FOREWORD

The cart-ruts are one of the most elusive enigmas of Maltese archaeology. Like the prehistoric megalithic temples and the corpulent statues found in them, they defy a comprehensive and satisfying explanation. They are a fascinating subject for discussion not only for archaeologists but also for the ordinary citizens, whether resident or visiting. In fact they have been treated both in archaeological and in other kinds of literature, as well as in television documentaries.

Even though one can never say it is the last word, we have here the most comprehensive treatment of the subject of the cart-ruts ever produced. A real monograph on the topic, it takes into consideration all the literature published on the topic so far and discusses all the solutions suggested in that literature, separately and collectively, with regard to different aspects, such as date, purpose, vehicle used. Most importantly, it is based on the most comprehensive catalogue of cart-rut sites on the Maltese islands (which is appended to the monograph). The compilation of such a catalogue has never been done before, a failing that has hampered previous studies most seriously. The detailed, scientifically documented, survey of the most important cartrut system, that of Misrah Ghar il-Kbir, using the most sophisticated, stateof the art surveying equipment has shed new, crucial and incontrovertible light on the date of at least this particular cluster of these rock-cut features. Further scientific contribution was provided by another independent study of the phenomenon, the sedimentological and geological study of three sites, involving the extraction of samples and their subjection to microscopic and SEM analysis.

I have always contended that cart-ruts are not a purely Maltese phenomenon and that they must be studied in conjunction with and in the light of their manifestations abroad, at least those within the Mediterranean region. This study of the Maltese cart-ruts has taken the whole question one better, by incorporating all the other known examples of cart-rut systems in the Mediterranean and even beyond, in the Middle East and in the New World. The placing of the Maltese cart-ruts in an international perspective is one of the major novelties of this work.

When I was asked Joe Magro Conti and Paul Saliba to direct the academic side of this European-funded Cultura 2000 project, before it was even proposed for approval, I accepted their invitation most willingly. Joe Magro Conti and Paul Saliba are two graduates of my department who have

successfully kept up their archaeological commitment in their career, albeit in government agencies concerned mainly with the protection and conservation of the cultural heritage. In the 1990s, they had worked under my direction, together with a number of other former students, in the compilation of the protective inventory of archaeological sites for the then Planning Authority. Together, they were responsible for the coverage of the greatest number of archaeological sites and features. The thoroughness by which the present catalogue of cart-ruts has been augmented – even though, as admitted by the two authors, it is still not complete – leaves me with no regrets whatsoever for accepting the academic direction of this project.

Another major contributor to the inventory of cart-ruts, and to whom I pay due tribute for his sterling work, was Mr Gregers Algreen-Ussing, who was then Head of Division, Preservation of Building and the Urban Environment of the National Agency for Physical Planning of Denmark. Over a number of years, he had recorded in his private capacity more than a hundred cart-rut clusters in the Ghadira-Pwales region.

In spite of having my own pre-set ideas about the cart-ruts - ideas that had matured over decades of observation of the setting of cart-ruts in Malta and elsewhere - in my direction of the preparatory phase of this work, I made it a point to leave Joseph Magro Conti and Paul Saliba complete freedom of operation in the compilation of data, which they have done conscientiously and with the utmost objectivity. I only encouraged logical deductive reasoning in the subsequent presentation of arguments in favour or against certain stances, and clarity of expression. On several occasions in the text, the authors are critical of my own work - perhaps justifiably - as they are of all their predecessors who dealt with the matter, inasmuch as we have clung to one possible explanation and one dating. I have refrained from discouraging them from being so critical. However, I do not necessarily make that criticism my own. There are still a few points on which the authors and myself remain at variance. The logical sequence of cart-ruts and grave-digging at Mtarfa and that of silo-pits and cart-ruts at Birzebbuga are still not resolved to my complete satisfaction. The inclination, or otherwise, of the bottom of the ruts at the point where they meet the silo-pit at Birżebbuga depends on the (rather hazy) surviving photographic documentation and cannot be checked autoptically. To me, therefore, the line of argument depending on it is still undecisive.

