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# Quantified analysis of long-term settlement trends in the northern Oman peninsula

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**Summary**

This paper sets out a tentative quantified analysis of long-term trends in the settlement history of the northern Oman peninsula from prehistoric times to the Late Islamic period, based on published archaeological evidence.

Although the data set used is undeniably problematic, it is argued that despite the sheer quantity of available evidence, the database will have ironed out at least some of the specific and localized problems that exist, and will therefore give a broadly correct indication of general long-term trends. It is clear from both academic conversations and the published material that implicit and unsystematic reviews of precisely this data set are regularly used by many scholars in impressionistic and non-rigorous ways — especially as the basis for consensus opinions on trends in the relative density of activity and occupation in different periods. Therefore, the opportunity has been taken here to put such comparisons on a firmer footing and to make them more explicit and testable. The robustness of the data can — and should — then be debated.

The stability of some of the longer-term trends suggests that this data could be acceptable in low-grade analyses such as those presented here. Nonetheless, caution must still be applied until the conclusions can be more rigorously tested.

**Keywords:** northern Oman peninsula, quantified analysis, database of sites, settlement trends, quantification problems

## Introduction

Quantifying settlement through archaeological data is an important aspect of investigating the past. It can provide interpretations of settlement density and size and, most significantly, quantified analysis allows for diachronic and inter-regional comparisons to be made and for longer-term trends to be identified. Such quantification can be carried out using different techniques including, for example, remote sensing from satellite and aerial photographs, but field survey using site and/or ceramic surface counts is the cheapest and most commonly used 'proxy-data' among archaeologists (Chapman 1999: 65, 69).

It is important that data used for such analysis is collected using a systematic survey methodology that is statistically robust. Before carrying out any quantification of settlements or sites, it should be noted that there are several factors that can bias quantification. Sbonias (1999) states a group of models and factors that should be taken into consideration in the interpretation of the distributions of artefacts. He defines six broad categories, of which two are related to the problem of quantification. These are 'factors connected with survey methodologies (biased picture resulting from methods of observation, recording and collection in the field, different criteria for the definition of sites intensity of survey)' and the 'deposition of artefacts, relation of the surface collections to the various ages, and differential preservation of sites' (1999: 2).

To have a proper understanding of settlement quantification from published survey data, it is important to evaluate the results of the surveys concerned. This is in order to understand the biases of these surveys and to evaluate possible problems and inadequacies in their results. A comparison between the data collected during the intensive survey and the published works sometimes shows contradictions and inconsistencies. These seem to rotate around the reliability of data collected by different surveys that might lead to bias in the straightforward comparison of the site numbers. Sbonias (1999: 3) indicates that the intensity of surveys is a major factor which might cause bias in site numbers and distribution.

Since 2008, the author has been attempting to develop a methodology for quantifying settlement patterns in the particular geographical and cultural setting of the northern Oman peninsula (al-Jahwari 2008; al-Jahwari & Kennet

2008). To date, no such approach has been developed, generally adopted, or applied in the Arabian Gulf region, although some attempts have been made (e.g. Costa & Wilkinson 1987; Wilkinson 1974; de Cardi, Kennet & Stocks 1994; Kennet 2002). Thus, the author has attempted to investigate long-term trends in settlement in the northern Oman peninsula using two types of data: a surface pottery collection from the author's own survey in Wādī ᶜAndām in al-Sharqiyyah Region (see al-Jahwari 2008; al-Jahwari & Kennet 2008), and a database of published sites that was created using data available in the literature.[1] The latter is the focus of this paper.

This paper will attempt to set out a tentative quantified analysis of long-term trends in the settlement history of the northern Oman peninsula from the Stone Age to the Late Islamic periods based on published archaeological evidence. To achieve this, a database of sites was created using the published literature related to research carried out in the northern Oman peninsula. In fact, none of the projects and survey projects concerned has attempted to quantify sites or settlement activity over time in a systematic or statistically rigorous way. Many of the projects employed survey methods that might have resulted in some sites being neglected, and many have presented their data in a way that is difficult to quantify. This is understandable: they did not set out to provide a quantified analysis, but rather to explore and locate sites of specific interest, or to deal with specific research questions and aims. Although perfectly valid in respect of their research aims, such methodologies make it difficult to make comparisons of settlement patterns in different periods and areas. They provide an essentially biased picture and can misrepresent actual levels of activity and the perceived settlement hierarchy. This makes it difficult to rely on the results of these surveys in quantifying settlement activity over time.

