

tioned, and Shaphan the scribe occupies only the fourth place (2 Kings xxii, 12, 14). It is, therefore, plausible to assume that Ahikam was the first minister of state, the 'asher 'al ha-bayith', even if his title is not mentioned. Furthermore we learn from the words of Jeremiah that 'the hand of Ahikam the son of Shaphan was with Jeremiah' (Jer. xxvi, 24). This again proves the important position of Ahikam, which enabled him to give protection to the prophet. It also shows us the political attitude of Ahikam.

Political views similar to those of the prophets were also held by some of the high ministers about whom we read in Jeremiah xxxvi. Ahikam is not mentioned any more; he must have died in the meantime. Among others mentioned is his son Gedaliah, if we accept one of the different versions in the Septuagint. This adds the name of Gedaliah to the names of the three ministers who implored the king to listen to the prophet.²² This pacific attitude and their relation to the prophet show that these officials formed one party. Their opponents were the party favouring war headed by the king himself (2 Kings xxiv, 1). This was why Elishama the scribe, a member of this party, presided over the meeting of the cabinet (Jer. xxxvi, 12). It is therefore reasonable to assume that the title 'asher 'al ha-bayith' was held by some member of the house of Ahikam.

The two pairs of 'asher 'al ha-bayith': Hilkiyah-Eliakim and Ahikam-Gedaliah make it probable that in the last period of the Judean monarchy the office was held mainly by one family, the house of Hilkiyah.²³

²² Cf. the different versions of the Septuagint to Jer. xliii, 25.

²³ Isa. xxii, 25 may be understood as a later interpretation to explain the downfall of the house of Hilkiyah; cf. K. Marti: *Das Buch Jesaja. Kurzer Hand-Commentar zum AT*. Tübingen, 1900, pp. 176-177.

An Analysis of Jacotin's Map of Palestine

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I. THE MAP

THE northern sheets of the *Carte topographique de l'Égypte*,¹ surveyed during Napoleon's Egyptian campaign in 1799, are rightly regarded as the first trigonometrically based map of Palestine. This was a big step forward in the cartography of the country, and the result served as a basis for most of the maps of the nineteenth century, until it was superseded in 1880 by the *Map of Western Palestine*² (henceforward to be referred to as the PEF map). The cartographic merits and shortcomings of Jacotin's map have been dealt with in several articles.³ One sheet of the series is reproduced in the *Atlas of Israel*⁴ (see Pl. 22).

Apart from its value for the history of cartography, the map is an important historical document for the conditions prevailing in Palestine at the time of the survey, especially for the existence of settlements, roads, khans, and to some degree for agricultural crops. This value of the map as an historical source depends of course on the reliability and correctness of the measurements and notes.

The survey was made during the short Palestine campaign, which lasted from February to May 1799, and as it was confined to the areas actually occupied by the French, the only parts of the country that could be surveyed at all were the coastal plain and Lower Galilee, with an excursion to Safed and the Jordan at Jisr Benat Y'akub. The problem was therefore whether to omit the unsurveyed parts altogether, or to show them on the map without clearly indicating their unsurveyed character. Actually both methods were used in the final edition of the map. The whole south of the country east of the coastal road was left blank,

¹ Panckoucke, ed.—For full titles etc., see bibliography, below, p. 159.

² Conder & Kitchener, 1880.

³ Schattner, pp. 152-154; Elster; Kallner (Amiran). I am indebted to Prof. D.H.K. Amiran, who provided me with some unpublished notes on Jacotin's map, which were very useful in discussing the identification of settlements and the roads.

⁴ *Atlas of Israel*, sheet I/5.

but in the centre the mountains of Judea and Samaria were indicated by a rough outline, as were the mountains of Upper Galilee. The reason for the inclusion of these unsurveyed areas was the wish to indicate the holy places and the main road from Jerusalem to Damascus. The position of Jerusalem was known astronomically,⁵ and it could therefore easily be put on the map. The other places marked on the map served only to indicate the main road, and only places touched by the main road were noted. The basis for the selection of places was the itinerary given by an inhabitant of Shefa 'Amr and the list of holy places by d'Anville (Jacotin, p. 91). Thus the road from Jerusalem to Jenin is indicated by the following stations: Gabaa (Jaba); Aialon and Vallée d'Aialon (?); Michmas; Bethaven (Beitin); Gosna (Jifna); Geba (?); Lebona (Lubban); Nablous; Gaba (Jeba—which in geographical order should come after Sebaste); Sebaste (Sebastieh); Qabattieh; Jenin. This route is correct as far as the names are concerned, and indicates a route slightly east of the main road of today, but still marked as a route on the PEF map. Another road, indicated only by names without correct position, is the road from Jaffa to Nablus, which touches the following places: Hazoun ('Azzoun); Fondouq (el-Fundouq); Qarihagi (Quryet Jitt; but the spelling was probably influenced by the nearby village of Quryet Hajja); Rafidiyeh. This road still serves as the main road between Kalkilieh and Nablus.

In addition to the routes, the map tries to define the watershed between the Dead Sea and the Mediterranean, but for lack of detailed information it is based on pure guesswork—probably the greatest blunder in the otherwise honest mapping.

The surveyed parts of the map (in contrast to the unsurveyed parts) strive for the greatest possible degree of accuracy. This was by no means easy to achieve, for much of the surveying had to be done under fighting conditions. Jacotin himself describes the work as follows: 'Mapping was done while the army was on the march, and it was therefore to some degree incorrect. The army had to fight enemies as well as starvation and plagues. . . . Any deviation from the roads was dangerous owing to marauding Arabs. . . . Most of the reconnaissance was done not by surveyors, but by officers of the artillery and the pioneer corps.'⁶ In these conditions, only the roads served as basis for

⁵ Jacotin used the measurements of Niebuhr (Jacotin, p. 89).

⁶ Jacotin, p. 88.

measurement; all the other objects were plotted by intersection, and of course the only objects that could be marked correctly were those that could be seen from the roads or from specially selected spots like Mounts Carmel or Tabor. The measurements on the roads were taken by compass-traverse, and the distances measured by time. One sample-minute was measured with the rod, and from time to time the distance was checked by counting paces. The distances and directions between two places along the road are hence more or less accurate. As for the objects measured from the roads by view and triangulation—and these comprise most of the settlements—a certain degree of error is unavoidable; the error increases with the distance from the road. Usually a group of three or four settlements shows a correct relationship of direction and distance, as they were measured from one or two common points, but the relation to the next group of villages shows certain distortions.

The mapping of wadis presented far greater difficulties, as one cannot see the whole course of a wadi. The mapping of a wadi is therefore only correct as long as it runs along the road (for instance Wadi Ouja—Yarkon—from its mouth to the army's crossing point, or Nahr Keisoun—Qishon—from Haifa to Yoqne'am). Other wadis are correct only for about two kilometres above and below the crossing point. If a wadi is crossed by two different roads, its course is correct near these roads, but the interconnection of the two stretches is mainly based on conjecture. This happened in particular with the wadis in the Sharon and those emptying into the Sea of Galilee. Jacotin himself reports: 'The course of the rivers on sheet Caesarea could not be traced and was guessed;⁷ work was hampered by constant attack of Arabs.'⁸

The coast too was only drawn correctly where a road ran along it, i. e. from Rosh ha-Niqrah to the mouth of Nahr Rubin (Naḥal Soreq), south of Jaffa. From there southward the wide belt of dunes prevented access to the coast, and the coastline was therefore drawn according to existing maps as a series of bays and headlands. Only along the river mouths could the coast be reached, and the position of these places is hence more or less correct.

The correctness of the different parts of the map is therefore a function of the density of the road-net and of the possibility of viewing large areas. For these reasons, the best-mapped part is Lower Galilee, which then had a close network

⁷ These stretches are shown on Jacotin's map by a drawing slightly different from the surveyed parts of the rivers. On the accompanying maps they are shown by a dotted line.

⁸ Jacotin, p. 91.

of roads and which can be seen in considerable detail from mountains like Carmel, Har Haqfiṣah (Jebel Kafsy), Tabor, the Horns of Hittin. Next come the western slopes of Upper Galilee and the plain along their foot, from Rosh ha-Niqrah to Akko (Acre). The coastal plain too is quite well mapped along the foot of Mount Carmel, but further south its hilly character prevents wide views, and the correctness of the map is therefore confined to narrow strips along the roads.

