

difficilement obtenir de meilleurs résultats que ceux qu'elle présente. L'effort qu'elle a fourni est considérable et mérite l'admiration. Le fait qu'elle ne s'est pas tenue à la seule partie occidentale de l'Empire appelle aussi une mention toute particulière. Il est indéniable que ce livre prendra une place importante dans les études sur l'économie du monde romain.

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Alfred Michael HIRT, *Imperial Mines and Quarries in the Roman World. Organizational Aspects 27 BC - AD 235*. Oxford, University Press, 2010. 1 vol. 16 x 24 cm, XIV-551 p., 23 fig. (OXFORD CLASSICAL MONOGRAPHS). Prix : 84 £. ISBN 978-0-19-957287-8.

This book is based on the author's D.Phil. thesis, read at Oxford University in 2004 and reworked and completed in late 2007. It is made up of nine chapters (Introduction, Geological Constraints and Organizational Implications, Mining and Quarrying Districts, Imperial Officials and Extractive Operations, The Roman Army and Imperial Extractive Operations, Imperial Officials and the Allocation of Responsibilities, Private Partners to Imperial Operations: *Occupatores/Coloni* and *Conductores*, The Emperor and Imperial Extractive Operations and Imperial Mining, Quarrying Administration: A Conclusion). In addition there is an appendix, a bibliography and two indexes (one of specific sources and the other a more general one). The working method is in part archaeological and in part epigraphic in that it determines the chronological period studied (from the first century AD to the rarefaction of the epigraphic habit in the Roman world, i.e. in the second quarter of the third century AD). The list of abbreviations (pp. XII-XIV) at the beginning of the book is entirely epigraphic in character while the bibliography is full with references dealing with epigraphy and archaeology (p. 446-483). The final appendix is equally valuable, and thoroughly epigraphic, dealing with the inscriptions on the *pavonazzetto* and white marble at Dokimeion (p. 370-401), those on the Upper Tembris valley (p. 401-409), Portasanta on Chios (p. 409-411), Cipollino at Karystos (p. 411-420), Giallo Antico at Simitthus (p. 420-428), Granodiorite at Mons Claudianus (p. 428-438), Carrara marble at Luna (p. 438-442), and those of Parian and other marbles (p. 442-445). The use of literary sources on the other hand is, although frequent, limited in scope owing to the paucity of available references. The same is true of numismatic sources which are alluded to but rarely. – The author is cautious in his work and careful not to drift away from the available evidence in his reasoning. This is why the book begins in the Eastern Desert of Egypt, given that “the inscriptional and archaeological evidence for districts outside Roman Egypt is far from abundant” (p. 53). In this region, the quarries seem to have been highly concentrated in small areas of operation, which was also true of other quarries such as those of Simitthus/Chemtou, Dokimeion/Bacakale, Karystos or Luna/Carrara, even taking into account the fact that sometimes, as at Luna, it is difficult to distinguish between the ancient areas of exploitation from the medieval or modern ones (p. 29). The same appears to have been the case in mining districts such as Alburnus Maior (Dacia), where operations and mining settlements seem to have been concentrated in areas as small as 5.5 square km (p. 41). As the author reveals, Roman quarries and mines were not always owned by the emperor,