These problems lead us to ask whether this type of data can be taken at all as representative of settlement patterns and trends in the past. Ultimately and while bearing in mind these problematic issues, it was decided to attempt an analysis to discover what sort of patterns and indications the data might provide. At the very least the analysis will serve to characterize the information that is presently available.

This paper will mainly focus on the methodology used in this approach and will comment only briefly on the most significant trends that can be discerned from the analysis. However, before doing so, it is important to define the geographical extent of the area under investigation.

## Limits of the study area

The database includes all sites published in the whole of the northern Oman peninsula (Fig. 1),[2] which has been divided into six major sub-regions. In some instances, due to the lack of available information, it was not possible to assign sites to a sub-region and they were therefore assigned to an additional category named 'Unknown sub-region'. The use of sub-regions is to allow regional comparisons to be made within the study area. The sub-regions are intended to have some degree of internal consistency with regard to their landscape and environment, although there is inevitably considerable variation within each.

Starting from the northernmost sub-region, the Musandam and Northern Emirates (MNE) covers the northern part of the peninsula from the Straits of Hormuz in the far north to Dubai in the north-west, along the Arabian Gulf and Fujairah in the north-east, running along the Sea of Oman. The second sub-region is the Abu Dhabi Coast (ABDC) that covers the area extending from Dubai in the north-east to the border between the UAE and Qatar in the north-west along the Arabian Gulf. It also covers the inland areas to the south, close to the border with Saudi Arabia: from the Umm al-Zumūl desert and the Liwāʾ Oasis in the south-east to the Sabkhat Maṭṭī in the south-west, as well as all the islands of Abu Dhabi.

The third sub-region is the Ḥajar Mountains (HM) which covers an area that extends from the Buraymī Oasis in the north, down to the al-Mudhaybī area in the south. It includes a large mountainous area crossed by wadis and gravel plains that have formed the base for human settlements. The fourth sub-region is the Bāṭinah Coast (BTNC) which extends from Fujairah in the north down to al-Sīb in Muscat along the Sea of Oman. It also includes parts of the inland area between the eastern Ḥajar Mountains and the coast. The fifth sub-region is the Eastern Coast (ESC) that extends from Muscat in the north-east along the Sea of Oman to Ṣawqirah in the south-west along the Arabian Sea. The northern part of this coast covers an area extending from Muscat to the fishing port of Qurayāt along the Sea of Oman, while its southern part covers the area that extends from Sūr to

[1] For a fuller outline of the methodology and analysis of this database, see al-Jahwari 2008.

[2] The southern part of Oman (Dhofar region) has a very different cultural and settlement history and has therefore been excluded from this analysis.

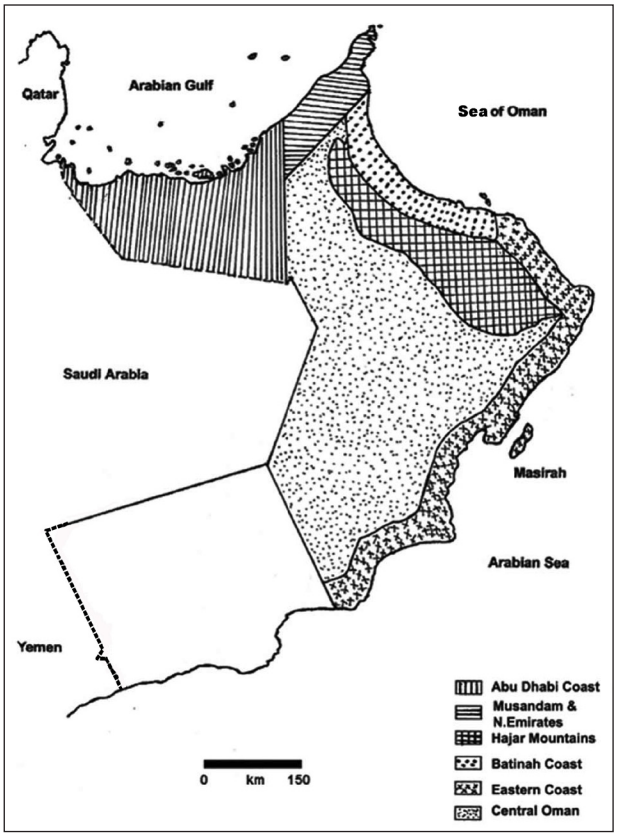


**Figure 1.** *Defined sub-regions for the purpose of the analysis of the sites database.*

Ṣawqirah along the Arabian Sea. The latter part includes a vast gravel plain and wadis, particularly the area around Jaᶜalān. The final sub-region is Central Oman (CNO), which covers a large area with gravel fans and vast deserts, extending from southern Buraymī in the north-east to the border of the Wahībah Sands at the south-eastern corner of the peninsula.

