Part II

The Atlas

Technical Remarks

This Atlas, enlarged and expanded in scope, has benefited greatly from the research work behind the publication of the "Atlas of Palestine 1948" in 2004. The expansion in this issue, entitled: "Atlas of Palestine 1917-1966" is based on new research, new material and the expansion of the coverage area, enhanced by upgraded GIS techniques. This work resulted in a comprehensive database about Palestine.

Area Covered

The target area is all of Mandate Palestine. This area has a measured land area of 26,324,450 donums (1) sq. km = 1000 donums), in addition to Lake Tiberias and the Dead Sea. Lake Hula is included in the land area. The Atlas was based largely on the Survey of Palestine, 1:20,000 sheets, available for Palestine from north to south at approximately grid 70 to100 N. At this southern grid, the area is covered by the latest Survey of Palestine, 1:100,000 sheets (Rafah, Gaza, Beer Sheba and Hebron) prepared during WWII. See Map A.1. The region from Gaza to Um Rashrash on the Gulf of Agaba is covered by (1) Survey of Palestine. 1.:250,000 sheets (1944, revised upto April 1946), (2) Gaza-El Auja, 1:100,000 sheet, Survey of Egypt, June 23, 1917, (3) "The Negeb or Desert South of Beer Sheba", Survey by Capt. S. F. Newcombe, 1913-1914, printed for PEF by the War Office, 1921, and (4) The Administrative Line Agreement of October 1906 between Egypt and Palestine.

Aerial Survey

The aerial survey undertaken by RAF in 1945-1946, just before the British hurried departure from Palestine. gives a life to the Atlas pages. A total of about 5000 aerial photos were examined. Those which were clear, informative and non-repetitive were selected to show in the Atlas. The area covered by aerial photos in this Atlas is 11,097 sq. km; most of this area covers the Jewish land and water resources along River Jordan (Map A.1). Predominantly Arab areas were not closely covered as there was no need to prove Arab Palestine. Since the survey maps were drawn, revised or updated anywhere between 1924 and 1946, the information they contained may not match RAF photos taken in 1945-1946. A new road on the photo may not be shown on the map. Therefore it is prudent to read both together. Without the photos, lines and points can be drawn by a typical surveyor. But photos show visible features of towns, villages, roads and cultivated fields. This pictorial display describes the life of a people who lived for centuries in this ancient land. This belies the myth that "Palestine is a land without people".

DEM (Contours)

The contours for the year 2000 (not 1948) are an added feature in this Atlas. A contour interval of 25m was selected. This is due to the rapid variation in the terrain from the coastal plain, through the mountains, to the Dead Sea. Contour shading was also applied. Two shades were used: one over photos, the other in the absence of photos. The purpose is not to obscure photo details when available.

Scale and Data

The scale of 1:25,000 was selected for this Atlas. This enabled the reduction of the Atlas page size from 34 \times 43 cm to 24 \times 34 cm, which is a suitable shelf size, although it requires more pages. All previous and new information are shown in this Atlas.

The Database in this Atlas comprises the major grouping of data and their rounded numbers. These are:

- 1581 town/village points, which includes 165 new (after 1948) villages in the West Bank, 112 new (after 1948) villages in Palestine 1948, leaving 1304 points in all of Palestine in 1948.
- 2. 26,300 Place Names and over 3000 wadi names in all Palestine. The number of wadis does not mean different wadis; a single long wadi can have multiple names as it winds through different regions. Place names have been verified by different methods. The problem arises from the absence of auttural letters in Latin script, Letters h. s. t can have different sounds in Arabic. Also a. o. u. i can be short or extended in Arabic. (The original Survey of Palestine sheets had dash (-) above some of these letters to indicate extension). In the south, there has been considerable difficulty in reconciling different sources, as they represent different datum and accuracy. (Palestine Grid was established only in 1923). Place names were variously listed depending on the pronunciation of dragomen and (more authentic) local guides. It is surprising that official government maps issued in subsequent years covering this region copied the wrong spelling. After Newcombe, there was no field survey to verify place names. Therefore we consulted villagers in Palestine, Sinai, Jordan, Syria and Lebanon about their pronunciation. Also we reviewed about 70 village books written by people from these villages. This cleared up many place names (including very few spelling mistakes in the original Survey of Palestine sheets). However those remaining in doubt were printed in grev. not black. to distinguish them. This large number of place

names is one of the significant contributions in the Atlas. They are not found anywhere else in a single volume. Preservation of this record is especially important because Israel erased all these names and replaced them by crafted Hebrew names to create a virtual Jewish history, and thereby, in theory at least, preventing young Palestinian generations from maintaining continuity with and recognizing their patrimony.