Even so, some areas inside the surveyed lands remained unmapped for lack of roads. Among these were the whole mountainous part of Mount Carmel and the mountains of Lower Galilee north of the Beit Neṭofah Basin (Sahel el Buttauf). The Valley of Jezreel too remained unmapped, and its position and settlements were marked by view from the mountains of Lower Galilee.⁹ Hence the positions become incorrect with increasing distance from the mountains and are much distorted on Mount Gilboa, the farthest area visible from these mountains.

In Upper Galilee only the westernmost slopes are mapped, all other areas being guesswork. Only the settlements along the road from Akko to Safed are marked. The area of Safed itself is very much distorted, probably because of the short time the surveyors spent there.

The names on the map are full of distortions and errors. Many of them are misspelled, probably owing to the surveyor's ignorance of Arabic and the incorrect way in which many Arabs pronounce the names of their places. Another source of error was the practice of noting names not on the map but on separate lists with corresponding numbers on the map.¹⁰ Moreover, the map was drawn almost twenty years after the survey (1818), so that it is no wonder that some of the place-names got mixed up or that some names got lost altogether, and the settlement was marked only by the word 'Village'.

Only a few of the rivers are named, and even fewer mountains. A comparison of the list of named mountains with Jacotin's Memoirs shows that only those mountains were marked which served as orientation points or as landmarks in the triangulation.¹¹

A complete list of all names with corrections, and their identification on the PEF map and on modern maps, is given in the following maps and tables (pp. 160-173).

⁹ Jacotin, p. 94.

¹⁰ *Ibid.*, p. 13.

¹¹ *Ibid.*, p. 93.

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II. COMPARATIVE TABLES OF NAMES ON JACOTIN'S MAP

Sheet 46, western half, incl. a small southern section of sheet 47 (see Fig. 1)

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
<i>Mountains</i>			
Mont Saron	—		Sullam Şor
Montage du Karmel	Carmel		Carmel
<i>Rivers</i>			
Hardowil R. ¹	Wady el Kurn		Naħal Akhziv
Mafchour R.	Nahr Mefshukh		Naħal Ga'athon
R. d'Acre	W. el Halzun		Naħal Hilazon
R. Rahmin	Nahr Namein		Naħal Na'aman
W. Obellin	W. Abellin		Naħal Avelim
Nahar Wadi Melik	W. el Melek		Naħal Şippori
Riv. de Keisoun	Nahr el Mukutta'		Naħal Qishon
Rab Wadi Agel	W. Fellah (W. Hajli)		Naħal Oren
Wadi el Melieh	W. el Milk		Naħal Yoqne'am
—	W. Shukak		Naħal/Dalialh
—	Nahr ed Dufleh		
<i>Settlements</i>			
The settlements on each sheet are placed in order from north to south			
Corps de Garde	Ras en Nakurah	160 277	
El Basa	el Bassch	163 275	Shelomi
Zib	ez Zib	159 272	
Hamsin (Ruines)	Kh. Hamsin	164 272	
Kabli	el Kabry	164 269	Kabri
— ²	et Tell	163 268	
El Qahweh	el Kahweh	163 268	
El Fargi	Kh. Umm el Ferj	161 267	Ben 'Ami
El Rabsieh	el Ghabsiyeh	164 267	
Château de Geddin	Kulat Jiddin	171 266	Yehi'am

¹ A wadi of this name is mentioned by H. B. Tristram: *The Land of Israel*. 2nd ed. London, 1866, p. 81, as a feeder of Wadi Kurn. ² Jacotin's map shows here a mill.

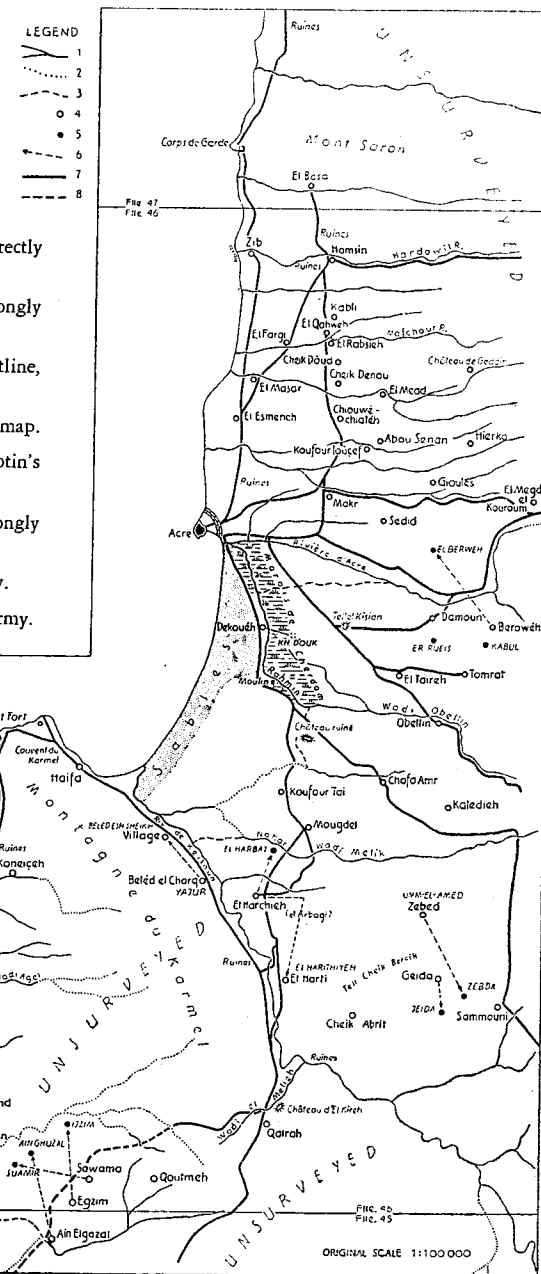
Fig. 1.

Transcript of Jacotin's map.
Western Galilee.
Parts of sheets Nos. 45, 46, 47.

Legend:

1. River course or coastline, correctly drawn on Jacotin's map.
2. River course or coastline, wrongly drawn on Jacotin's map.
3. Correct course of river or coastline, not shown on Jacotin's map.
4. Settlement, as shown on Jacotin's map.
5. Settlement, not shown on Jacotin's map, but shown on PEF map.
6. Right position of settlement, wrongly placed on Jacotin's map.
7. Surveyed route of the French army.
8. Unsurveyed route of the French army.

Names in capital letters are not shown on Jacotin's map. Spelling according to PEF map.



(Drawn by N. Z. Baer)

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
Cheik Daoud	Sheikh Daud	164 266	
El Masar	el Mezrah	159 265	el-Mazra'a
Cheik Denou	Sheikh Dannun	164 266	
El Mead ⁸	Amka	165 264	'Amqa
El Esmerieh	es Semeiriyeh	159 264	
Chiouwe Chiatch	Kuweikat	164 263	Beth ha-'Emeq
Abou Senan	Abu Senan	166 262	Abu Sinan
Hierka	Yerka	170 262	Yirka
Koufour Youçef	Kefr Yasif	165 262	Kafr Yasif
Gioules	Julis	167 260	Julis
Ruines	el Menshiyeh	158 259	
Makr	el Mokr	163 259	el-Makr
Sedid	el Judeiyideh	165 259	Judeida
Damoun	ed Damun	167 253	
Beroweh (misplaced)	el Berweh	167 256	
Dekoueh	Kh. D'auk (?) ⁴	161 253	
El Taireh	Kh. et Tireh	166 250	
Tomrat	Tumrah	169 250	Tamra
Château ruiné	Burj es Sahel	161 248	
Obellin	'Abellin	168 247	Avelim
Chafa Amr	Shefa 'Amr	166 245	Shefar'am
Koufour Tai	Kefr Etta	160 245	Kfar Ata
Kaledieh	el Khalladiyeh (r)	171 240	
Mougdal	el Mejdel	161 243	Shamir
Village	Beled esh Sheikh	154 242	Tel Hanan
Beled el Charq (misplaced)			
(= Beled esh Sheikh)	Yajur	155 240	
El Koneiçeh (misplaced)	et Tireh	148-241	Tirat ha-Carmel
(= Kh. el Keniseh)			
El Harchieh ⁵	el Harbaj	158 240	
El Arbagi (misplaced)			
Zebed ⁶ (misplaced)	Umm el 'Amed	166 237	Maavaq

³ No reason could be found for the change of this name.