## Methodology and database structure

The first step of the study was to create a database of published sites from the northern Oman peninsula; it was created and analysed using Microsoft Access 2003™. Before presenting the results of this analysis, it is important to show the structure of the database, and to indicate precisely how sites were defined from the literature.

Generally speaking, sites were defined by examining the available published and unpublished literature. The database includes a total of 4520 sites, which covers all definable sites up to February 2007.[3] Whenever possible, sites were defined from published lists, gazetteers or, when these were lacking, from within the text itself. An example of this definition can be quoted from a paragraph published by Schreiber (2005: 255) from the Ibrā survey:

'We decided to start our investigations in this neutral zone, in a hilly area overlooked by an Islamic watchtower (I0003) … Here, we discovered the remains of what must once have been a large circular Umm an-Nar building (I0004).' In this paragraph, two sites were defined:

- Ibrā (I0003) = Islamic watchtower
- Ibrā (10004) = Umm an-Nar large circular building

In some cases, it was not possible to define sites as the literature did not point to related information, such as names or numbers, within the text. Instead, they point out that in a specific area the survey recorded some features or sites while providing a general description of the recovered evidence. The following paragraph is an example quoted from Schreiber (2004: 7–8) in his survey at Izkī:

> South of Iz0005, down the slopes several structures (a retaining wall, terraces, house foundations), … which probably belonged to a 3rd millennium BC settlement … Situated immediately to the west of the circular building Iz0005, are some large rectangular structures, possibly tombs… because of their NE-SW orientation, they were tentatively dated to the Late Iron Age or Samad-period.

It is clear from this paragraph that there is no indication of the sites' names, numbers, or whether the recorded features belong to a single site or multiple sites. In this case, the definition of sites was based on their location and period:

1. Saruj (south of site Iz0005), which includes an Umm an-Nar settlement with a retaining wall, terraces, and house foundations.
2. Saruj (west of site Iz0005), which includes Late Iron Age-Samad large rectangular structures that are possibly tombs.

[3] Since 2007 more sites have been published but sites published after this date are not included in the analysis. The database can be updated and it is the author's intention to update and analyse it every few years.

| Period | Dating | Sub-periods | Dating |
|---|---|---|---|
| Stone Age | Earlier than 7000 to 3500/3400 BC | Early Stone Age | Earlier than 7000 BC |
| | | Late Stone Age | *c.*7000–3500/3400 BC |
| Hafit | 3500/3400–2500 BC | — | — |
| Umm an-Nar | 2500–2000 BC | — | — |
| Wadi Suq | 2000–1300 BC | — | — |
| Iron Age | 1300–300 BC | Early Iron Age | 1300–600 BC |
| | | Late Iron Age | 600–300 BC |
| Hellenistic–Parthian | 300 BC– AD 100/200 | — | — |
| Sasanian–Early Islamic | AD 100/200–900/1000 | — | — |
| Islamic | AD 1000 onwards | Middle Islamic | AD 900/1000–1300 |
| | | Late Islamic–Recent | AD 1300 onwards |

**Figure 2.** *The proposed chronology for the Oman peninsula adopted in recording sites in the database.*

In other cases, sites were defined directly from the illustrations provided in the publications, especially photographs, sketch plans, and maps in which site numbers or periods are shown, whether or not they were included within the text itself. For instance, Hastings, Humphries and Meadow (1975: 11) provide a map of third-millennium BC settlements recorded by the Harvard survey in which three settlements shown on the map are not mentioned within the text itself; thus, they were counted as third-millennium BC sites and given the same names, numbers, and description as provided on the map. These are:

- Bahlah BB-16: Umm an-Nar circular stone walled structure
- Wādī Ḥalfayn 3: Umm an-Nar settlement with cairns
- Wādī ʿAndām 16: Umm an-Nar circular stone walled structure

Some survey projects published their results in their own languages so, whenever possible, sites from these publications were defined using manuals or some sort of reliable online electronic dictionaries. It is also important to mention the fact that there is a large number of individual, mainly excavated, tombs that were recorded and given a unique number. Therefore, when defining sites within the database each tomb was entered as one unique site. This fact makes the quantification difficult and complicates the general pattern, for this will obviously increase the total number of tombs versus settlements, as will be seen in the analysis below.

After sites were defined from the literature, they were entered, together with their related information, into the database. In order to organize the relational database information, three tables were created: the 'Site table', 'Location table' and 'Survey Project table' (Figs 3–6).