 16,000 Feature Points, covering all landmarks, such as religious and historical landmarks, water resources (wells, cisterns, tanks), government (police stations, public buildings), civic and transport installations. Only 3,500 have names, most belong to holy sites (mosques, shrines and churches).

There are also other features such as 1948 Jewish colonies within Arab village lands and refugee camps inside and outside Palestine.

The symbols used for all these features are given in the Legend page.

Holy Sites

Palestine, the Holy Land, is studded with holy sites, revered by the same people, no matter what change occurred to their language, religion, ethnicity or their concept of nationality. The Atlas shows 3,674 such sites based on the Survey of Palestine maps. Additional field research by Shukri Arraf and Aqsa Associations (north and south) gave a net additional 1037 sites. Of these, 1,149 in the Atlas and 881 in the additional list have names listed in the Atlas. From the latter list, we have already eliminated the sites found in the Survey of Palestine maps. Although the additional sites have been identified in the field, their location is imprecise and should be used with caution. They are therefore shown with different symbols for separate identification.

Cities and Villages

Selected cities and villages in all Palestine are shown in a large scale in Chapter 2. Photos taken as early as 1918 are shown. This is to illustrate the old character of these cities and villages, notwithstanding the urban expansion which took place later due to population increase. The village photos show the organic structure of the village plan and its close affinity with its fields and water resources, the source of its livelihood. These photos are particularly valuable because Israel destroyed most of them, mainly in the period 1948-1966.

Coordinate System

The coordinates used throughout are those of "Palestine Grid 1923". This grid selected a point such that: 100E / 100N was assigned to a hill, Sheikh Ali Al Muntar, on the eastern outskirts of Gaza. Israel maps use the same grid based on the Cassini-Soldner transverse cylindrical projection. The new Israel grid (1992), based on Transverse Mercator projection, adds 50 km Easting and 500 km Northing. Sheikh Ali Al Muntar point thus becomes 150E, 600N. The transformation to geographical and UTM coordinates is available through GIS system.

Village Boundary

The village boundary, representing the area and the extent of the village land, is most important to define accurately. Administrative divisions, such as districts or sub-districts, fiscal policies, taxation, parcellation, blocks and ownership depend on accurate village boundary (VB).

Before Jewish immigration, Palestinian village land area was large and it was possible to trace it correctly on average scale maps. When Jewish colonists bought a small piece of land, say 100-400 donums, it remained officially within the village boundary. If it grew a little larger, or if a conflict grose between Arabs and Jews. the colony land was split from the main Palestinian village land and the colonists asked the government to be given a new (Jewish) name and recognized status. But it still remained much smaller than the Palestinian village. See comparison of averages in Table 2.11. As this happened frequently during the British Mandate, the 1:20,000 sheets did not always catch up with these changes. To resolve this problem, reference was made to some detailed, but not official. Jewish maps prepared by colonization companies. Available official maps were drawn in a small scale and it was not possible to read small details. A system was created to log each case and compare a Jewish colony's official and measured area. If the error is large, the problem was resolved by combining two of three adjacent colonies, the sum of which usually led to good matching. A log was kept in which the problem and its resolution were described. There was also considerable difficulty with the eastern boundary: River Jordan, Dead Sea and Wadi Arabah, as these were not well defined. This border was discussed in Sections 1.3 and 4.5. The discrepancy between official and measured areas was kept to minimum as can be seen in the tables throughout. A number of villages owned lands in a neighbouring village. For these cases, the Survey of Palestine maps defined these lands by using the term "detached". This term is reproduced in the Atlas 25 times but only the principal village boundary is recognized.