⁴ The site of these two places is not exactly the same, as they are situated relatively west and east of the swamps. Guérin noted here the ruins of a khan and an Arab village.

⁵ The hilly area between Wadi el Melek and the Qishon River was not surveyed, but drawn according to the notes of an inhabitant of Shefa 'Amr (Jacotin, p. 94), and particulars are incorrect.

⁶ See n. 5.

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
El Harti	el Harithiyeh	160 236	Sha'ar ha-'Amaqim
Geida ⁷ (misplaced)	Jeida	167 234	Ramat Yishay
Sammouni	Semunieh	170 234	Shimron
Cheik Abrit	Sheikh Abreik	162 234	Qiryat 'Amal
Atlit	'Athlit	144 234	'Atlit
Ruines ⁸	el Ishakiyeh (?)	163 232	
Château d'El Kireh	Tell Keimun	160 230	Yoqne'am
Sarfend	Surafend	145 228	
Qairah	el Qireh	159 227	
Koufour el An	Kefr Lam	144 227	Habonim
Hadarah	Kh. Heiderah	144 225	
Sawama ⁹ (misplaced)	Suamir	146 226	
Qoutmeh	Kh. Koteineh	153 225	
Tantourah	Tanturah	142 224	Dor
Egzim ¹⁰ (misplaced)	Ijzim	149 227	Kerem Maharal
Ain Elgazal ¹¹ (misplaced)	'Ain Ghuzal	147 226	Ofer

Sheet 46, eastern half, incl. a small northern section of sheet 45 (see Fig. 2)

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
<i>Mountains</i>			
Mont de Canaan	Jebel Safed		Har Meron
Gebel Matel Bahrein	?		
Mt. Kafr Mendah	Jebel ed Deidebeh		Har 'Aşmon
Montagne des Béatitudes	Kurn Hattin ¹²		Qarnei Hittin
Mt. Qaber Simani	?		

⁷ See n. 5.

⁸ See n. 5.
⁹ The northern route through the hills of Menashe was taken by a detachment under General Jounot. Settlements in view of this road were not surveyed but put on the map according to a route report.

¹⁰ See n. 9.

¹¹ See n. 9.

¹² All travellers up to the nineteenth century identified Qarnei Hittin (The Horns of Hittin) with the 'Mount of Beatitudes', allegedly the place of the Sermon on the Mount. Today the Mount of Beatitudes is identified as a hill overlooking Tabgha, crowned by a modern Italian monastery.

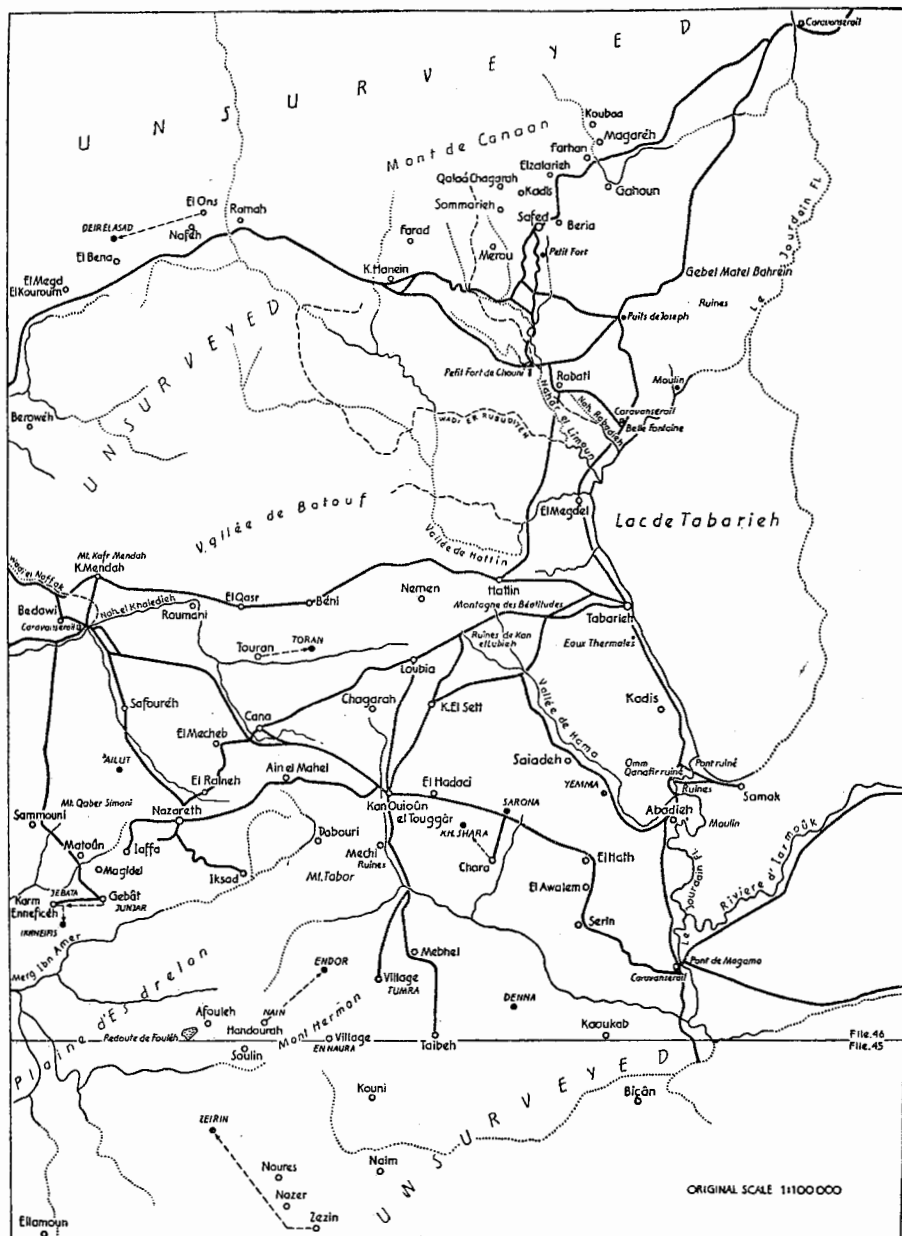


Fig. 2. Transcript of Jacotin's map. Eastern Galilee. Parts of sheets Nos. 45, 46. Legend: See Fig. 1. (Drawn by N. Z. Baer)

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
Mt. Tabor	Jebel et Tor		Har Tavor
Mt. Hermon	Jebel ed Duhy ¹³		Giv'at ha-Moreh
<i>Valleys</i>			
Vallée de Batouf	Sahel el Buttauf		'Emeq Beit Netofah
Vallée de Hattin	Merj Hattin		Biq'at Arbel
Vallée de Hama	Sahel el Ahma		Biq'at Yavneel
Merg Ibn Amer	Merj Ibn 'Amir		'Emeq Jezreel
Plaine d'Esdrelon			
<i>Rivers</i>			
Wadi el Limoun (misplaced)	W. 'Amud ¹⁴		Naḥal 'Amud
Nahar Rabadiéh (misplaced)	W. er Rubudiyeh		Naḥal Šalmon
—	W. el Hamam		Naḥal Arbel
—	W. Abu el Anus		Naḥal Raqqat
Wadi el Naffak			Naḥal Avelim
Nahar el Khaledieh	W. el Khalladiyeh		Naḥal Yiftah'el
—	W. Fejjas		Naḥal Yavneel
—	W. el Bireh		Naḥal Tavor
Rivière d'Iarmouk	River Yarmuk		Nahar Yarmukh
<i>Settlements</i>			
Koubaa	Kabba'ah	200 267	
Magareh	el Mugar	200 266	
Farhan	Fer'am	200 265	
Elzalarieh	edh Dhaheriyeh	197 264	Qiryat Sarah
Qalaa Chagarah	el Jish (?) ¹⁵	192 270	Gush Ḥalav
Kadis	Kadditha	194 267	
Sommarieh	es Semuaieh	192 262	Kefar Shamay
Gahoun	Ja'auneh	200 264	Rosli Pinah
El Ons ¹⁶ (misplaced)	Deir el Asad (?)	175 260	Deir el-Asad

¹³ Up to the end of the nineteenth century Giv'at ha-Moreh was called 'Little Hermon'.

¹⁴ As for the drawing of the rivers, see page 157.

¹⁵ The area north of Safed was not surveyed, but drawn according to an existing map of d'Anville (Jacotin, p. 94).