The 'Site table' (Fig. 4) includes information about each site, such as its number; name(s); location; latitude/longitude; the survey project(s); and chronology. The chronology was divided into fourteen fields, one for each period starting from the Early Stone Age and ending with the Late Islamic–Recent period (see Fig. 2 for the proposed date of each period). Each record includes data about the type of site or archaeological feature found within the site (e.g. settlement, tomb, midden/scatter, fortification, industrial place, rock art, religious place, harbour/port, earthwork, cave/rock shelter, etc.). Each chronological period within a single site might cover

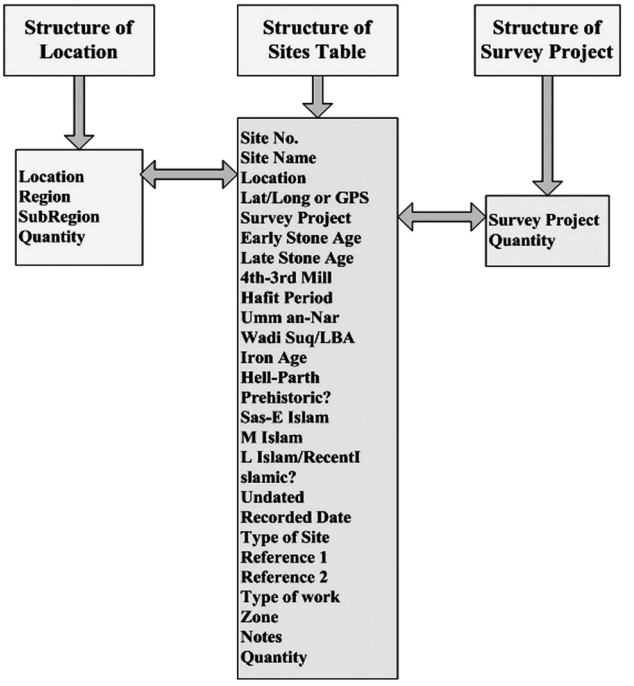


**Figure 3.** *The relationship between the three tables within the regional database.*

| Field Name | Data Type | Description |
|---|---|---|
| Site Number. | AutoNumber | Computer-generated number of the site within the current database |
| Site Name | Text | Name and encoding of the site as it was called by the survey project |
| Location | Text | Area where the site was found (e.g. Sohar) |
| Lat/Long or GPS | Text | Map reference or GPS coordinates that show the exact location of the site |
| Survey Project | Text | Name of the survey project/team who carried out survey, excavation, or both at the site |
| Early Stone Age | Text | Includes all types of archaeological sites/features dated to the period earlier than 7000 BC |
| Late Stone Age | Text | Includes all types of archaeological sites/features dated to around 7000–3500/3400 BC |
| Fourth–third millennium | Text | This field was created for all types of archaeological sites/features recorded, mainly, by the Joint Hadd Project and dated to a broad timescale that includes three periods within the current database (e.g. Late Stone Age, Hafit, Umm an-Nar) |
| Hafit Period | Text | Includes all types of archaeological sites/features dated to around 3500/3400–2500 BC |
| Umm an-Nar | Text | Includes all types of archaeological sites/features dated to around 2500–2000 BC |
| Wadi Suq/Late Bronze Age | Text | Includes all types of archaeological sites/features dated to around 2000–1300 BC |
| Iron Age | Text | Includes all types of archaeological sites/features dated to around 1300–300 BC |
| Hellenistic–Parthian | Text | Includes all types of archaeological sites/features dated to around 300 BC–AD 200 |
| Prehistoric? | Text | Includes all types of archaeological sites/features that are possibly of prehistoric and pre-Islamic date |
| Sasanian–Early Islam | Text | Includes all types of archaeological sites/features dated to around AD 100/200–900/1000 |
| Middle Islam | Text | Includes all types of archaeological sites/features dated to around AD 900/1000–1300 |
| Late Islam/Recent | Text | Includes all types of archaeological sites/features dated to around AD 1300 onwards |
| Islamic? | Text | Includes all types of archaeological sites/features that are possibly of Islamic date |
| Undated | Text | Includes all recorded but undated types of archaeological sites/features |
| Recorded Date | Text | Date when the site was found for the first time |
| Type of Site | Text | Description of the site and its components |
| Reference 1 | Text | General reference where the site was mentioned |
| Reference 2 | Text | Reference and exact pages where the site was mentioned |
| Type of work | Text | Survey, excavation, or both |
| Zone | Text | Inland, coastal, or unknown |
| Notes | Text | Any notes about the site such as other names of the site given by other survey projects |
| Quantity | Numeric | This field was given a value of 1 in order to facilitate quantification |

