

Chadi Hatoum

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# Ancient Rural Managements and Their Impact on the Landscape in Southern Syria

Jabal al-‘Arab; Roman countryside; agricultural remains; field boundaries.

## Introduction

The aim of this article is to show examples of the impact of human activities on the landscape in a selected zone from Southern Syria. This article discusses the archaeological evidence that can be exploited to show this impact. The successive survey campaigns allow recognition of the different aspects of landscape evolution, due to human activities. This study depended on the use of 1:25,000 and 1:50,000 scale Syrian topographic maps of the region dating from the sixties of the 20th century and written in Arabic, besides the aerial photographs taken by the French mandate air forces in the 1920s and 1930s, as well as those taken by the Russians in 1958, and Google Earth images. All these documents have been scanned and are available in digital form and preserved at the UMR 7041, ArScAn, APOHR team, Maison René Ginouvès, l’Archéologie et l’Ethnologie de Nanterre in France.

## The Geographic Position

With the term “Southern Syria,” we mean the volcanic province which is located in the south of the Syrian Arab Republic (Fig. 1). This region consists of the volcanic mountain massif of Jabal al-‘Arab which rises above the plateaus of Southern Syria up to an elevation of 1800m a.s.l. Jabal al-‘Arab or Djebel Druze, the present dominant habitation by the Druze people (Jabal Hauran, the Aurantis of Antiquity), is a large elliptical dome (about 60km from north to south and 40km from east to west) and constitutes the core of this region, it lies between the plain of Hauran to the west and the desert of Hamad to the east. To the north-west extends the broken sea of lava of the Trachon (Leja or Ledja). The lava fields of Ledja and the Kraa and Safa are to the northeast.

The central area of the lava lands is formed by the wide, fertile plain of an-Nuqra which is covered with rich soil of volcanic decomposition that provides excellent arable land. To the west are the region borders of the mountains of the Jaulan and the terrains of the Golan. In a large part of this region the landscape has been shaped mainly by volcanic activities.

## Historical Context

Conquered by the Assyrians, then by the Persians and the Greeks, Southern Syria was heavily settled in the preprovincial period (a term preferred to the pre-Roman or Hellenistic).<sup>1</sup> Annexed by the Romans in 106, it prospered, as proved by numerous archaeological remains. The north-western slopes of Jabal al-‘Arab, an area known for the large Roman

