case of Docimium, Aphrodisias and Fasillar, there is abundant evidence of long-term, if intermittent, extraction. For Docimium in particular, the cut marks on the rock and the evidence for tunnelling in different *bracchia* of the quarry, sometimes returning to long abandoned positions after many years, were explained as the product of changing social and economic values that arose due to an imperial monopoly. A place-based perspective, however, can add to these apparent links between small-scale practices and large-scale processes in significant ways. All of the quarries discussed in this paper have long histories of extraction. Extraction changes the physical or material composition of the site. Therefore, rather than simply thinking about new economic motivations as the impulse for changing actions at quarries, a stronger sense of what a quarry is would incorporate the impact that changes to the landscape in the past had on the nature of later quarry interactions. In this sense, quarries are multi-temporal in that they comprise the actions, in many cases, of the very long-term: the traces of actions from multiple pasts are simultaneously present, each having equal impact on present interactions with the landscape. The material of the quarry, therefore, does not lend itself neatly to a chronological or historical arrangement based on the archaeologist’s interaction with the site.

Furthermore, quarries lend themselves to issues of place through the notion of movement. Materials for stonecutting and extraction converge at quarries, and the products or outcomes of cutting practices are often distributed. Quarries and quarrying quite literally inhere in motion

and movement, a notion that blends quite nicely with the approach to ‘place’ that Tim Ingold (1993; 2007) advocates. Notably, Ingold notes that any given points A and B (like quarry A and city B, for example) are reached through movement between them and within them. Moreover, they bring together the movement of a multiplicity of materials and people as they intersect in particular locations, or places. Thus places comprise movement. Quarries speak of this flow very effectively, suggesting that a productive way to think about them is to regard them as intricately connected regionally through the movement of people and materials, instead of isolating them from their surroundings, which necessitates a regional approach. For the Teos quarries, Fant (1989b: 213) argues that the extraction process was so thoroughly driven by Roman imperial needs that the scale of operations remained small and the quarries were effectively isolated from neighbouring communities. This may hold true from an economic perspective, in the sense that the communities around the city of Teos were not entirely dependent on quarrying for their livelihood, but it does not account for the quarry as place. It reduces quarries to specific kinds of site interactions rather than questioning the kinds of movement that coalesce around them. It effectively reduces their significance as locations.

Recent studies that incorporate network analysis provide useful insights into the high degree of connectivity between people and locations, many of which pertain directly to the movement of industrial goods. Ruffini’s (2008; Graham and Ruffini 2007) work on Byzantine Egypt, for example, showed that hierarchical models for social interaction need to be reconfigured. In summary, the scale of human interaction across socio-economic boundaries was shown through network analysis of papyri to be unexpectedly high. Similarly, Graham (Graham and Ruffini 2007) performed social network analysis on Italian brick stamps, revealing some of the complexity inherent in the trade and movement of industrially produced goods. Studies like these indicate a variability and extent to social networks that force us to think beyond straightforward organizational control of something like brick stamp production and, by extension, quarries. Looking at combinations of *material* networks may prove a fruitful way of expanding such analyses. Thus, with respect to quarries, we may be able to think about the human networks involved – who worked at the quarries, who purchased stone and who was involved in the movement of stone – but we may also begin to think about what other materials were required for stonecutting and transport, what the geographic origins of other architectural and decorative elements were at the point of destination, and how all of this, the human and material, comes together. The quarry, it is argued, does not exist prior to these networks; rather, multiple kinds of quarries emerge from the different combinations of networks.

Building from the notion that quarrying in the Roman Empire took a variety of forms enables a final commentary on one of the issues outlined at the beginning of the paper – instead of considering quarry practices as dependent on the Roman Empire, quarries participated in the kinds of networks that define what the Roman Empire was. The opportunistic use of limestone outcrops all over Anatolia during the Roman period, for instance, suggests that one overarching model of stone interaction does not apply across the board. Instead, the Empire and the social and economic principles that characterized it developed out of a complex interaction between locations and actions. The imperial models that comprise Rome were possible because of interactions on the local level. Rather than Rome dictating new forms and new structures that affected stonecutting, work with stone and the varieties of stone that exist in a place as geologically rich as Anatolia should be regarded as having helped to constitute the structures of the Empire. The long-term trends that are present at many quarries go a long way towards revealing this. The structures and practices were seldom entirely new, but related to the long-term history of a location, and the durability of the traces of past action. From a place-based

view, the fact that quarries inherently involve continuous reshaping of the physical terrain, with which subsequent communities must interact, suggests that Roman stonecutting dealt intimately with local knowledge, craft specialization that had developed over great lengths of time, and networks of local communities. An imperial endeavour at Docimium, for instance, was not free of other structures, but related to them in a multitude of ways.

### Conclusion

By way of conclusion, I would like to point out that this paper has been, in many ways, a position piece. The position taken has derived from an examination of how quarry studies have developed in general and from looking at how this can be bolstered, or undertaken, differently. A place-based approach, as discussed here, does not imply that it is unimportant to understand broad social, historical, political and economic processes with regard to specific quarries and the processes that went on at them. Rather, it is suggested here that such studies can work to reinsert a stronger role for quarries in the production of these large-scale processes if some of our attention is turned to the vast networks of interaction that occurred at and around them. Quarries then become much richer places, with deep histories and complexities that transcend economics through the diversity of their material qualities. Looking at quarries as integral to social formation, rather than as secondary to pre-existing social structures, provides a new avenue for research in this important aspect of Roman, and indeed all periods of, Anatolia.

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