**Figure 4.** *The physical structure of the Site table as it appears in its 'design view'.*

| Field Name | Data Type | Description |
|---|---|---|
| Location | Text | Area where the site was found (e.g. Sohar) |
| Sub-Region | Text | The sub-region where the site is located (e.g. Ḥajar Mountains) within the whole region of the northern Oman peninsula. |
| Quantity | Numeric | Summary of the total number of sites recorded within the sub-region |
| | | |

**Figure 5.** *The physical structure of the Location table as it appears in its 'design view'.*

| Field Name | Data Type | Description |
|---|---|---|
| Survey Project | Text | Survey project which recorded the site |
| Quantity | Number | Summary of the number of sites recorded by the project |

**Figure 6.** *The physical structure of the Teams' table as it appears in its 'design view'.*

more than one type of site/feature (e.g. settlement and tombs). The site table also includes the date when the site was discovered; a description of the site and its contents; and an indication of where the results from the site were published. It also specifies the type of work carried out at the site (survey, excavation, or both); whether it is inland or coastal; and other notes (e.g. mentioned by other survey project(s) under a different name).

The 'Location table' (Fig. 5), consists of three fields: location, sub-region, and quantity of sites within each location/area.

The 'Survey project table' (Fig. 6) includes two fields: one for the name of the survey project and another for the total number of sites recorded by this project.

## Preliminary analysis: long-term trends in settlements and tombs

Analysis of the database (Fig. 7) shows that by far the largest number of sites recorded in the northern Oman peninsula is dated to the Late Islamic–Recent period. For pre-Islamic periods, Iron Age sites are the most

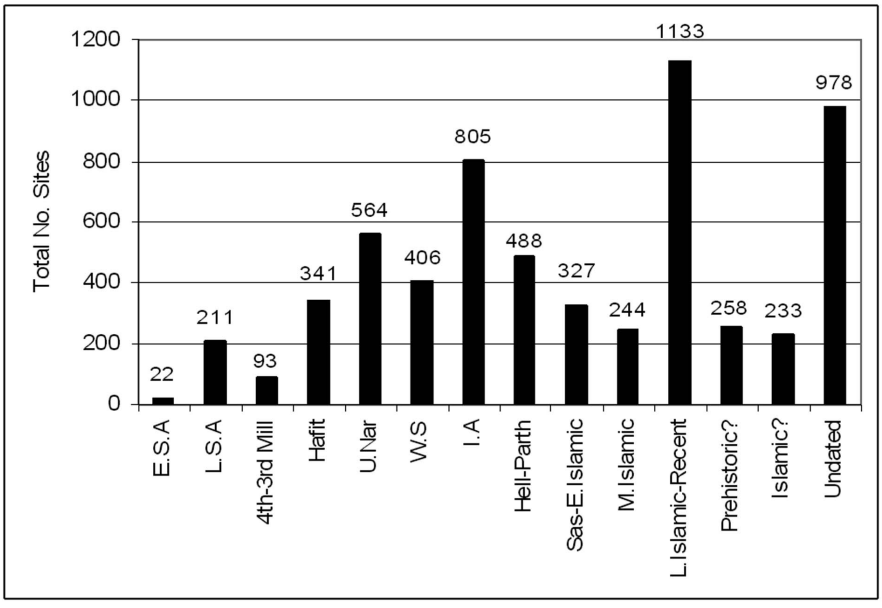


**Figure 7.** *The total percentage of sites recorded in the whole regional database by period.*

common followed respectively by the Umm an-Nar and Hellenistic-Parthian periods. It seems, from Figure 7, that there are long-term variations and changes in the level of activities within the northern Oman peninsula. The figures suggest that there was a gradual increase in the level of activity from the Early Stone Age to the Iron Age followed by a gradual decline until the Middle Islamic period. This broader trend is broken only by a decline in the number of sites during the Wadi Suq period. Following the apparently low levels of activity during the Middle Islamic period, the Late Islamic–Recent period witnessed quite dramatic growth, representing the highest level of activity of all periods.

There are a number of points to make here. First, the changes in the numbers of sites do not appear to be random or arbitrary but instead there seems to be a longer-term trend, with a peak in the Iron Age. While the apparent strength of this trend suggests that the data is not purely random and might be reasonably reliable, it is also difficult to explain. A second point is the obvious crudeness of the chronological resolution. For example, the Iron Age has been combined into a single period for this analysis, an approach that was made necessary by a lack of precision in much of the published evidence, but it is known that the Early and Late Iron Ages (Iron I, II and III in some areas) have quite different levels of activity. Other periods could also be subdivided, for example the Sasanian and Early Islamic periods. It is also true that there is no consideration of the different lengths of these periods. Obviously, longer periods can be expected to have resulted in more sites. It is hoped that further, more subtle analysis of this data, taking some of these issues into consideration, will be possible in the future.

