THE MALTESE CART-RUTS

UNRAVELING AN ENIGMA

GORDON E. WESTON

This edition 2010

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"But Malta is a place of brief sojourn to such as are not native, and what is done must be done quickly. It is not that there are none in Malta who could tell the world things of great value, and it is they who should do what I have attempted. But national modesty seems to restrain them where I have rushed in."

R. N. Bradley

Contents

Acknowledgments . . . 9
Preface . . . 11
An Intriguing Problem . . . 13
Making a Start . . . 15
The Cart-Rut Sites . . . 23
1. Mellieħa Bay E416 N808 . . . 24
2. East of Mellieħa E438 N804 . . . 25
3. Xemxija Heights E445 N789 . . . 26
4. Mellieħa Pumping Station E433 N784 . . . 28
5. Manikata E416 N778 . . . 29
6. West of Manikata E408 N775 . . . 31
7. Salina Bay (Coastline Hotel) E484 N785 . . . 32
8. Port Burmarrad (Salina Catacombs) E482 N781 . . . 33
9. Burmarrad Valley E481 N781 . . . 34
10. Wardija E415 N773 . . . 36
11. West of San Martin E438 N765 . . . 37
12. Tal-Palma E425 N766 . . . 39
13. Busewdien E447 N768 . . . 41
14. Żebbiegħ to Pwales Valley Road E439 N765 . . . 43
15. North of Mġarr E431 N762 . . . 45
16. East of Mġarr E435 N756 . . . 47
17. Ġebel Għawżara E464 N764 . . . 49
18. Naxxar Gap E494 N761 . . . 50
19. Żebbiegħ E441 N755 . . . 53
20. Fort Mosta E483 N756 . . . 55
21. Pellegrin E404 N750 . . . 57
22. Tal'Uai South of the Mosta Dolmens E489 N750 . . . 58
23. Victoria Lines E470 N750 . . . 59
24. San Ġwann E527 N745 . . . 61
25. Dwejra Lines E443 N738 . . . 63
26. Binġemma Gap E440 N735 . . . 64
27. North Baħrija (Gerżuma Valley) E414 N731 . . . 65
28. West of Baħrija Village E409 N728 . . . 67
29. East of Baħrija Village E419 N726 . . . 69
30. South of Baħrija Village E412 N721 . . . 70

31. East of Nadur Tower E436 N733 . . . 71
32. Tas-Salib Chapel E443 N725 . . . 74
33. Tax-Xini E425 N725 . . . 75
34. North of Chadwick Lakes E446 N725 . . . 77
35. Mtarfa E452 N719 . . . 79
36. Tat-Tarġa E445 N708 . . . 81
37. Tal-Merħla E413 N713 . . . 83
38. Domus Romana Rabat E459 N716 . . . 84
39. Kalkara E579 N717 . . . 85
40. Ta' Baldu E426 N703 . . . 86
41. North East of Verdala Palace E462 N691 . . . 88
42. Mary Magdalene Church Dingli Cliffs E446 N678 . . . 89
43. Għar il-Kbir Clapham Junction E456 N678 . . . 90
44. Clapham Junction East E459 N700 . . . 95
45. Għar Mundu E462 N676 . . . 98
46. Laferla Cross Locality E472 N674 . . . 100
47. Ta' Żuta E461 N669 . . . 102
48. Dalam Valley & Għar Dalam Museum E574 N661 . . . 104
49. Ħas-Saptan Valley E564 N661 . . . 106
50. St George's Bay (Birżebbuġa) E577 N656 . . . 108
Primary Data Analysis . . . 109
Carts . . . 111
Carts and Carters . . . 120
Carters . . . 123
Troubled Times . . . 127
The Borġ in-Nadur People . . . 131
Life with the Baħrija People . . . 135
Phoenicians Bearing Gifts . . . 142
Colonization . . . 146
Cart-Ruts and other Cultural Features . . . 152
Cart-Ruts Creation and Development . . . 172
Hand-cut . . . 172
Compression and Abrasion . . . 176
Dissolution . . . 180
Conclusion . . . 201
The Rest of the Ruts . . . 209
Ċirkewwa (Paradise Bay) 1 . . . 209
Ċirkewwa (Paradise Bay) 2 . . . 209
West of the Red Tower 1 . . . 209
West of the Red Tower 2 . . . 209
West of the Red Tower 3 . . . 210