1 Dentzer 1985, 398.

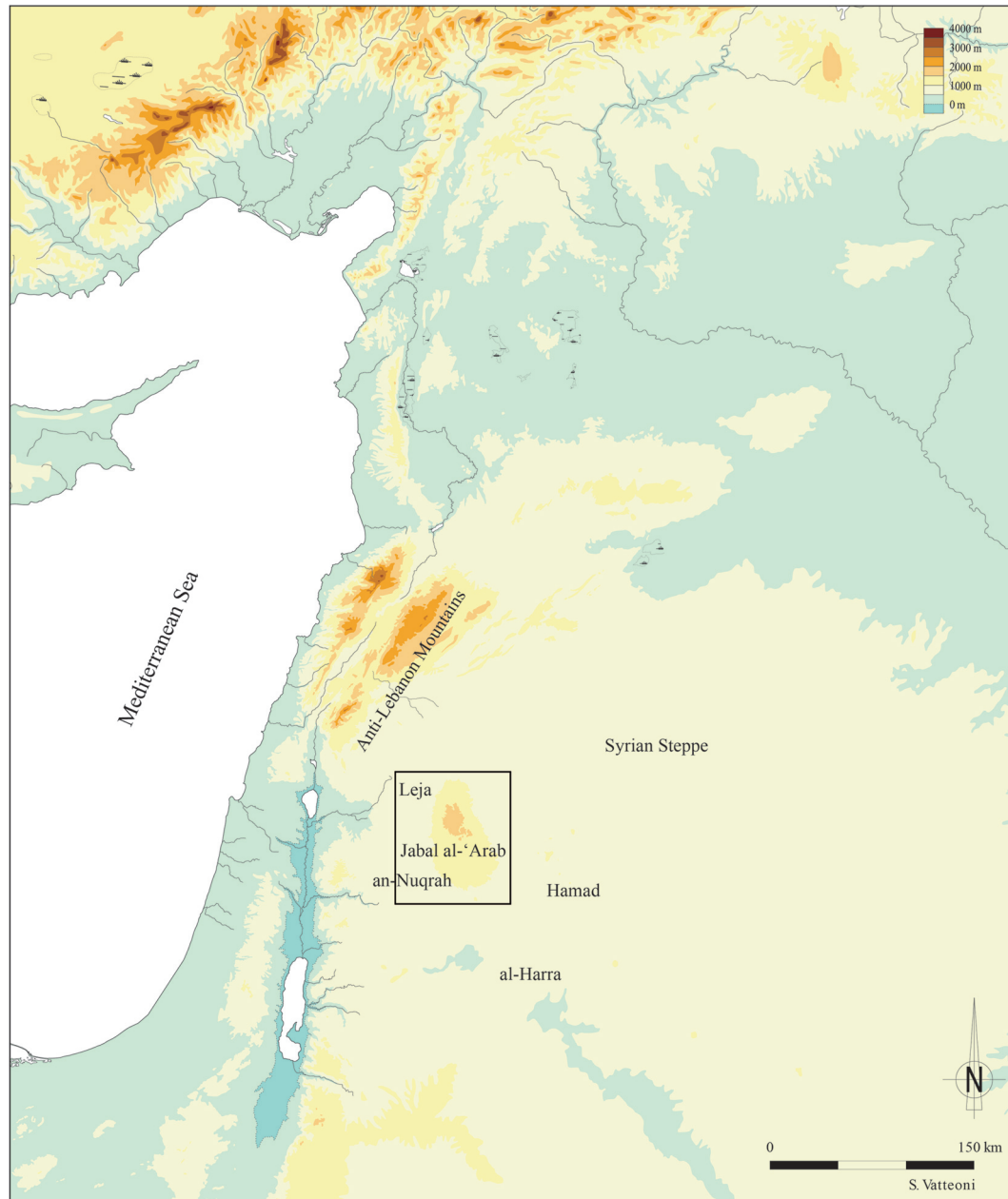


Fig. 1 | Location of the study area within the Near East (Map modified from the map of The French Archaeological Mission in the South of Syria).

cities of Suweida' /Dionysias, Qanawat/Canatha and Shahba/Philippopolis (Fig. 2). It was Christianized in the Byzantine era. Conquered by Muslim Arabs in 634, it suffered much during the Crusades when it was hotly contested. Then the Hauran began to decline, the Mongols ravaged several times. It became, thereafter, a pasture for summer nomads. In 1688, the Jabal Hauran was settled by the first 1,500 Druzes of Lebanon. The Druze conquest continued until 1860.

From the Ottoman period there exist several administrative records. Some note places that were located in Southern Syria, but for settlements that have now disappeared this is difficult to corroborate.<sup>2</sup>