## Types of site

The trends and changes defined above might help our understanding of the longer-term cultural and economic changes that the northern Oman peninsula has witnessed over time. It is, however, important to mention that these patterns are complicated by tombs, which appear to show a different pattern. Figures 8 and 9 show the total number and percentage of settlements and tombs by period. They demonstrate that the Stone Age is more commonly represented by settlement sites. It is possible that this might be related to the fact that the majority of sites from this time are shell middens and/or flint scatters that are very visible on the surface, while no evidence of tombs — with a few exceptions, e.g. Raʾs al-Ḥamrāʾ 5 (Salvatori, Coppa & Cucina 2007) and al-Buhais 18

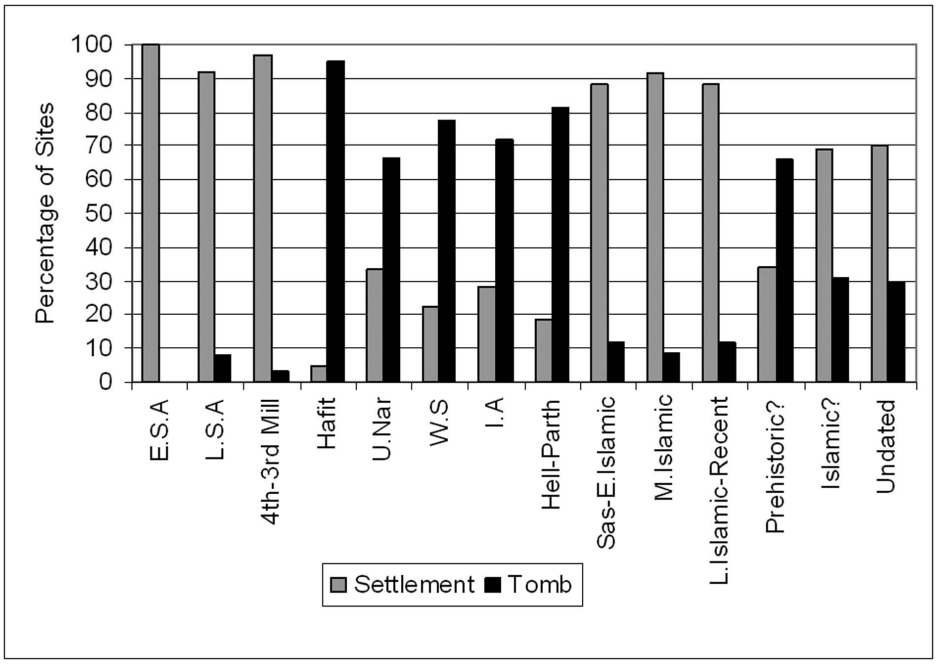


**Figure 8.** *The ratio of settlements and tomb sites from the whole area by period (percentages based on the total number of sites by period presented in Fig. 10).*

| Period | Settlement | Tomb | Total/Period |
|---|---|---|---|
| Early Stone Age (ESA) | **22 (100%)** | 0 (0%) | 22 (100%) |
| Late Stone Age (LSA) | **210 (92%)** | 18 (8%) | 228 (100%) |
| Fourth millennium–third millennium | **91 (97%)** | 3 (3%) | 94 (100%) |
| Hafit | 17 (5%) | **328 (95%)** | 345 (100%) |
| Um an-Nar UN) | 199 (33%) | **397 (67%)** | 596 (100%) |
| Wadi Suq (WS) | 93 (22%) | **325 (78%)** | 418 (100%) |
| Iron Age (IA) | 233 (28%) | **601 (72%)** | 834 (100%) |
| Hellenistic–Parthian (Hell–Parth) | 94 (19%) | **413 (81%)** | 507 (100%) |
| Sasanian–Early Islamic (Sas–E. Islamic) | **301 (88%)** | 40 (12%) | 341 (100%) |
| Middle Islamic (M. Islamic) | **230 (91%)** | 22 (9%) | 252 (100%) |
| Late Islamic (L. Islamic)–Recent | **1038 (88%)** | 140 (12%) | 1180 (100%) |
| Prehistoric? | 91 (34%) | **176 (66%)** | 267 (100%) |
| Islamic? | **164 (69%)** | 73 (31%) | 237 (100%) |
| Undated | **610 (70%)** | 256 (30%) | 866 (100%) |
| **Total/Type** | **3395** | **2792** | **6187** |