I still believe that the majority of Maltese cart-ruts were somehow associated with ancient quarries. Ancient quarrying is a favourite subject of research for me. Although I never published any papers on them I have supervised two very successful undergraduate dissertations with a related topic. I spent the best part of my early academic career searching for such quarries, mostly in northwest Malta, dedicating most of my and my young family's Sunday afternoon excursions in the countryside to that pursuit. It is at that time that the connection cart-ruts/quarries became increasingly convincing. I had always entertained the aspiration of actually collecting all the data and literature into a publishable work, but never managed to find the time for doing so. I am happy to see my aspiration brought to fruition by two of my former students, and much better than I could have hoped to do myself.

From the very outset, we agreed on a general format that should include an independent scientific study by a geologist, and the choice fell on Dr Martyn Pedley, an expert on Maltese sendimentology. It is with enormous satisfaction

that the cart-ruts from which his samples were extracted are deemed by him to be "intimately associated with quarrying activities, especially at Misraħ Għar il-Kbir and at T'Alla w Ommu" (p.68). I'm also happy that Pedley reached the conclusion that the cart-ruts, after some preliminary cutting testified by tool-marks, were used by carts fitted wheels and that iron-rimmed wheels were used for the heaviest transport. All the concluding points in his chapter support my contention that the majority of cart-ruts, certainly those at Misraħ Għar il-Kbir and at T'Alla w Ommu are associated with quarrying activity of Classical antiquity.

One of the major achievements of our two authors in this exercise is their discovery of a crucial and incontrovertible clue relating to the date of the cart-rut system at Misrah Ghar il-Kbir, by far the largest and most impressive cart-rut system in Malta. At that spot there is no shadow of doubt that the cart-ruts post-date the quarry into which they extend, even if by a few hours. Since the quarry belongs to the Classical age, that set of cart-ruts must belong to that age, or later; definitely not before. And as that cart-rut is typical of the other ruts in the Ghar il-Kbir system, it is not difficult to conclude that the whole system belongs to the same age.

This monograph on Maltese cart-ruts is further enriched by a preliminary inventory of cart-ruts in Spain and by the first ever survey of a stretch of a long set of cart-ruts in the region of Padul, near Granada in southern Spain. Like some of the long sets in France and Switzerland, this Spanish one is also dated to the Classical age, spanning the indigenous Iberic culture and the following Roman period. Only occasionally is this ancient road network found connected with remains of ancient quarries.

Before I conclude this foreword, I think that a short note on the circular structure at Dwejra, mentioned in page 69 is in order. That structure, not a mere pile of stones as it was thought to be by Parker and Rubenstein, was archaeologically investigated by members of the Grupp Arkeologiku Malta, with the kind permission of the Museums Department in the summer of 1985. Unfortunately, not a single pottery shard or man-made object was encountered in the operation which was limited to a small segment of the circular structure, half of which had already collapsed over the edge of the ridge. The structure consisted of largish, rough, polygonal boulders laid with a flat surface on the outside. The circular perimeter consisted of two skins of such a wall, one facing in, the other facing out, with an infill of small stones and stone powder in-between. The technique is typical of the Bronze Age and not dissimilar to that of the Borg in-Nadur rampart. Dr Pedley's observation that the structure pre-dates the cart-ruts at Dwejra and his guess that its function could have been that of signal tower are most appropriate.

I end by congratulating the authors of this monumental work, Joseph Magro Conti and Paul Saliba, and the other contributors listed in the front page, in particular the Project Co-ordinator, Hermann Bonnici, for crowning this European project with such a marvellous publication. I have no doubt that this monograph will remain a major work of reference on the subject for years to come.

Anthony Bonanno
Head, Department of Classics and Archaeology
University of Malta