2 Hutteroth and Abdulfattah 1977.

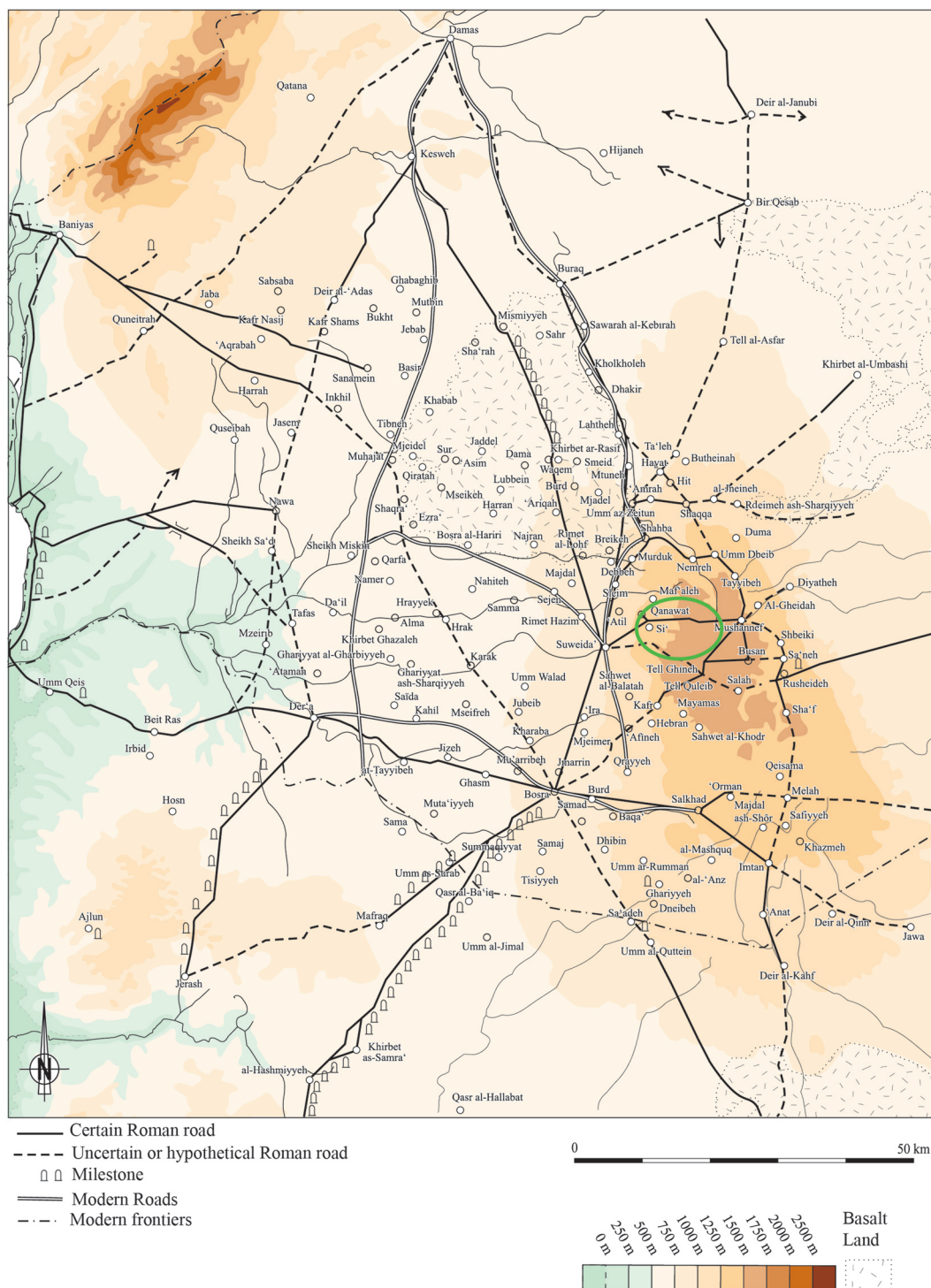


Fig. 2 | Location of the case study area in Southern Syria (Map modified from the map of The French Archaeological Mission in the South of Syria), Dentzer-Freydy, Dentzer, and Blanc 2003

### Case Study: Jabal al-‘Arab Highland Area

Woodlands in Jabal al-‘Arab contain a wealth of archaeological remains. These often belong to landscapes that pre-date ancient or historic woodland and recent planting. Many features survive particularly well because they have not been damaged by cultivation. Remains may also include features such as towers, tumuli, wineries, etc. The study area extends to the east and south-east of Qanawat and to the east of Si’, and covers around 40km<sup>2</sup>.

Systematic fieldwork could not proceed until the examination of the French mandate air forces and Russian photographs besides Google Earth satellite image data, with accurate ground control. Subsequently, work has proceeded through a combination of the examination of the latter documents supported by ground observation. Fieldwork aimed to link features visible on the imagery to broad categories of remains that can be identified on the ground, and we can say that the area retains traces of a unique suite of archaeological remains.

