BOOK REVIEW

The Economics of the Roman Stone Trade. By BEN RUSSELL. Oxford Studies on the Roman Economy. Oxford: Oxford University Press, 2013. Pp. xxi + 449. Hardcover, \$150.00. ISBN 978-0-19-965639-4.

Russell has written an important, useful, and thorough study of the many varied aspects of the Roman commerce in stone. The book's eight chapters treat market demand and costs, quarrying, the problems of transport, the distribution of the evidence across the Mediterranean, the supply of stone for architectural projects, as well as the production of both sarcophagi and statuary. With its detailed treatment of the evidence and its comprehensive bibliography, the book will be an essential reference work for future studies of Roman architecture and sculpture. Russell dispels a number of scholarly false assumptions, and establishes a solid basis for the reconstruction of ancient practices, both with respect to the supply of materials and their use.

The book seeks a pragmatic reassessment of the ancient stone monuments and the materials from which they were constructed—and aligns itself with an approach that has transformed the study of ancient architecture, particularly, Roman architecture, in recent decades (exemplified by Janet Delaine, Mark Wilson-Jones, and Lynn Lancaster), an approach that Russell here extends to sculpture. While the evidence, as the author acknowledges, is largely drawn from the east (mostly Asia Minor), this is simply the state of our sources for studying the problem; the result of the author's careful discussion will surely provide the groundwork for discussions of practice throughout the Roman world.

Despite the book's real significant value for the advancement of current studies, not every reader will share all of the conclusions drawn from the body of evidence presented. Three examples of the present reviewer's reservations shall suffice.

¹ J. Delaine, The Baths of Caracalla: a Study in the Design, Construction, and Economics of Large-Scale Building Projects in Imperial Rome [JRA Suppl. 25] (Portsmouth RI, 2001); M. Wilson-Jones, Principles of Roman Architecture (New Haven, 2000); L. Lancaster, Concrete Vaulted Construction in Imperial Rome: Innovation in Context (Cambridge, 2005).

First, the relationship between "standardization of production methods" and the "specialization of the labor force"—a theme that runs throughout the book. It is not at all clear how these two phenomena are related; whether their dual role should suggest not only greater refinement in the carving of particular architectural elements, but also that there was a concomitant intention to produce them to standard measures. Some standardization seems harder to deny than Russell allows (more on this below). Take the example of the proportions of column shafts (dependent of data compiled by Wilson-Jones); according to Russell, these appear not to have been so regularly produced (219), a view that is seemingly undermined by the acknowledgment that it possibly was the case for larger shafts, those over 30 RF (223). A seemingly modern notion of the "industrialization" of the labor force appears, to this reviewer, scarcely appropriate to account for the vagaries of ancient technologies. Here the rather compelling suggestions of Filippo Coarelli concerning the place of standardization in Roman architectural production (PBSR 45 [1977] 1-23), despite their somewhat different focus, are surprisingly missing from the discussion.

Second, any assessment of the standardization of architectural elements needs to address the problem of *tolerances*—just how precise did each element have to be, in practical terms? The evidence is indeed hard to assemble. Russell's discussion of the varying heights of capitals is a step—but is it in the right direction? If, as he notes, they so often required cutting down "to compensate for overly long column shafts" (248), what would have been the gain of a specialization in the production force (such as Russell imagines) that was responsible for them? And, given the real discrepancies found in surviving buildings (some examples in Wilson-Jones, *Principles of Roman Architecture* [New Haven 2000], 71–72) why should we regard the need for such adjustments as evidence that there was no attempt at deliberate standardization of the same elements for particular structure? Should it surprise us that the columns of a façade did not share *exact* dimensions, even when such was intended? They often didn't. Imprecision was (and still is) a problem in the actualization of architectural plans.

Third, my two preceding comments address the running polemic that marks Russell's book: an attempt to dispel the influential views of John Ward-Perkins concerning what is called "production to stock"—that is, the making of things in advance of individual commissions, in standardized forms and dimen-

sions, so that they might be stockpiled, ready-to-hand for future use. Indeed, one senses that a strong reaction to Ward-Perkins' views lay at the origin of Russell's study—yet one equally gets the impression that a wholesale objection was harder and harder to sustain in the face of the fully panoply of evidence that the author has assembled. Need this be a case of either/or? For example, Russell discusses the "repetitive forms" found on the sarcophagi, declaring them "not the result of production methods, of attempts to simplify forms and increase efficiency, but rather part of an established visual repertoire which individual commissioners bought into" (358). But didn't such serial production result in precisely such changes? That is, these were essentially *re*-productions of existing designs, often at much the same scale, a practice that had obvious efficiencies—whether these caskets were produced in advance or to order. The character of such multiply-replicated designs suggests what Russell elsewhere describes as a "local pattern of demand" (278)? In this case, as in others, we might recognize how standardization might intentionally occur without "quasi-industrialization."

But these and surely other issues are matters for productive debate. One is always gratified that good books, like this one, bring them to the fore.

Michael Koortbojian

Princeton University (romanist@princeton.edu)

² J. B. Ward-Perkins, *Marble in Antiquity: Collected Papers of J. B. Ward-Perkins*, edd. H. Dodge and B. Ward-Perkins [Archaeological Monographs of the British School at Rome, 6] (London, 1992).