the public for all manner of entertainments, the Colosseum—built in a reclaimed sector of the villa—created a hierarchical enclosure. Whereas Nero had put his Greek sculpture on public display in a rather democratic fashion, Vespasian and Titus ensured that the Greek-inspired sculptures in the Colosseum were framed and regimented (imprisoned even?) within a decidedly Roman arcaded façade. Whereas Nero had downplayed military motifs in his villa, the Colosseum trumpeted Roman militarism in many guises, from the huge shields on the façade attic to Titus’s inscription crediting the war spoils that financed the project. Welch’s hypothesis is coherent and seductive; still, it is well to remember that another Flavian monument in Rome, the similarly munificent Templo Pacis, was probably (among other things) a public museum and sculpture garden not so different from its Neronian predecessors. Excavations in the 1990s turned up several inscribed statue bases there bearing the names, in Greek, of famous Greek sculptors. Admittedly it is hard to confirm their original dates of installation.

Welch’s Colosseum chapter will be controversial, but it is no less important for that. Indeed, it presents a rare gift to the often-taught subfield of the topography and monuments of ancient Rome: an argument, tailor-made for the classroom, that can be digested and discussed by students with no special reserve of knowledge. And it has strong cultural appeal, transcending the usual dry debate about what buildings stood where and when. Repeatedly, Welch’s book stirs the embers under simmering controversies, thereby giving us both good reading and adventurous scholarship.

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Notes
1. Maurizio Scaparro et al., Teatri greci e romanî alle origini del linguaggio rappresentati (Rome, 1994).

Roger B. Ulrich
Roman Woodworking

In Roman Woodworking, Roger B. Ulrich has produced an important resource for scholars of the ancient world, a resource richer than its conventional size and simple title imply. Ulrich brings to front and center a material whose known importance has not received adequate attention. Wood was a basic material used in every aspect of ancient life, from the mundane source for firewood to the support for large structures, such as bridges and amphitheaters. Because wood has left little trace in the material record, it has been largely ignored, and Ulrich undertakes to show the importance of the material in all aspects of Roman life.

In many respects Roman Woodworking is a hybrid, a cross between a traditional handbook and a historical narrative. Thirteen chapters comprise two-thirds of the book while the last third contains a detailed glossary, a useful appendix, and an extensive bibliography and index. The uneven quantity and quality of the evidence leads to a wide variation in the length and depth of discussion in each chapter.

In chapter one Ulrich draws on direct and indirect evidence to build a picture of the importance of wood in the ancient Roman world. Direct evidence in the form of artifacts is understandably scanty, but Ulrich includes evidence that has come to light relatively recently in places, such as Britain, where conditions of preservation have been favorable. Indirect evidence includes imprints of wood in the volcanic ash of Campanian sites, in concrete foundations and in postholes in the ground, and depictions of wooden objects, structures, and woodworking tools in reliefs and paintings. Ulrich relies on literary and epigraphic evidence in his search for more precise definitions, and he gives substantial descriptions of tools, procedures, and form. Precision is not always possible, given the ambiguous application of terms by ancient authors.

Unlike the traditional handbooks that inspired him, Ulrich’s narrative in chapter two begins with people rather than trees or forests. Woodworkers were skilled craftsmen who were generally Greek freedmen and formed part of a large and productive class with limited rights in Roman society. The study of this class is an interesting and topical field in Roman social history. At six pages, this chapter on the Roman woodworker is one of the shortest, serving as a quick introduction to the social status of the woodworker with regard to the elites and his peers. This brief overview begs for expansion into a substantial social study of the woodworker and his profession. Although Ulrich finds no documentation of professional guilds for the craft, he does emphasize the sense of pride among craftsmen in general and woodworkers in particular.

The following two chapters deal with the woodworkers’ tools and craftsmanship. Both are well illustrated. A catalogue of tools relies heavily on representations, with the few actual examples coming mainly from sites in Britain. Alphabetically arranged according to their English names, the entries on tools provide a description of form and function as well as a historical discussion of the tool and related scholarship. The associated chapter on joints reveals the carpenters’ high degree of craftsmanship.

It is the most technical of the chapters.