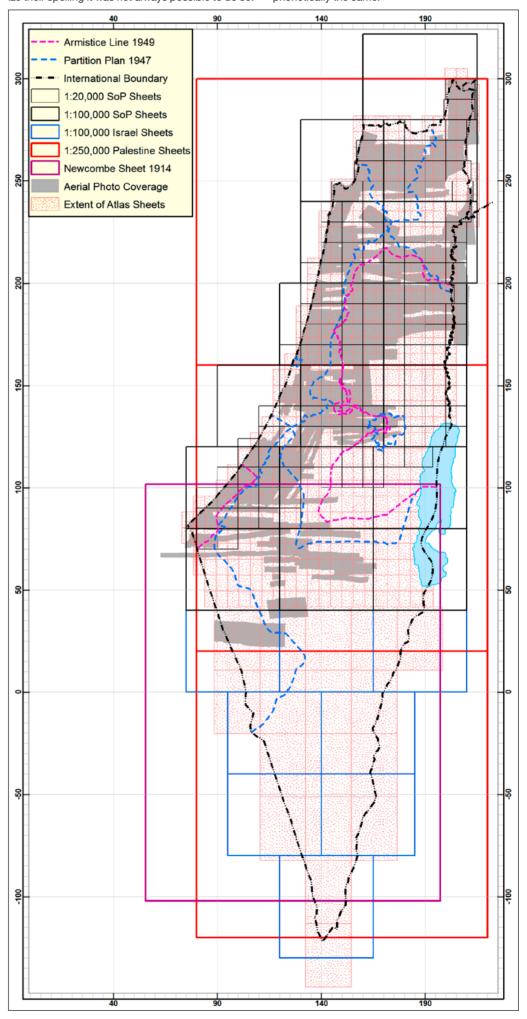
Tribal Boundaries in Beer Sheba

Although the village boundary administrative divisions did not cover Beer Sheba district during the short Mandate period, an attempt was made to delineate tribal boundaries. These are fairly known in the north western half of the district where rainfall is above 200 mm/year. Tribal land there is well defined and its ownership was recognized by Churchill, the Colonial Secretary, and the Law Courts. This is also confirmed in the writings of Aref al Aref and the district's official correspondence. With less rainfall. tribes are scattered, cultivating every patch of good soil. Hence, a tribe may own and cultivate lands in another location, in addition to its principal land. This is similar to "detached" land in villages. In the remote locations, more than one tribe can cultivate lands side by side. These various locations have been identified in the Atlas and referred to as "multiple locations". The location of the tribes is based on Survey of Palestine 1:100,000 sheets, the reports of the district officer, Aref al Aref, and the information by the scholars Alois Musil, Max von Oppenheim, Father Jaussen and others.

Spelling

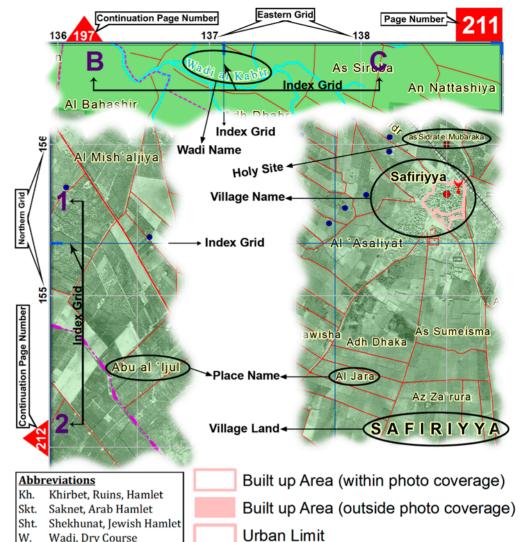
The most consistent transliteration of village/town Arabic names is given in Village Statistics 1945, Section 2.4. Although an effort was made to standardize their spelling it was not always possible to do so.

These names may appear in a different context, document, quotation or another period (e.g. Turkish). They were mostly kept as per the original. The apostrophe in letter 'Ein or 'Arab is kept as frequently as possible. The vowels could be written in different forms, as in Bayt, Beit. The letter h is dropped in Aqaba, Nakba. It is unlikely that none of these forms will materially cause any problem in name identification as they are phonetically the same.



LEGEND

PALESTINE Scale 1:25,000 from 305.18 N to 41.67 N and 1:100,000 in the south 1 km Grid Contours (25m interval) (For year 2000, not 1948) Armistice Line 1949 International Boundary Partition Plan 1947 Sub District Boundary **Tribal Boundary** Village Boundary -----Railway Dismantled Railway 1917



Wadi, River
Breakwater

Major Roads

Aqueduct, Canal

Minor Roads, Other Roads

Mgt. Magharat, Cave

Terrain Elevation (metres)

Holy Sites:

- Mosque
- Sheikh/Tomb
- Cemetery
- Church, Chapel
- Christian Institution
- Synagogue
- Ruins
- Arraf
- Aqsa

Water Sources:

- Well
- Cistern
- Spring
- Water Tank
- Water Tower

Government:

- Police Post
- Police Station
- Police Office
- Post Office
- School
- Railway Station
- Watch Tower
- Other Govt. Building

Others:

- Civic Structure
- O Cave
- Bridge
- Fish Pond
- Hospital

- Ford/Makhadet
- Threshing Floor
- Blockhouse
- Mill/Tahunet/Lime Kiln
- Refugee Camp
- Jewish Colony within Arab Village
- ▲ Border Pillar
- Airport
- Military Camp 1948
- Landing Ground

Villages-

Palestinian:

- Depopulated Village
- Unidentified Name
- Village Destroyed in 1967

- Depopulated and Repopulated Village
- Existing Village since 1948
- New Recognized Village after 1948
- New UnrecognizedVillage after 1948
- Depopulated Multi location in Beer Sheba
- Village in West Bank and Gaza
- Post 1948 West BankVillage

Other:

Demilitarized Zone (DMZ)

- Jewish Settlement inside the Armistice Line
- Jewish Settlement outside the Armistice Line
- Village outsideNorthern Boundary