While the imagery proved invaluable for the mapping of the settlements and field boundaries, preliminary fieldwork in 2010 and 2011 had revealed that the settlements and their surroundings showed a marked degree of variability, suggesting that the interpretation of the image data would be much enhanced by a selective program of ground observation. The preliminary field investigation of the area was undertaken in order to assess the features which could not be readily established from image data, e.g. piles of stones resulting from the clearance and the de-rocking of the fields and their relationship to nearby structural elements and local topography.

The first reports describing archaeological sites in Southern Syria stem from nineteenth century western travelers. These people generally came to the region with a Biblical focus, but often had an academic background and a wide interest in many of the different aspects of the region. Topics like geography, climate, vegetation, and the manners and customs of the local population were given attention, as these could potentially provide a better insight into the general setting of the Biblical stories.

One of earliest reports describing sites in Southern Syria was Burckhardt's one, who crossed the region during the summer of 1812 on his way from Damascus to Cairo. When he visited Qanawat, for example, he said: "the road lying through a forest of stunted oaks and Zarour trees, with a few cultivated fields among them."<sup>3</sup> "There were only two Druse families at Kanouat, who were occupied in cultivating a few tobacco fields."<sup>4</sup> Apart from that brief description, Burckhardt did not afford any further information about the landscape. But the information he presented shows that the main village, whose inhabitants possess and exploit the majority of the land of our study area nowadays, began to be inhabited at the beginning of the nineteenth century after a long period of abandonment.

Today a considerable amount is known about the archaeological remains in Southern Syria. Several surveys have been carried out, e.g. *Jabal al-'Arab*,<sup>5</sup> and a number of sites have been the subject of excavation projects, e.g. *Si' 8*.<sup>6</sup> However, when Jean-Marie Dentzer started the excavations at *Si' 8* in 1977 the amount of knowledge on the archaeological remains present in the region was considerably less. With the continuation of the excavations, from that year onwards as a joint project with the Department of Antiquities, the knowledge of the region's past grew, not least as a result of the aforementioned surveys and excavations.

A familiarity with the region is important not only to understand the framework, but also because the landscape observed is not the same as that of today. Intensive farming and large-scale building activities have changed the landscape and the features in it. Archaeological remains like boundaries or building remains have disappeared or been obscured.

Whereas the region to the east and southeast to Qanawat has a more rugged, hilly topography, the region located between Tell Quleib and *Si'* is more plain-like in character. The geological and hydrological features of this volcanic massif determine the landscape's natural features, as well as the Mediterranean vegetation of scattered forests and scrubland.

3 Burckhardt 1822, 83.

4 Burckhardt 1822, 86–87.

5 Gentelle 1985; Leblanc and Vallat 1997; Vallat and Leblanc 2008.

6 Dentzer-Freydy, Dentzer, and Blanc 2003.

The study area has a semi-arid Mediterranean climate characterized by hot, dry summers and mild and rainy winters. Nearly all of the rainfall occurs in the winter and spring. The mean annual precipitation is between 400 and 600mm, but with considerable variation from year to year, as is typical for Mediterranean climates. In the absence of permanent rivers or bodies of water, rainfall, valleys and springs feed the man-made pools.

In practice most of the rainfall ends up flowing out of the area through small seasonal wadis or is contained within depressions where it forms seasonal lakes (Birkets). The lakes and wadis can in some years contain water until the early summer, but thereafter, as with most of the region, remain dry until the winter.

The sufficient amount of rainfall the region had made the vine culture and the natural growing of oak and yellow hawthorn possible. G. Willcox, who studied the vegetal remains discovered in the house 101 in Sia, found that, between the second and the 4th century AD, the *Quercus* evergreen constituted 40% of the vegetation and that the vine cultivation was an important part of the economy.<sup>7</sup> This fact is reinforced by the discovery of wine presses in the area dating to the same period.