Il-Gudja . . . 210
Selmun Palace 1 . . . 210
San Niklaw . . . 210
Selmun Palace 2 . . . 210
West of Mellieħa . . . 210
Selmun Palace 3 . . . 211
Ta' Randa 1 . . . 211
Tal-Kortin . . . 211
Ta' Randa 2 . . . 211
Mellieħa By-Pass . . . 211
Ta' Randa 3 . . . 211
Ta' Randa 4 . . . 211
Mistra Valley . . . 212
St Paul's Bay 1 . . . 212
St Paul's Bay 2 . . . 212
Għajn Żnuber . . . 212
North East of Manikata 1 . . . 212
North East of Manikata 2 . . . 212
Wied Mejxu St George's Bay . . . 212
East of Żebbiegħ 1 . . . 213
Ta' Lippija . . . 213
North East of Mġarr . . . 213
East of Żebbiegħ 2 . . . 213
East of Żebbiegħ 3 . . . 213
South of Tal-Ħżejjen . . . 214
North of Falka Gap . . . 214
South of Fort Binġemma . . . 215
Cross Roads South of Fort Binġemma . . . 215
South West of Nadur Tower 1 . . . 215
South West of Nadur Tower 2 . . . 215
Għemieri . . . 215
West of Ta' Wied Rini . . . 216
L-Andrijiet . . . 216
South East of L-Andrijiet 1 . . . 216
South East of L-Andrijiet 2 . . . 216
Nigred . . . 216
North of Ta' Baldu . . . 216
South West of Rabat . . . 217
East of Għar Il-Kbir . . . 217
Ta' Żuta 1 . . . 217
Coast Road West of Ta' Żuta . . . 217

Ta' Żuta 2 . . . 217
South of Gudja . . . 217
Mnajdra 1 . . . 217
Mnajdra 2 . . . 218
Tal-Baqqari . . . 218
Gozo Ruts . . . 218
Dwejra and the Inland Sea . . . 218
Ta' Xilep . . . 218
South of Xewkija 1 . . . 218
South of Xewkija 2 . . . 219
Ta' Lambert . . . 219
South East of Sannat . . . 219
Ta' Ċenċ 1 . . . 219
Ta' Ċenċ 2 . . . 219
Ta' Ċenċ 3 . . . 219
Glossary . . . 220
Bibliography . . . 222

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Preface

Curiosity about our world and its history is, for most of us, a part of our consciousness. We live in an age dominated by scientific discovery and technological innovation which with increasing speed seems to be unravelling the mysteries of the universe, and appears to be tantalizingly close to explaining the nature of everything. It is therefore surprising that, seemingly incidental manifestations of our comparatively recent past can defy explanation by scientific scrutiny and remain shrouded in mystery. Such, however, is the case with the so-called Maltese cart-ruts.

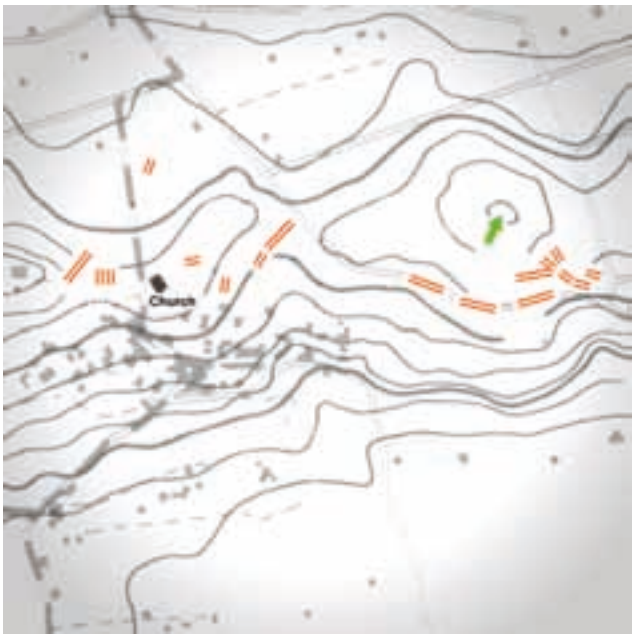
The Maltese archipelago is a veritable wonderland of the past, starting with the remains of extinct exotic fauna dating back to the late Pleistocene epoch some 130,000 years ago. Human presence on the archipelago has been dated, by means of archaeological science, to approximately 7,000 years ago; the early part of the current, post Ice Age, Holocene epoch, which began 13,000 years ago. The application of archaeological science has, it is believed reliably, put into sequence prehistoric cultural changes that have taken place since the advent of human presence on Malta. It is the view of most, but not all, learned commentators that the cart-ruts have their origins within the prehistoric sequence of cultural changes. However, neither traditional archaeological methods, nor the application of modern scientific archaeological methods, have, so far, been able to conclusively place the cart-ruts within the established prehistoric sequence, let alone, position them within the sequence.