¹⁶ Clearly a mistake of the map. The situation of one village above another exists only in the case of Bi'na and Deir el-Asad. There is no village above Nahf.

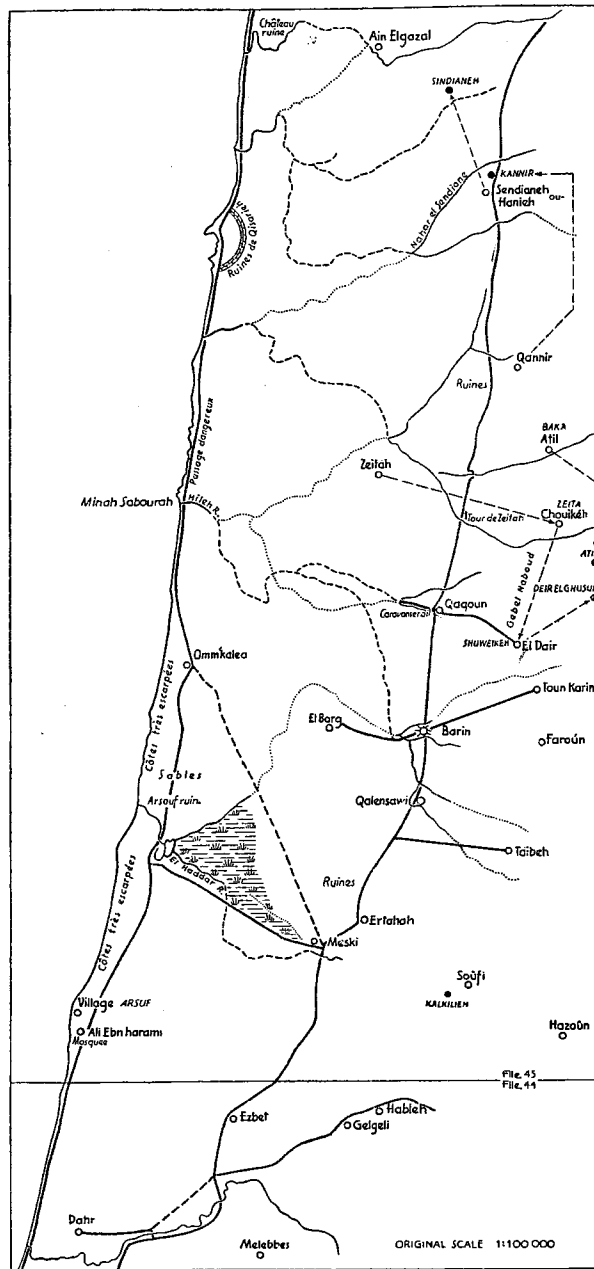
Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
Nafeh	Nuhf	179 260	Nahf
Ramah	er Rameh	184 260	er-Rama
Beria (misplaced)	Biria ¹⁷	196 265	Biriya
Farad	Ferradieh	190 259	Parod
Merou (misplaced)	Meiron ¹⁸	191 265	Meron
K. Hanein	Kafr 'Anan	189 258	
El Bena	el Baneh	175 259	el-Bi'na
El Megd El Kouroum	Mejd el Kerum	174 258	Majd el-Kurum
Puits de Joseph	Khan Jubb Jusef	200 258	
Ruines	Kh. Kerazeh	203 257	
Petit Fort de Chouni	Kh. esh Shuneh	195 256	
Rabati (misplaced)	Kh. Rubudiyeh	193 252	
Moulin	et Tabghah	201 252	
Caravanserail (Kan el Farir) Belle Fontaine	Khan Minia	200 252	
Beroweh (misplaced)	Ain et Tineh		
El Megdel	el Berweh	167 256	
Hattin	el Mejdal	198 248	
K. Mendah	Hattin	193 245	Hittin
Bedawi	Kefr Menda	174 246	Kafr Manda
Roumani	Tell Bedeiwiyeh	174 243	
El Qasr	Rummaneh	179 243	Rummana
Beni	el 'Azeir	181 243	Uzeir
Nemen	el B'aineh	184 245	Bu'eina
Touran (misplaced)	Nimrin	190 245	
Loubia	Tor'an	185 242	Tur'an
Eaux Thermales	Lubieh	190 242	
	Hummam	201 241	Hot baths of Tiberias
Chagarah	esh Shejerah	188 240	Ilaniya
K. El Sett	Kefr Sabt	191 239	
Safoureh	Seffurieh	176 239	Şippori
Cana	Kefr Kenna	182 239	Kafr Kanna
Kadis	Kh. Kadish	202 237	
El Mecheb	el Meshhed	180 238	Mash-had
—	'Ailut ¹⁹	174 235	'Ilut

¹⁷ See n. 15.¹⁸ See n. 15.¹⁹ This village probably was not correctly located because of its position in a valley that cannot be seen from the road Seffurieh-Nazareth.

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
Ain el Mahel	'Ain Mahil	183 236	'Ein Mahil
Kan Ouioun el Touggar	Khan et Tujjar	187 236	
Saiadeh	Kh. Seiyadeh	198 237	
Omm Qanatir, ruiné	Umm el Kanatir (r)	203 235	
Pont ruiné	Jisr es Sidd (r)	203 234	
Ruines	Umm Junieh	203 233	Degania B
Samak	Semakh	205 234	
El Raineh	er Reineh	179 236	er-Reina
El Hadaci	Kefr Kama ²⁰	191 236	Kafr Kama
—	Sarona	194 235	Sharona
—	Yemma	197 233	Yavneel
Abadieh	el 'Abeidiyeh	202 232	
Matoun	Malul	173 233	
Iaffa	Yafa	176 232	Yafa
Dabouri	Deburieh	185 233	Daburiya
Mechi	Meshah	189 232	Kefar Tabor
Chara ²¹ (misplaced)	Madher	193 233	
El Hath	el Hadetheh	196 232	
Magidel	el Mujeidil	173 231	Migdal ha-'Emeq
Iksad	Iksal	180 232	Iksal
Karm Enneficeh ²²	Ikhneifis	171 230	Sarid
Gebat ²³ (misplaced)	Jebata	170 230	Gevat
	in place of Junjar	174 230	Ginegar
El Awalem	'Aulam	197 230	
Serin	Sirin	197 228	
Mebhel	Kefr Misr ²⁴	190 228	
Village	Tumrah	188 227	
Handourah	Endor ²⁵	186 227	
(misplaced)	in place of Nein	183 226	
Afouleh	el Fuleh	177 224	'Affuleh

²⁰ The village of Kafr Kama is now settled by Circassians. As the settlement of Circassians in Palestine started in 1878 (Schumacher, 1888, p. 57), i. e. after the survey of the PEF, the change of name must be due to an earlier attempt at new settlement on this spot.²¹ The name of Chara was taken probably from Kh. Sharah in the vicinity of the place.²² See n. 5.²³ See n. 5.²⁴ Kefr Misr was settled by Egyptians during the rule of Ibrahim Pasha (Conder & Kitchener: *Memoirs*, II, p. 85). Hence the change of name.²⁵ The villages on the slope of Giv'at ha-Moreh were viewed from Mount Tabor and are therefore inaccurately located.

Fig. 3.
Transcript of Jacotin's map.
Sharon.
Parts of sheets Nos. 44, 45.
Legend: See Fig. 1.



(Drawn by N. Z. Baer)

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
Soulin	Solam	181 223	Sulam
Village	en Na'urah	187 224	
Taibeh	et Taiyibeh	193 223	
Kaoukab	Kaukab el Hawa	199 222	
Kouni	Kumieh	187 219	'Ein Harod
Noures ²⁶	Nuris	184 215	
Naim	Shutta (?)	190 217	
Nazer	el Mazar	184 214	
Zezin	Zerin	180 218	Yizreel
Ellamoun	el Yamoun	171 210	el-Yamun

Sheet 45, incl. a small northern section of sheet 44 (see Fig. 3)

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
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Mountains

Gebel Naboud Jebel Nablus (?)