The two major features of the study area are the piles of stone resulting from the clearance of fields and the scattered hamlets built with basalt. The use of basalt was encouraged by its omnipresence and by its suitability for use as dressed stone. Its use spread to include numerous elements of the buildings, as wood was a more rare commodity. The basalt was extracted from quarries located either in the same site of the village to be built, or from quarries on the top of hills. In the first case, this practice leads to the forming of huge pools to be exploited for the storage of water for the dry season.<sup>8</sup> This phenomenon, widely spread in the region, is seen in a form of dark patches on the old aerial photographs, inside or in the immediate vicinity of the villages, and as dark green or blue patches on Google Earth images.

Human occupation on the basalt hills began with the clearance of stones from the soil and the building of the first, as yet modest, villages. Land reclamation through the removal of surface and subsurface rocks and stones carried out manually in the past, and recently by heavy equipment, known as 'de-rocking,' was the main intervention towards expanding cultivable areas and increasing production through land reclamation, particularly through the de-rocking of areas with high potential for agriculture. This aspect is comparable to the one observed in the region of Homs.<sup>9</sup> Farming activity initially involved clearing stones from land designated for crops, followed by the construction of numerous low walls for protection, soil retention and demarcation of plot boundaries in accordance with Roman rules. These low walls marking out the cultivated areas are still very visible in the landscape today.<sup>10</sup> The fields in the south of Jabal al-'Arab take two different shapes, orthogonal and polygonal.<sup>11</sup> This leads to a permanent alteration of the visual landscape, including piles of stones that appear on the old aerial photographs, as well as on the Google Earth images, in a form of white spots.

The human impact on the landscape was characterized by growing mastery over the soil, notably by the building of low walls to protect the fields from erosion as much as to mark out their perimeters, giving tangible form to the agricultural plot plan (Fig. 3). When the population expanded, they extended farming into areas normally considered as marginal. When the population was in decline, they abandoned prime farmland and allowed it to revert to its semi-natural form. Much of this activity has been cyclical and highly dependent on economic trends in agriculture and investment by landlords.

7 Willcox 1999, 712, 714.

8 Braemer 1988, 101.

9 Philip et al. 2002, 6.

10 Gentelle 1985, 35.

11 Villeneuve 1985, 126, 128.



Fig. 3 | General view of the landscape of the study area to the east and southeast of Qanawat. The straight Roman road and the organization of fields on both its sides are clear, besides the terraces and the boundaries of fields running down the abandoned slopes (Photo by the author).

Historic buildings, which are ruinous in this region, make a fundamental contribution to the character of the present-day landscape. The structures situated on farmland can range in date and type from ruined preprovincial villages and fortified hamlets to Byzantine monasteries. In some landscapes, such as the hills to the east and southeast of Qanawat, the ancient hamlets called “khirbets” are numerous and dominate the landscape, some have been visited and described by Butler, e.g. Khirbet al-Khissin that he called “*Town*”.<sup>12</sup> In other areas, their contribution is more subtle but still important in establishing local identity and sense of place. They provide unparalleled evidence, through their siting in the vicinity of villages or in the open countryside, for the long history of settlement in the Jabal al-‘Arab landscape and, through their scale, use of materials and layout, they illustrate the homogeneity of local and regional aspects concerning geology and building tradition. Here, villages are often still surrounded by surviving patterns of ancient field boundaries.<sup>13</sup> The regular pattern of stone walls belongs to an enclosure landscape.

## Conclusion

With a long history of human exploitation, land resources in Southern Syria, as in other Mediterranean countries, have been subject to increasing pressure for thousands of years. The examination of the French mandate air forces and Russian photographs besides Google Earth satellite image data has permitted the detailed investigation of patterns of landscape modification through much of the twentieth century, and will highlight those landscapes that are at greatest risk from development.

De-rocking and stone clearing are a longstanding land reclamation practice used by Syrian farmers for thousands of years. Farmers made significant efforts to clear their land by traditional methods. They adapted the de-rocking as an efficient mechanism for expanding cultivated land.

<sup>12</sup> Butler 1909-1920, 345.

<sup>13</sup> Leblanc and Vallat 1997, 44.



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Chadi Hatoum, University of Aleppo, Syria; University of Paris 1, Pantheon – Sorbonne, 39 Rue des Envièrges, 75020 Paris, France, chadi.hatoum@yahoo.fr