**Figure 9**. *The total number and percentage of settlement and tomb sites by period (percentages based on the total number of sites by period).*

(Uerpmann, Uerpmann & Jasim 2000; Kiesewetter, Uerpmann H-P & Jasim 2000; de Beauclair, Jasim & Uerpmann H-P 2006) — have yet been found, probably due to erosion or deposition or the difficulty of locating such sites. Not unexpectedly, the data shows that tombs make up the largest part of the data set from the Hafit (Ḥafīt) to Hellenistic–Parthian periods. The large number of tombs from the Hafit period is to be expected as almost four decades of fieldwork in the Oman peninsula has only yielded a few settlement sites from this period, while a large number of these very visible tombs have been recovered all over the peninsula. Many are located in mountainous or barren areas, which means they have survived well and are easy to spot. The same is true for the large number of Wadi Suq tombs. It is suggested elsewhere (al-Jahwari & Kennet 2008: 210) that these tombs might belong to a small nomadic or semi-nomadic population in which their occupational remains might have been built of perishable material that does not leave any traces, while the tombs are quite visible, especially in the northern part of the region, where they are not subterranean.

By contrast, the large number of tombs from the Umm an-Nar and Iron Age to Hellenistic–Parthian periods might be related partly to site visibility and also to the bias of several survey projects towards recording tombs from specific periods. Several surveys (see al-Jahwari 2008: 208–263) have concentrated on recording or excavating individual tombs within specific cemeteries. It must also be remembered that each of these tombs was entered and counted as one site in the database and this has increased the ratio of tombs to other types of sites and, thus, complicates the possibility of quantifying the level of activity for each period. In the future it will be useful to count the number of cemeteries rather than individual tombs, but this is sometimes difficult due to the way in which the data has been published.

## Sub-regional trends

The data collected as part of this analysis has shown some general regional pattern from the whole of the northern Oman peninsula. It suggests that there are some long-term trends that are explicit, but it also presents us with some important questions. One obvious question arises: is this pattern the same for all parts of the region or are local variations discernible? The following brief analysis will attempt to show the degree of sub-regional variation that is present in the data. It should be noted that this analysis is still ongoing and is expected to result in a more detailed analysis of sub-regional trends in the future.

The data (Fig. 10) demonstrates that there are differing levels of activity within each sub-region. For the pre-Islamic period particularly, a number of interesting and important points emerge. For example, it seems that there was a growth in the level of activity during the period between the Hafit and Umm an-Nar periods throughout the northern Oman peninsula, with the exception of al-Bāṭinah and Ḥajar Mountains sub-regions, which witnessed stable levels of activity. Additionally, the period between the Umm an-Nar and Wadi Suq periods shows growth in the level of activity only in the Musandam and Northern Emirates sub-regions whereas, by contrast, the Abu Dhabi Coast, Central Oman, and Eastern Coast sub-regions witnessed a notable decline during this time, while the level of activity seems to have remained stable on the Bāṭinah Coast and in the Ḥajar Mountains.

The data also suggests that there was a growth in the level of activity between the Wadi Suq and Iron Age periods in the Central Oman, Eastern Coast, and Ḥajar Mountains sub-regions. Only the Abu Dhabi Coast witnessed a stable level during this time, while there was a decline in the al-Bāṭinah Coast and Musandam and Northern Emirates.

## Discussion

Although the data set presented here is unusual and also undeniably problematic, the hope is that the sheer quantity of evidence will have alleviated at least some