and neither were they always exploited directly by him or indeed by the Roman state. It is true that the state exercised protection over Roman mines and quarries, in part through its civilian staff and in part through military personnel. There were, nevertheless, a large number of private individuals and companies who helped to exploit the mines. After exploring the mining districts which were under military control in Moesia, Dacia, Spain and Sardinia (p. 68-82), the author shows how the ownership of mines and quarries in the Roman world by private individuals, municipalities and the Roman state are shown in the epigraphic records available (p. 88-90). Following the hypothesis of Cl. Domergue, for whom the author professes great admiration (p. 5), it is suggested that the name of the emperor was used on products extracted from mines and quarries above all in relation to payable duties or *portoria*, that is, as a mark of the export of ingots and not as a mark of ownership (p. 105, p. 274-275). The Vipasca tablets from Portugal and the twenty five wooden tablets from Alburnus Maior (Dacia) appear to confirm that the purpose of the mould marks present in the stamps on the lead ingots of Carthago Nova and other mines (p. 269-280) must be viewed in the context of further markings applied to them (p. 281) by later owners or merchants (*mercatores/navicularii*) (p. 282-284). One of the most interesting features of the book is the analysis of the exact relationship between the army and the exploitation of mines and quarries (p. 168-201). The author shows how crucial the technical expertise of certain military officers was in the quarries of Mons Claudianus, Karystos, Dokimeion, the Rhine region, Numidia and Luna/Carrara (p. 168-174) – an expertise that was seen to be important over and above the officers' actual military status. The transfer of this type of technical skill on the part of the military appears to have been common in the first half of the second century AD, and seems to have been directed from Rome (p. 174). On the other hand, more than a few Roman detachments seem to have been in charge of extractive activities in Germania, Britain, Syria, Arabia and Egypt (p. 175-179), as well as in charge of the roads linking them to the rest of the empire, a fact that is well documented in the case of Egypt and North Africa (p. 179-185). In some places these detachments were not posted in the vicinity of mines or quarries, but in strategic locations (Hispania, Germania, p. 186-190). Elsewhere, in Britain for example, signs also exist that point to a certain number of Roman troops being involved with the exploitation of metals (p. 190-191), or at least suggest that this could have been the case, as in the Danubian region (p. 194-195). Roman soldiers were, however, generally reluctant to take part in this kind of activity (p. 197) and it seems clear that legionnaires were not systematically involved (but, on the other hand, "auxiliary troops may have been an answer to security problems" p. 198). The last main theme of the book is the role played in extractive operations in the Empire by imperial officials (p. 119-145). The social background of these officials, *procuratores* or *praefecti*, differed according to the province: freed men in the quarries and mines of Spain, members of the equestrian orders in the Danube provinces, or members of the *familia Caesaris* in Dacia (p. 145-155). In all cases, much use was made of a vast supply of slave labour (p. 222-225, 332-336). In relation to this, the author highlights a number of important aspects which are often neglected by the majority of historians and archaeologists, particularly that the opening of mines and quarries required the explicit approval of the emperor (p. 338-339), or that these quarries and mines could be closed for purely political rather than economic reasons. Indeed in the second

century BC, the Romans had already, for strictly political reasons, temporarily closed the mines of gold and silver in Macedonia (Livy 39.24.2; 45.18.3: 45.29.11, p. 91). At times Rome seems to have chosen to operate one quarry or mine over another for reasons of convenience (p. 340), and there was indeed a central bureau that was responsible for such decisions (p. 342-343), with particularly strong evidence of this as regards marble (p. 344-353). As the author correctly notes in his conclusion: "this elaborate organizational system remained vital to maintain Rome's power throughout the Principate" (p. 369). Hirt's work is painstaking in its research and is a mine of valuable information in which every historian or archaeologist will find useful data. Even more important than this, though, is the fact that many of the questions studied may be extrapolated to other periods and other regions, given the presence of the necessary safeguards. The exploitation and use of mines in the Late Roman and Early Byzantine Empire is the subject of much debate and this book is a valuable source of ideas about the topic. A greater focus on the issues in question would perhaps have been desirable, as a theme is often repeated in a number of different parts of the book using similar arguments. Pages 226-260 revisit the issues described above, and the relationship between *procuratores* and the exploitation of mines in north-eastern Spain is addressed on as many as fourteen different occasions (p. 76, 119, 120, 123, 162, 166, 186, 187, 188, 199, 232, 250, 340 and 360). In certain areas there are gaps, such as the lack of attention paid to coinage or to monetiform objects such as those that existed in the south of Spain between the first centuries BC and AD (A. Casariego, G. Cores, and F. Pliego, *Catálogo de plomos monetiformes de la Hispania antigua*, Madrid, 1987), the purposes of which appear similar to the Balkan token money and coin series (*nummi metallorum*) which are in fact covered in the book (p. 58, 59, 64-67, 72, 82). The essential questions regarding the organisation of mines and quarries in the Principate are, however, examined with a great deal of intelligence and flexibility, and the responses, as pertinent as the questions themselves, provide a valuable window on the organisation of the vast, diverse and complex world of quarries and mines in the Roman world. This is an important book, and one which will prove to be an essential point of reference for a considerable time.

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La livraison 2010 des *MBAH* réunit les communications d'un colloque qui s'est tenu à Winnipeg sur le thème des imitations dans la production et le commerce antiques. Dans le commerce mondialisé d'aujourd'hui, la production de fausses montres suisses, vêtements griffés, voire médicaments trafiqués constitue un phénomène majeur qui entraîne à la fois des protections juridiques de plus en plus lourdes et une répression de plus en plus impitoyable des contrefacteurs. Le monde gréco-romain lui aussi imite et vend de l'imitation. Et comme il n'existe ni brevet déposé, ni copyright, ni contrôle de l'origine, le faux se vend comme le vrai. L'intérêt pour l'historien économiste est multiple. Cela implique qu'il y a de la valeur ajoutée sur