Apart from a recently published volume (part of series of small volumes relating to Maltese heritage), it is believed this is the first dedicated work on the subject of the Maltese cart-ruts, accessible to a general readership, for the past twenty six years. On approaching the subject it soon became clear that a new, in-depth, and holistic appraisal of the Maltese cart-rut phenomenon was overdue. It also soon became clear that, the majority of previous commentators on the subject, seemed to have been, ignorant of, ignored, or not brought into clear enough focus pertinent facts or aspects appertaining to the subject that were important to its understanding; resulting in often poorly elaborated or unexplained assumptions. Furthermore, and importantly, all too often past published studies, and their conclusions, have suffered from geographically limited field-work: an inadequate number of cart-ruts had been studied. Notwithstanding, some well reasoned, and in some instances it is believed correct, assumptions regarding the mystery surrounding the origins of the cart-ruts have in the past been made.

An important part of what follows is an in-depth examination of fifty sites on mainland Malta at which cart-ruts can presently be seen; accompanied by maps and photographs. Much of the following work is devoted to a gradual reduction by rational argument, in many instances backed by expert opinion, of a time span in which the cart-ruts could have possibly been created, to a time span when they probably were created. In accordance with the holistic nature of the work, it has been deemed important to devote space to sociopolitical and cultural activities of prehistoric and proto-historic peoples in Malta and around the Mediterranean region, in as much as these activities have been judged to impinge upon the subject. Perhaps one of the most important aspects of the work is a chapter devoted to existing and widely held opinions as to the manner of creation and development of the cart-ruts as they appear today; included with this is a little considered hypothesis, which no doubt, will prove contentious. Although the work draws upon sources from a number of well qualified academics, it makes no pretension to be an 'academic' work: it is best described as a holistic enquiry, with the aim of advancing our understanding of the Maltese cart-rut phenomenon.

5. Manikata E416 N778

Upper Coraline Tal-Pitkal Member
Garigue
68 metres



This is a large and variable site near the west end of the Bajada Ridge. In the West between the modern church and the reservoir is a pair of ruts curving South West, they are broken up but well-defined with a gauge of 1.4m. A little distance to the East are two short pairs of ruts running parallel to each other in a North to South direction. To the North of these ruts are two small and shallow ashlar type quarried areas. On the East side of the modern church is

A corbell-constructed Girna, many of which can still be seen in the west of the island

the Bronze Age: a practice that periodically continued well into historical times. Though evidence is scant, free standing dwellings referred to as huts are attested in the Late Maltese Bronze Age archaeological record. Huts where constructed on firmly placed rubble-stone foundation footings built over with sun-dried earth or Blue Clay bricks, possibly roofed with rush wood. Huts sometimes had moisture impervious floors formed by repeatedly wetting and tamping crushed limestone. Where such huts have been uncovered the presence of hearths were noted along with querns and rollers, presumably used to grind corn or pulses. It seems strange that, in a land abundant with easily extracted durable stone, mud-brick construction was the preference. Mud-brick domestic construction was prevalent throughout the Near East, thus it is broadly indicative of the immigrant's place of origin. It has been suggested that construction in mud-bricks may also indicate the builders to have been used to a pastoral semi-nomadic lifestyle. According to one expert, building in mud-bricks continued into the Arab period of occupation (810–1,091 A.D.). However, all-stone construction is certainly attested during the Temple period, and as excavations at Skorba indicated, the practice may have existed during the preceding Neolithic period. As a point of interest, the Girna, an all rubble-stone

Chapter 7

Cart-Ruts Creation and Development

Most interested observers of the Maltese cart-ruts usually have their curiosity centred on the type of device responsible for the ruts. Most seem content to assume that because the ruts give the impression of having been cut or worn into the bedrock that is what must have happened. Indeed, many of the ruts do give just such an impression. However, this impression invariably results from a too restricted view. When one observes ruts in a multiplicity of configurations occupying variable topographical conditions such a received impression is by no means as secure. In this chapter we are going to examine and make appraisal of a number of possible ways that prehistoric cart-ruts could have come to be formed in the bedrock, and how they have probably developed over time.