Rivers

Nahar Sentioneh (misplaced) in place of Wady 'Arah Nahal 'Iron
 — Nahr el Mefjir Nahal Hadera
 Hileh R. Nahr Iskanderuneh Nahal Alexander
 El Haddar R. Nahr el Falik Nahal Poleg

Settlements

Ain Elgazal (misplaced) in place of Umm et Tut 149 222
 Sentioneh-Hanieh²⁷ (misplaced) in place of Kannir 153 214 Regavim
 Qannir (misplaced) ?
 Ruines Kh. Kefr Basa (?) 153 205
 Atil (misplaced) in place of Baka 154 202 Baqa' el-Gharbiya

²⁶ The villages on Mount Gilboa were viewed from the opposite basalt plateau, and their location is therefore inaccurate (Jacotin, p. 94).

²⁷ Almost all villages on the western slope of the Samarian mountains, which were viewed from the coastal plain, are inaccurate. This may be explained by the fact that during its march through the Sharon the French army was constantly attacked by Arab marauders, and no correct measuring was possible. It is even possible that the surveyors were purposely misinformed by the local people as to the names of the villages.

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
Zeitah ²⁸ (misplaced)	in place of Zelefeh (?)	144 201	Giv'at Hayim
Tour de Zeitah ²⁹	Jelameh	150 200	Lehavot Havivah
Chouikeh (misplaced)	in place of Zeita	155 199	Zeita
Minah Sabourah	Minet Abu Zabura	137 201	Mikhmoret
Qaqoun	Kakon	149 196	
El Dair	Deir el Ghusun (?)	157 195	Deir el-Ghusun
(misplaced)	in place of Shuweikeh	153 193	Shuweika
Omm Kaled	Mukhalid	137 193	Netanya
Toun Karin	Tul Keram	153 191	Tulkarm
El Borg	Burj el 'Atot (r)	145 191	
Faroun	Fer'on	152 193	Far'un
Barin	Burin	148 191	Beerotayim
Qalensawi	Kulunsaweh	148 192	Qalansuwa
Taibeh	et Taiyibeh	151 185	et-Taiyiba
Ruines	Deir 'Asfin (r)	145 184	
Ertahah	et Tireh ³⁰	145 182	et-Tirah
Meski	Miskeh	143 180	
Soufi	Sufin (r) ³¹	148 177	
Village	Arsuf	132 178	Nof Yam
Ali Ebn harami	el Haram	132 177	el-Haram
Hazoun	'Azzun	155 175	'Azzun
Ezbet	Sheikh el Ballutah ³²	139 173	Hadar-Ramatayim
Hableh	Hableh	148 174	Hablah
Gelgeli	Jiljulieh	145 173	Jaljiliya
Dahr	Sheikh Mu'annis ³³	131 168	
Melebbes	Mulebbis	139 166	Petah Tiqvah

²⁸ The placing of Zeita in the coastal plain may be due to the fact that there was a temporary detachment of the inhabitants of Zeita (Khirbeh) in the place called later Zelefeh. The region bore the name of Raml Zeita in Mandatory times.

²⁹ One of the main battles of the French army was fought here and became known later by the name 'Battle of Zeita'.

³⁰ Possibly the name of the village was mixed up with the name of Ertaha, which lies on the slopes of the Samaritan mountains, south of Tulkarm, and is not marked on the map.

³¹ Strangely enough, this ruin was noted here by Jacotin and not the large near-by village of Kalkilieh. Unless we assume deliberate misinformation, it may be that the name Gelgeli (Jiljuliyeh), which appears a little further south, was mistaken for the name of this village.

³² The name Ezbet indicates a temporary detachment of one of the mountain villages in the coastal plain. (It differs from Khirbeh in that it has no permanent buildings.) A temporarily inhabited place may have been mistaken for a settlement.

³³ The change of name may indicate a settlement of Egyptians, who were settled by Ibrahim Pasha in the vicinity of Jaffa.

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
Sheet 44 (see Fig. 4)			
<i>Rivers</i>			
Nahar Ougeh	Nahr el 'Auja		Yarkon
Riv. de Rubin	Nahr Rubin		Naḥal Soreq
—	Nahr Sukereir		Naḥal Lachish
<i>Settlements</i>			
Chateau de Ras el Ain	Kulat Ras el 'Ain	143 173	Rosh ha-'Ayin
(outside the margin of the transcript)			
Village	Summeil	130 165	(Tel Aviv)
Jazour	Yazur	131 159	Azor
Qabab (misplaced)	in place of Beit Dejan	134 155	Beit Dagon
(= el Kubeibe)			
Beit Agel (misplaced)	in place of Safriyeh	135 155	Shafrir
(= Beit Dejan)			
Village	Surafend	135 151	
Ramleh	er Ramleh	138 148	Ramleh
Lydda (misplaced)	Ludd	140 151	Lod
Village	el Qubeibeh	128 144	
Village	Zernukah	130 143	
Ebneh	Yebnah	126 141	Yavneh
El Kan Ebneh ³⁴	Tell el Kharrubeh	124 140	Ben Zakkay
Village	el Butani el Gharbiyeh	121 129	
Village	el Butani esh Sherkiyeh	123 128	
Esdoud	Esdud	117 129	
Sheet 43 (see Fig. 4)			
Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
<i>Mountains</i>			
Mont Samson	'Aly el Muntar		
<i>Rivers</i>			
Riv. d'Ascalon	Wady el Hesv		Naḥal Shiqmah
Rivière de Gaza	Wady Ghuzzeh		Naḥal Besor
Torrent	—		

³⁴ None of the travellers of the nineteenth century mentions a khan south of Yavneh. Perhaps the name Kharrubbe was mistaken for Kan Ebneh.

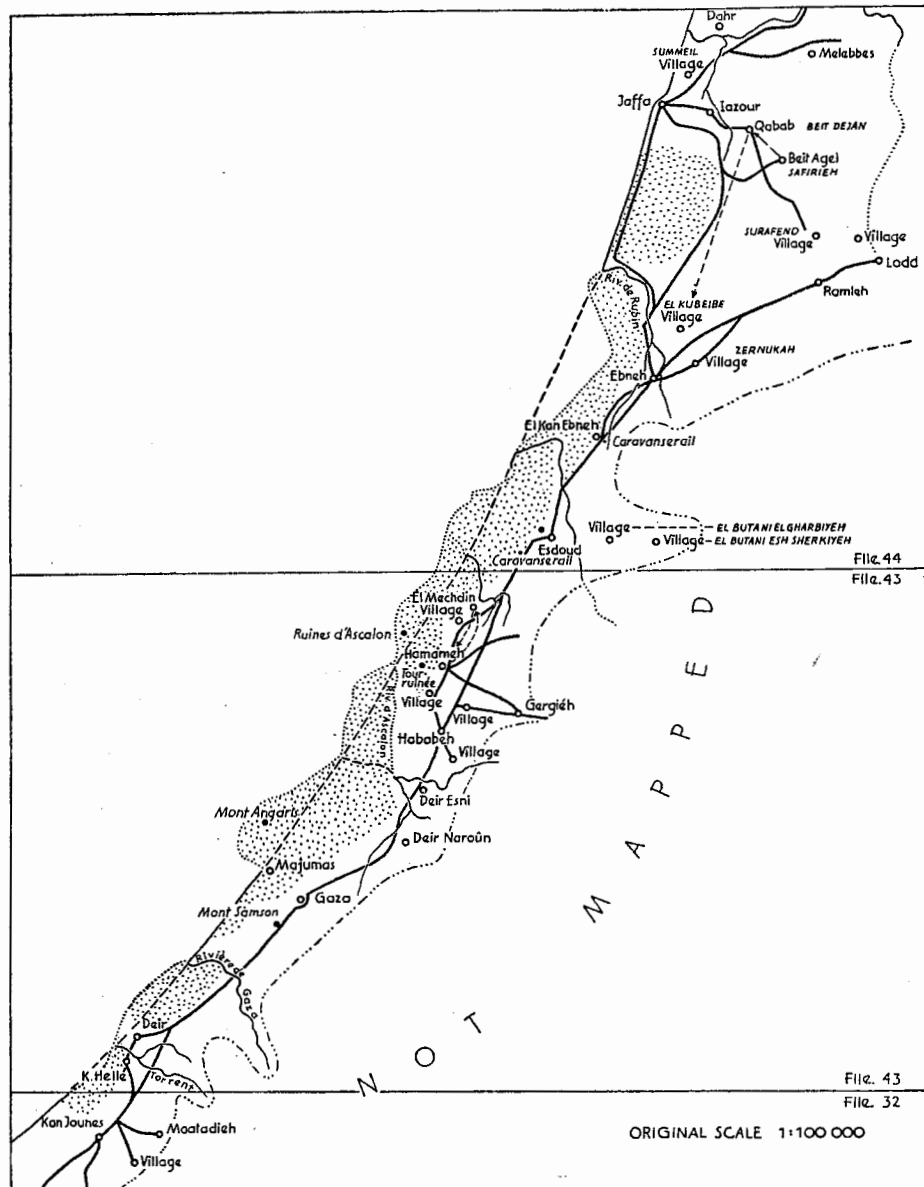


Fig. 4. Transcript of Jacotin's map. Southern coastal plain. Parts of sheets Nos. 32, 43, 44. Scale more reduced than on maps Figs. 1-3. Legend: See Fig. 1. (Drawn by N. Z. Baer)