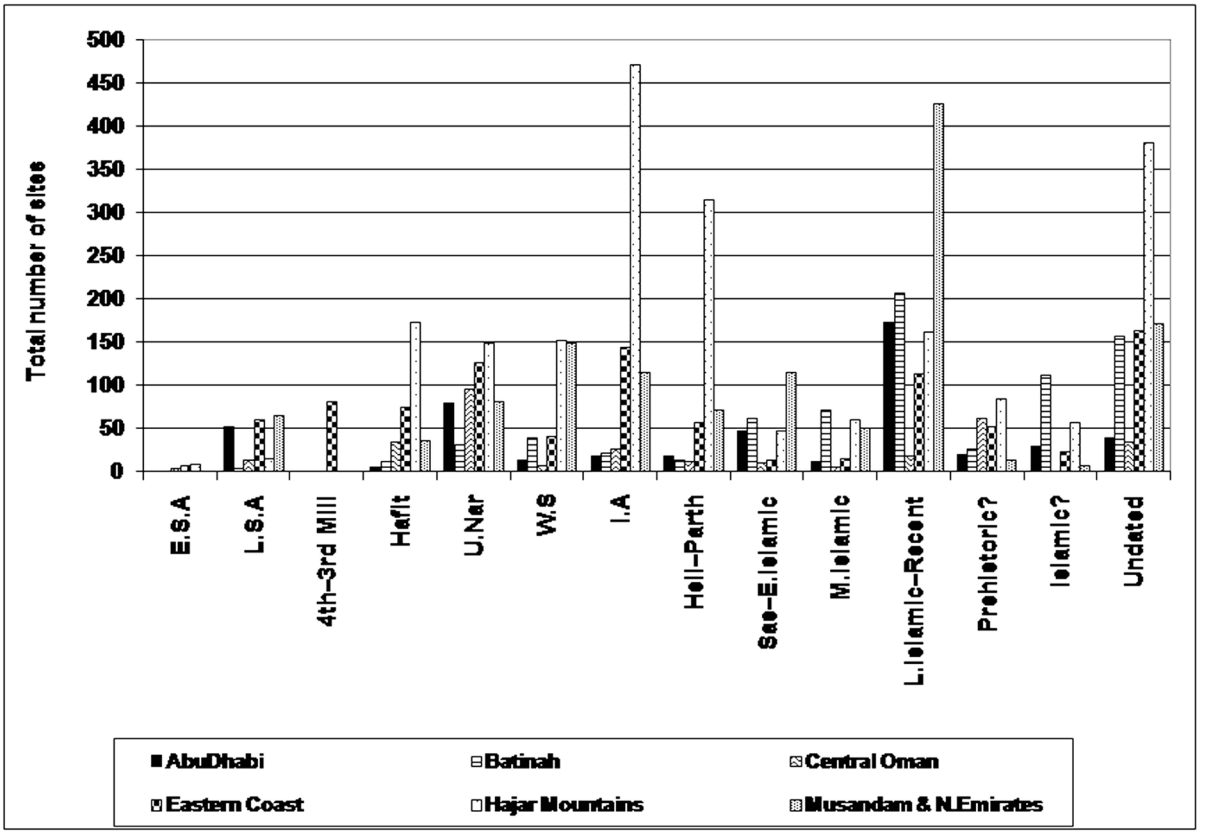


**Figure 10.** *The total number of sites by period and sub-region.*

of the localized problems and biases, and will give a broad indication of general trends. Most importantly, it is clear from academic correspondence and published material that this same data set is being used implicitly by many scholars in an unsystematic, impressionistic, and non-rigorous way based on their own reading, to formulate ideas about the nature of change in the region. Received opinion about the relative density of activity and occupation in different periods is generally based on the same data set that has been analysed here. The chance was therefore seized here to put such comparisons on a firmer footing and to make them explicit and testable. It is also worth repeating that, while the reliability of the data can be debated, the stability of some of the longer-term trends suggests that it may be reliable enough when used for low-grade analysis such as that presented here. Nonetheless, caution must still be applied until the conclusions can be more rigorously tested.

While the author is fully aware of the data problems and limitations, an attempt has been made to make the best use of the available data and to test it as far as is reasonably possible. There is no doubt that this data is not good enough for highly detailed analysis, but an exploration of how far it can be taken was thought to be worthwhile. In fact, despite any possible problems and unreliability that might exist, there is no doubt that this study has contributed to our understanding of the region's archaeology. Quantification of the published archaeological evidence from the whole northern Oman peninsula offers some preliminary developments and patterns that could help to develop future hypotheses and interpretations related to changing levels of activity. It also provides a much more detailed picture of the development of the region than was previously possible. Some of the former conclusions about the region's development appear to be correct and coherent, while others need to be revised.

As mentioned above, this research is ongoing. It is hoped in the future to improve the resolution of the analysis in terms of the chronology, site typology, and definition of sub-regions. Thereby, it is hoped that it will be possible to investigate sub-regional variations in the numbers of sites in different periods more accurately than the very crude preliminary analysis that has been presented here. Clearly, interpreting these trends is a complex matter and more work needs to be done before they can be explained and accepted, or rejected as unreliable. Different hypotheses (e.g. environmental conditions, natural resources, reliability and intensity of fieldwork, archaeological reality, etc.) might eventually be suggested, but with the data currently at hand, it is perhaps too soon to speculate on the reasons behind the regional and sub-regional trends that have emerged from this analysis.

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