Chapters five through nine, the core of the book, deal with the structural use of wood. Discussions of foundations, framing and walls, wooden flooring, roofing and ceilings, and interior woodworking proceed in a logical sequence. Wood was used to form concrete foundations, but Ulrich focuses on its use as a foundation in the form of sleeper beams or piles. He includes the first bridge over the Tiber, the Pons Sublicius, and Julius Caesar’s wooden bridge over the Rhine, both of which are known only through literary references. The debate surrounding the hypothetical reconstructions of the Rhine Bridge and problems of terminology are discussed but naturally remain unresolved. Rejecting a developmental catego-
rization of bridges from fully wooden to mixed to fully stone, Ulrich suggests, plausibly, that these types were coeval. Wooden piles, he argues, remained important throughout.

The best known wooden structures from ancient Rome are the Iron Age huts from the Palatine for which only the postholes remain. These huts and their proposed reconstructions serve the discussion of the post-and-lintel system and associated terminology in the chapter on walls and framing. A brief section on wooden columns considers indirect evidence of their use in surviving terra-cotta bases and capitals from the sixth century BCE. Ulrich then addresses the framing of large structures such as theaters, amphitheaters, and spans for bridges in which the basic techniques using vertical, horizontal, and diagonal beams were scaled up to create cantilevered or arched support systems. The Column of Trajan provides visual evidence of wooden frames for bridge spans and amphitheaters.

The chapter on wooden flooring, based on a previously published article, demonstrates that the Vitruvian description of a multilayered flooring system corresponds closely to Roman practice. Vitruvius's seventh book provides a term for this system (*contignatio*) and its components. *Contignatio* was used in both public and private structures for the upper floors and in some cases supported a floor surface of mosaic, particularly in luxurious houses. Most of the evidence for the floors he discusses comes from Ostia and Herculaneum, which has some carbonized remains.

Roofing technology had antecedents in Greek and Etruscan structures, and Ulrich emphasizes the role of wood in the external protective layers of pitched roofs. With regard to support, Ulrich postulates that the timber-trussed roof was a Roman invention of the second century BCE, a result of the need for a clear span in basilicas built in that period. Vitruvius's account of his basilica at Fanum sets the stage for a discussion of technical and philological problems surrounding roofing and ceilings. Ulrich offers an interesting argument to support the hypothesis that the state halls of Domitian's Palace in Rome had a timber-trussed roof and coffered ceiling rather than vaults. He acknowledges the importance of wooden centering for concrete vaults and domes, but because of the lack of literary or visual evidence, he does not speculate on the technical aspects of vaulting. He does, however, raise the question of whether wooden vaulted ceilings might have existed. Portals, doors, and shutters are included in the last of the chapters dealing with structural matters.

The three final chapters concern types of wood and their sources. The first focuses on the veneers and parquetry used to decorate furniture in the Roman world. Here Ulrich relies on pictorial representations in various media as well as the inventory of partially lost carbonized examples from Herculaneum. Certain types of wood were prized above others and a chapter follows that lists the types of trees available and the uses of their various woods. This material is offered in the form of a catalog with entries alphabetized according to the Latin names for the species. A final short chapter provides an overview of the sources of timber used by the Romans, concentrating mainly on wooded areas in the environs of Rome.

The glossary is an extensive and valuable resource for those philologically inclined, but it would have been easier to navigate were it organized alphabetically rather than broken down by chapter and type. A useful appendix gives a selection of tools and provides detailed information about the actual examples as well as the types of media in which they are depicted.

In researching his book Ulrich has cast a wide net, but the results have been uneven and have led to compositional difficulties. This is manifest in the catalog chapters where, for example, the entries in chapter three are in English while those in chapter twelve are in Latin, and the glossary (which is organized by chapter) contains entries in Latin. The variety in the length and depth of the narrative chapters also reflects the inherent difficulty of organizing the material. Despite these shortcomings, Ulrich's book offers scholars one handy volume containing a wealth of information on the subject of ancient Roman wood, a material once ubiquitous, though all but invisible today.

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Notes

Charles B. McClendon
*The Origins of Medieval Architecture: Building in Europe, A.D. 600–900*


In the language of architectural history, “medieval” means Romanesque and Gothic. Older forms of Christian architecture are classified as the end of classical antiquity (as Kenneth John Conant put it, “Ancient Rome created no new monumental types after the Christian Roman basilica”) or as ethnographic expressions of the wandering peoples who subsequently occupied Roman territory: Visigoths, Lombards, Saxons, Franks. The value of these buildings is measured by their perceived contributions to the ultimate crystallization of the Romanesque, just as Romanesque used to be assessed primarily in terms of innovations that could be considered proto-Gothic. Conant’s Pelican History of Carolingian and Romanesque architecture famously contains a single chapter on Carolingian and Romanesque architecture called “The Carolingian Romanesque,” within a section titled “The Pre-Romanesque and