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
<i>Settlements</i>			
Village			
El Mechdin (misplaced)	Hamameh (el Mejdal)	111 122	
Ruines d'Ascalon (misplaced)			
Tour ruinée qui se voit de loin ³⁵	'Ascalan	107 119	
Village	N'alia	109 118	
Village	Ejjeh	112 115	Gëah
Gergiéh ³⁶ (misplaced)	Beit Tima, in place of	115 114	
Village	Beit Jerjah	110 112	
Hababeh	Burberah	110 114	Mafqi'im
Deir Esni	Deir Sineid	107 109	
Deir Naroun	Beit Hanun	105 105	Beit Hanun
Majumas	el Mineh	096 104	
Deir	Deir el Belah	088 092	Deir el-Balah
K. Helleh ³⁷	—		

Sheet 32 (see Fig. 4)

Name on Jacotin's map	Name on PEF map	Map ref.	Modern name
Kan Jounes	(Not covered by map)	083 083	Khan Yunis
Maatadieh	"		
Village	"	085 083	Bani Suheila

(To be concluded)

³⁵ The location of the tower marked on the map indicates a tower that stood on the highest spot of the crusader wall of Ashkelon. As this tower is now fallen, it is possible that it toppled after an earthquake in the nineteenth century.

³⁶ The name may also stand for Ejjeh which lies near-by.

³⁷ There is no trace of another village in the vicinity of Deir el Belah. The name Helleh may be a distortion of 'el Belah'.



Part of sheet 46.

(Reproduced from Atlas of Israel, sheet I/5)

ABBREVIATIONS

- AAA** Annals of Archaeology and Anthropology, Liverpool
AASOR Annual of the American Schools of Oriental Research
ADAJ Annual of the Department of Antiquities of Jordan
AJA American Journal of Archaeology
'Alon Bulletin of the Israel Department of Antiquities
'Atiqot 'Atiqot, Journal of the Israel Department of Antiquities
BA The Biblical Archaeologist
BASOR Bulletin of the American Schools of Oriental Research
BIES Bulletin of the Israel Exploration Society, continuing:
BJPES Bulletin of the Jewish Palestine Exploration Society
CRAI Comptes-rendus des Séances de l'Académie des Inscriptions et Belles-L
EI Eretz-Israel: Archaeological, Historical and Geographical Studies, publ
 by the Israel Exploration Society
IEJ Israel Exploration Journal
JAOS Journal of the American Oriental Society
JBL Journal of Biblical Literature
JEA Journal of Egyptian Archaeology
JNES Journal of Near Eastern Studies
JPOS Journal of the Palestine Oriental Society
PEFA Palestine Exploration Fund Annual
PEQ Palestine Exploration Quarterly, continuing:
PEFQS Quarterly Statement of the Palestine Exploration Fund
Pj b Palästina-jahrbuch des Deutschen evangelischen Instituts für Altertumswi
 schaft des Heiligen Landes zu Jerusalem
QDAP Quarterly of the Department of Antiquities in Palestine
RB Revue Biblique
VT Vetus Testamentum
ZDPV Zeitschrift des Deutschen Palästina-Vereins

MT Massoretic Text of the Old Testament

An Analysis of Jacotin's Map of Palestine*

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III. THE MAP AS AN HISTORICAL SOURCE

JACOTIN'S map is the first to give an exact picture of part of the country. As far as it goes, it is an important source of information on conditions in Palestine at the time. This information comprises names and sites of settlements—but not their sizes—, roads, khans, mills, bridges, and even cultural vegetation. By discussing each one of these features we may arrive at a relatively correct picture of settlement conditions in the days of the survey. The picture will become still clearer if we compare conditions at the time of Napoleon with those prevailing at the time of the subsequent survey—*The Survey of Western Palestine*—, and consider the historical development in the intervening 75 years.

Land Use

Jacotin's map uses different symbols to indicate the state of vegetation in different parts of the country. These symbols denote cultivated land, orchards, forests, swamps and sand. Cultivated areas are marked by squares of different size and position, but it is obvious that the squares do not indicate the actual size of the cultivated areas, but only the general character of the land. Any detailed survey would have been impossible, in view of the haste with which the survey was made and the system of marking only outstanding features of the landscape. Only in the vicinity of roads was an exact survey made, so that cultivated areas farther away are partly guesswork. The extent of the cultivated land, therefore, seems exaggerated, especially in the plain of Sharon, where literary sources state unanimously that most of the land was uncultivated and used for grazing only.

As to plantations, large olive groves are indicated correctly in the vicinity of Safed, around Ramah, and at the western edge of the mountains of Upper

* Concluded from *IEJ*, 10, 1960, pp. 155-173; for bibliography, see p. 159.

Galilee. In other areas a different symbol is used to indicate woodland, which may include orchards. The different spacing of these tree symbols indicates the density of the tree cover. Thus, Mount Carmel and the hills of Beth She'arim (Sheikh Abreik), which are densely wooded even today, are the most densely spaced wood areas of the map. The wooded character of the Sharon, the last forests of which were cut during World War I, also stands out very clearly. The dense tree symbols on the western slopes of the Samaria mountains show by their uniform character the lack of preciseness which characterizes this part of the map. The difference in vegetation between the limestone area of Lower Galilee and its basaltic parts is also very clear.

Swamps are marked in only four places, where they blocked the path of the army. These are the swamps of the Na'aman River—called Marais de Cherdan (= Kurdaneh)—, of the Poleg and Yarkon Rivers, and in the vicinity of Jaffa, where the area is still called el Bassa. Dunes are indicated in the Bay of Haifa, at the mouth of Nahal Poleg, and in the southern coastal plain, where the road runs along their eastern edge. The marking of the edge of the dunes shows that there is almost no difference between the position of the dunes then and now.

Settlements

By comparing the number and location of settlements in the parts of the map surveyed in detail with those shown on the PEF map, an almost complete identity of settlement can be noted in the mountainous areas. Although some of the settlements of Jacotin's map are marked in the PEF map as *khirbeh*, reports of nineteenth century travellers state that these *khirbeh* were occupied at the time, and even the *Memoirs* of the PEF themselves report occupation of some of them, for instance Kh. Umm el Ferj¹² or Burj el 'Atot (one family remained).¹³ Guérin reports that Kh. Kadish was still inhabited by poor fellahin.¹⁴ Places abandoned in the period between compilation of the two maps compared here are: Dekoueh (161 253), El Taireh (166 250), Kaledieh (171 240), Hadarah (144 225); all these lie on the route of retreat of Napoleon's army, and after their destruction by the retreating army may not have been resettled. (For other abandoned villages, see pp. 246/7.)

¹² Conder & Kitchener: *Memoirs*, I, p. 147, give the number of inhabitants of this village as 200.

¹³ *Ibid.*, II, p. 178.

¹⁴ Guérin, III, part 1, p. 273.

On the other hand, a number of places appear on the PEF map, but not on Jacotin's. To some extent such differences are due to the incorrectness of Jacotin's map and to omissions, such as 'Ailut (174 235, see p. 166, n. 19), the mountains of Yotvat, or eastern Lower Galilee south of the Tabor Valley (Wadi el Bireh). The largest number of entirely new villages founded in the period between the two surveys are situated in the coastal plain.

Near the springs of Kabri a new village appears on the PEF map; it is called et Tell and may be nothing but an offshoot of the nearby village of el Qahweh (163 268). Guérin describes it as 30 dilapidated houses with mills, thus it was probably the dwelling quarters of the mill workers.¹⁵ Near Akko the PEF map marks a village called el Menshiyeh (158 259) at a place where Jacotin indicates only ruins. This village is probably a foundation of the time of Ibrahim Pasha. Guérin¹⁶ describes it as a newly founded village.