Hand-cut

To begin with, it is the opinion of this author that, none of the cart-ruts displaying prehistoric characteristics were deliberately cut into the bedrock by hand. An argument for prehistoric ruts having been as it were 'hand-cut', at least in the initial stage of creation, has been advanced in recent times by some learned commentators. It has been claimed that, in a small number of instances, marks left by cutting tools can be discerned. However, this enquiry has found no observable convincing evidence in support of such an argument. Such instances have been examined, and marks found that might suggest hand-cutting were judged more likely the result of natural chemical and mechanical erosion effecting less durable constituents within the heterogeneous structural composition of the particular bedrock. Interestingly, if one looks for evidence of tool marks on the exposed vertical faces of ashlar quarries, quarries which some proponents of the hand-cut argument assert to be contemporaneous with, and are of the same stone formation and member as the supposedly hand-cut ruts, no corresponding marks are found.

The Rest of the Ruts

(ROR sites)

The catchy phrase 'rest of the ruts' is, unfortunately, not quite accurate. An endeavour to locate and list all other cart-ruts, those not included in the 'fifty examined cart-rut sites' forming the core of this work, has, often despite some effort, resulted in a number of reported ruts eluding detection. There may be a number of reasons for this; nevertheless, blame for their absences from the list below is entirely down to the author. The list is arranged in a North to South direction.

Ċirkewwa (Paradise Bay) 1

E401 N826

A pair of ruts with a gauge of 1.35m runs North North East to South South West. The ruts have been interrupted obliquely and by sea cliff erosion at their southerly end, but continue intermittently for some distance in a northerly direction.

Ċirkewwa (Paradise Bay) 2

E400 N823

These ruts run for a short distance and are almost certainly a continuation or the same pair of ruts (above) a little way to the north, having the same gauge and also being cut off by sea cliff erosion.

West of the Red Tower 1

E402 N814

Two pairs of ruts with a gauge of 1.4m run intermittently for a short distance. The easterly of the two runs in a North North West to South South East direction while the other pair, not far to the west, runs in a North to South direction. There was scant evidence of another pair close by running in a North West to South East direction. A considerable surface scattering of Bronze Age pottery sherds was evident.

West of the Red Tower 2

E399 N814

Just to the west of an isolated house, a poorly-defined pair of ruts runs intermittently for some distance in a North West to South East direction. The ruts cross what appears to be, a drainage cully, while further on, they cross into a path.

Glossary

ASHLAR: quarried stone which is uniformly shaped, usually rectangular.

BRONZE AGE: (particular to this work) a prehistoric cultural period, defined in three phases: Tarxien Cemetery, Borġ in-Nadur, Baħrija. The term Bronze Age should be understood as referring to a period starting, as yet at an indeterminate time, but after the end of the Temple period, around 2,500 B.C.. The Maltese Bronze Age continued up until the first evidential settlement of Phoenicians on Malta around 700 B.C.. It may be well to point out here that, the alloy bronze, or any other metals for that matter, are only found in Malta as a result of importation. Malta's geological makeup is devoid of metallic minerals, save for particles of hydrated iron oxide found sporadically in the Globigerina Limestone Formation and Blue Clay Formation.

CHEMICAL SOLUTION/DISSOLUTION: (particular to this work) calcium-carbonate (limestone) dissolving when in contact with carbonic acid.

DOLINE: a hole or depression in bedrock, usually resulting from chemical dissolution beneath the surface. Dolines are typically seen in Malta formed in the Upper Coralline Limestone Formations and the uplifted Lower Coralline Limestone Formations.

DUNE-BEDDING: a geological term used to describe a rippling or sand dune like appearance of the bedrock, formed by the effects of strong currents in a shallow sea during a time of sedimentary deposition prior to terrestrial lithification: typically seen on the Upper Coralline Limestone Formation.

KARST (KARSTIC): a universally recognized geomorphologic term to describe a number of features accruing on or in limestone as a result of chemical dissolution.

KARREN (KARREN-FIELD): a term used to describe a range of topographical dissolution features relating to karstic limestone. Particularly in Malta, karren takes the form of shallow eroded basins separated by sharp ridges, often seen in a rectilinear and box like configuration. This particular form of karren is usually referred to as rillenkarren.

MECHANICAL EROSION: the weathering/erosion of bedrock by atmospheric agents: wind, rain, hard particles, and stress coursed by widely fluctuating temperatures.

MEGALITH: a large usually upright stone, which has been purposely placed.