A certain amount of settlement occurred in the Sharon plain during the 19th century, and the following villages were founded: Jelil (137 174), Bir 'Adas (142 174), Kefr Saba (144 176), all of them first mentioned by Prokosch (p. 35), who visited the area in 1829. The rule of Ibrahim Pasha brought in its wake settlements of Egyptians and the descent of many *bamulas* from mountain villages to branch settlements in the Sharon plain.¹⁷ Settlements of this kind are the following: Jerisheh (132 167) at the mills on the Yarkon River, Tabsor (Kh. Azzun, 138 177), el Mughair (Kh. Beit Lid, 140 191), Kh. esh Sheikh Muhammed (near Naḥal Alexander, 138 199), Tell edh Dhrur (147 203), el Mesady (150 206), and Kerkur (151 208), the last three in the area of the Ḥadera River swamps.

This list shows that in the nineteenth century all new settlement took place in the coastal plain, which means that by Napoleon's time settlement of the country's mountainous areas was stable and had reached the limit of its possibilities under existing conditions. The only possible extension of settlement was into the neglected coastal plain.

Only one mountain area shows certain changes in settlement: the basaltic part of Lower Galilee. Here some places mentioned by Jacotin as inhabited are shown as ruins on the PEF map: Kh. Kadish (202 237), Kh. Seiyadeh (198 237), and Kh. Sharah (192 235), while others do not occur on Jacotin's map, although

¹⁵ Guérin, III, part 2, p. 31.

¹⁶ *Ibid.*, p. 1.

¹⁷ Y. Karmon: *The Sharon*. (Hebrew, MS.)

this area was quite well surveyed. They are: Kefr Kama (191 236), Saronā (194 235), Yemma (197 233), and Kefr Misr (190 228). Villages farther south, like Denna (194 224), Jabbul (198 219), and El Murussus (195 218), cannot be taken into account since they are not situated in the area surveyed by Jacotin. For three reasons this area shows a certain instability of settlement: frequent droughts, the proximity of Beduin in the Jordan and Beth Shan basins, and severe earthquakes in the 19th century.

As to Beduin, Tristram¹⁸ describes the Valley of Yavneel (Ard el Hamma) as devoid of any settlement for fear of Beduin.

Earthquake damage is attested to by many writers. Robinson¹⁹ reports: some villages in this area suffered greatly from the earthquake of 1837, such as Lubieh, which was completely destroyed. He also mentions the village of Irbid as ruined.²⁰ Guérin describes almost all the villages of that area as partly or largely destroyed, with the inhabitants living among toppled walls. He mentions the names of Denna,²¹ Kh. Bekoa,²² Sirin,²³ 'Aulam, Hadetheh,²⁴ and Kefr Sabt.²⁵ The discrepancy of the two maps in that area is therefore understandable. It may be added that instability of settlement there is probably the reason why it was the only mountainous land in Palestine that was easily available for modern Jewish settlement; before World War I it was one of the main areas of Jewish agricultural settlement.

Unfortunately there is no way of comparing the sizes of settlements in the two periods. The only figures given by Jacotin are contained in a route report of General Vial,²⁶ who estimates the population of four villages on the road from Akko to Tyre. A comparison of the figures with the first official census published by Schumacher in 1887²⁷ gives the following picture:

	Vial	Schumacher
El Esmerieh	200 Turks	270 Moslems
El Masar	100 Christians	185 Christians
Zib	400 Turks	730 Moslems
El Bafa (?)	600 Metouallis	could not be identified

Of course, these figures cannot be regarded as representative, but they do

¹⁸ Tristram, 2nd ed., p. 425.

¹⁹ Robinson, p. 238.

²⁰ *Ibid.*, p. 252.

²¹ Guérin, III, part 2, p. 128.

²² *Ibid.*, p. 135.

²³ *Ibid.*, p. 137.

²⁴ *Ibid.*

²⁵ *Ibid.*, p. 25.

²⁶ Jacotin, p. 91.

²⁷ Schumacher, p. 178.

show an increase of approximately 80% during the nineteenth century, as compared with an estimated 50%²⁸ for the whole population in the same period.

Roads

As we know from literary sources of the nineteenth century, no roads capable of carrying wheeled traffic existed in Palestine until 1867. The roads marked on the map denote only tracks used for caravan transport. But these tracks, too, led through areas where the least obstacles would be encountered, where wadis could be crossed easily, and where the soil was not too stony or swampy. An analysis of the roads on Jacotin's map shows in fact that the old historic routes and Roman roads had persisted throughout the centuries with very slight deviations; most of the roads used by Napoleon's army were marked as main traffic routes on the PEF map too.

On the map the roads are explained by inscriptions naming the armies that had passed over them. In addition, the main traffic routes—not used by the army—were denoted by their destination, such as 'Route d'Acre à Damas', 'Chemin de Jaffa à Nablous'.

The French army entered the country by the historic *via maris* near the eastern edge of the sand dunes in the southern coastal plain, passing east of Gaza and through Esdud and Yebnah. As no incursions were made into the Judean mountains, no roads leading eastward are indicated until Yebnah is reached. There a road branches off toward Ramleh and Lod, forming the connection with the Jaffa-Jerusalem road. This eastern branch is the actual continuation of the *via maris*, which led from Lod to the edge of the Samaria mountains and northward along this edge. The main caravan route from Egypt to the north also passed along this route, but the French army chose a different one through Jaffa, since it could not leave this important town and port unconquered on its flank. Therefore a western, minor, branch of the main route was used, leading along the edge of the dunes of Rishon le-Zion toward Jaffa.

This southern stretch of the road has to cross some rivers. The only bridge mentioned along the route is a stone bridge which crosses the Lachish Valley (Wadi Sukereir) north of Esdud. Another one, destroyed, is marked at the crossing place of Nahr Rubin, where a 'pont de pierres ruiné' is marked. The PEF map shows the bridge at the crossing of Wadi Sukereir, Jisr Esdud, but

²⁸ Hurwitz quotes estimates of 300,000 for the whole population in 1800 (p. 498), and of 450,000 for 1882 (p. 503).

none at Wadi Rubin. Therefore, the road crossing that river north of Yebnah is shown farther east than on Jacotin's map.

North of Jaffa the army used a (probably Roman) road through Miskeh and et Tireh, which reaches the main caravan route at Kulunsaweh. The Yarkon River shows no bridge and was crossed by ferry, probably with the help of the ruins of a certain mill. Here the PEF map shows a bridge, as the mill was restored during the rule of Ibrahim Pasha.²⁹ Directly north of the crossing, the route from Jaffa to Nablus branches off eastward. It continues through Burin, Kakon and Jelameh to Kh. Kefr Basa. The PEF map shows this route as a minor path, placing the main route farther east on a line Kalkilieh—Tul Keram—Baka—Kh. Kefr Basa. But itineraries of Roman and Crusader times, as well as the sites of Turkish fortresses and khans, show the road taken by Napoleon to have been the main historic one. Its shifting farther east during the nineteenth century may have been due to the rapid deterioration of the khans and the disappearance of the last vestiges of Roman paving in an area liable to turn muddy in winter.

From Kh. Kefr Basa the road to Akko continues through Tell el Asawir (not marked on the map), branching off from the road to Megiddo in a northerly direction toward Tell Keimun (Yoqne'am). One detachment of the army took a slightly different route starting on the coast near Tanturah and crossing the hills through Umm et Tut and Umm ez Zeinat to Tell Keimun (approximately along the line of the modern Zikhron-Ya'aqov—Yoqne'am road). From Tell Keimun the route follows the Qishon River down to its narrow pass near el Harithiyeh (Sha'ar ha'Amaqim), crosses the Haifa plain toward the Na'aman River and, skirting the swamps of this river, reaches Akko (Acre).

In its retreat the army took a different road along the coastal plain, along the sea-shore from Haifa to Jaffa. This road is more difficult than the eastern one, especially in the region between the Hadera and Alexander rivers. But it may be assumed that the retreating army did not carry along its heavy equipment and artillery, and perhaps its morale was not high enough to stand any more flank attacks from the Arabs on the eastern road.

In contrast with the scarceness of roads in the coastal plain, Lower Galilee shows a very dense road-net, appropriate to its position as the most convenient region for crossing the country from west to east. The starting point of the road-net is the town of Akko, which in Napoleon's time was the most important town

²⁹ Avitsur, p. 149.

and port on the coast of Palestine. In addition to the coastal roads to Tyre and Jaffa there were the routes to Safed, Tiberias (which could be reached by different ways), Nazareth (to Jerusalem), and Jisr el Mujamia with continuations into Trans-Jordan and to Damascus. All these could be used alternatively, and almost all of them represent ancient and Roman roads and appear on the PEF map as well. Farther east, the plateaus and valleys of Lower Galilee provide ample opportunities for cross-connection between the main east-west routes, thus creating the densest network of roads in the country. The main northern road to Damascus led along the same route as the present highway from Akko to Safed as far as Ferradiéh, but it by-passed the mountains of Safed by crossing the 'Amud Valley at Kh. esh Shuneh and reaching the basalt plateau at Khan Jubb Josef. A branch of this road ascended to Safed on the spur between the 'Amud and Aqbara valleys, and descended into the Huleh Valley near Fer'am.³⁰

The southern road to Damascus used the basins of Beth Netofah and Rimmon which were reached by the easiest crossing of the hills of western Lower Galilee along the Avelim Valley. At Khan Bedeiwiyeh the road forked into two parallel branches, one passing along the southern border of the Beth Netofah Basin toward Hattin, the other along the Rimmon Basin (Sahel Tor'an) toward Lubieh or Khan et Tujjar. The steepness of the descent toward the shores of Lake Tiberias was overcome by alternative routes to Tiberias or el Mejdél. From there the northern road to Damascus was joined at Khan Jubb Josef. The PEF map marks only the southern branch of this road as a major route.

The third major transversal road led through Shefa 'Amr and Khan Bedeiwiyeh to Seffurieh and thence to Nazareth, which in turn was connected with the southern branch of the second road at Kefr Kenna and Khan et Tujjar.

From Khan et Tujjar the main road to Trans-Jordan led along the basalt plateau through Kefr Kama, el Hadetheh and Sirin, and descended on the slopes of the Tabor Valley to the Jordan crossing at Jisr el Mujamia. The main north-south road followed the shores of Lake Tiberias and the Jordan Valley toward Beth Shan. The road from Damascus to Jerusalem is indicated along a line from Khan et Tujjar to el Fuleh and Jenin, but was not surveyed.

Although all these roads served as caravan routes, some of them are marked in the PEF map only as paths. Only one road is marked as a main east-west

³⁰ This route from Safed to Jisr Benat Y'akub was no longer used at the time of the PEF Survey, but was the main route in Napoleon's time. Burckhardt (p. 316), who travelled there in 1806, calls it 'Akabat Ferain'.

connection: the Akko, Abellin, Kefr Sabt, Tiberias road; and one as a north-south connection: el Mejdél, Hattin, Khan et Tujjar, Tumrah, Zerín, Jenin. On the other hand, the PEF map shows the ascendancy of Nazareth as a crossroads connected by two roads to Akko (along Wadi Ibillin and along Wadi el Melek), and by one to Haifa. Nazareth became even more important at the end of the nineteenth century, as the first carriage roads were constructed, mainly to serve Christian pilgrims. Then the main road of Lower Galilee was built to connect the Christian holy places of Nazareth, Kefr Kenna, Tiberias, and Capernaum. As this road did not run along the easiest topographical route, but later became the main highway, there are today vast discrepancies between the modern roads and those of Napoleon's time. It may be added that the valleys of Esdraelon and Beth Shan, which with the construction of the Hejaz railway in the twentieth century became the major thoroughfare of the country, did not serve that purpose at Napoleon's time because they were infested by swamps and endangered by Beduin.

For crossing the Jordan, two bridges were available: Jisr Benat Y'akub on the direct route to Damascus, and Jisr el Mujamia on the route to Trans-Jordan, or on an alternative route to Damascus via Hamma (on the Yarmuk River) and Fig. Two other bridges at the exit of the Jordan from Lake Tiberias are reported as ruined on both Jacotin's and the PEF maps.

Khans

At the time of Napoleon, khans were an important institution for the international trade of the country. They were built in the fifteenth century and were situated along the roads, approximately one day's journey apart. Along the route of the French army the following khans (caravanserail) are marked, from south to north, at a distance of approximately 20 to 30 km. between each two khans.

Name	Approximate distance from last khan, in km.
Kan Jounes	
Gaza	25
Esdoud	36
El Kan Ebneh	11 (doubtful, see above, p. 171, n. 34)

The main caravan route turned eastward from Esdoud to the following stations, which were not touched by Jacotin's route:

Ramleh	25
Gelgeli (Jiljulieh)	25
Qaqoun	25

From Qaqoun the army again followed the main trade route:

Qairah	33	(the map does not mark a khan at this place, but its ruins are still found today)
Acre	33	

Locations and road distances of khans in Lower Galilee are marked in Fig. 5.

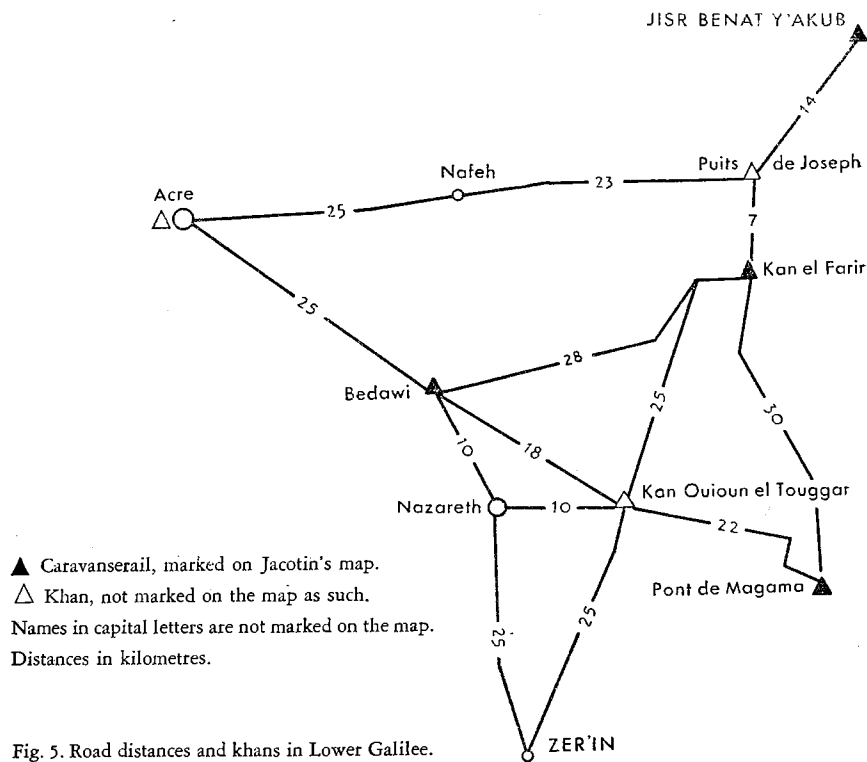


Fig. 5. Road distances and khans in Lower Galilee.

For the northern route the distance between Akko and Khan Jubb Jusef would justify a khan in the vicinity of Nahf, but there is no proof of its existence.

In Lower Galilee the most important khan was Khan et Tujjar, where the main road from Jerusalem crossed the two western roads from Nazareth and Akko and the two eastern ones to Jisr el Mujamia and to Lake Tiberias (Khan Minia:—Kan el Farir on Jacotin's map.)

Another important crossing was at Khan Bedeiwiyeh, where the route from Akko branched into the two roads to Tiberias, and another road to Nazareth. Khan Jubb Jusef served the route from Damascus.

In the PEF map the khans are marked too, but the type of marking shows the extent of their decline in importance during the nineteenth century. At the beginning of the century the khans were still the most important stations on the international routes through Palestine, even more important than towns. Burckhardt, who travelled through the country in 1806, stresses the fact that there is no khan in Safed or Tiberias.³¹ He states that most of the khans are well preserved ruins. In each of them he found a detachment of Turkish soldiers, and all were used for caravans. But later travellers state that most of the khans are ruined and no longer used.³² It seems that the development of transport in the nineteenth century led to a concentration of stations inside the towns, and this may explain the change in the use of some of the routes, especially the ascendancy of Nazareth as a traffic centre.

³¹ Burckhardt, p. 318.

³² Guérin, III, part 1, pp. 216, 346; Tristram, 2nd ed., pp. 438ff.