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Kiepert's Maps after Robinson and Smith: Revolution in Re-Identifying the Holy Land in the Nineteenth Century

Summary

In the long history of Palestine research one interesting development has to be noted. In the 19th century the Holy Land was 'rediscovered', leading to the detailed use of all existing sources, the foremost being the Scriptures. The US theologian Edward Robinson, accompanied by the missionary Eli Smith, traveled in the Holy Land in 1838. The pioneering role in Holy Land research, the detailed reconstruction of the Scriptures as a historical-geographical source was accepted by contemporaries – a milestone in the process of establishing Palestine research as a modern academic discipline. The voyage yielded a detailed, three-volume work, including various maps drawn by the young cartographer Heinrich Kiepert. These maps established a new narrative within the historical-geographical discourse, leading to a new construction of the identity of the Holy Land.

Keywords: Palestine research; history of cartography; Edward Robinson; Eli Smith; Heinrich Kiepert

In der langen Tradition der Palästinaforschung war die ‚Wiederentdeckung‘ des Heiligen Landes von großer Bedeutung. Sie führte zu einem detaillierten Studium aller verfügbaren Quellen, allen voran die Heilige Schrift. 1838 unternahm der

aus den USA stammende Theologe Edward Robinson in Begleitung des Missionars Eli Smith eine Reise durch das Heilige Land. Ihre Vorreiterrolle in der Erforschung des Heiligen Landes und die ausführliche Rekonstruktion der Bibel als historisch-geographische Quelle wurde von ihren Zeitgenossen anerkannt und stellte einen Meilenstein auf dem Weg der Palästinaforschung zur akademischen Disziplin dar. Ergebnis der Reise war ein umfassendes dreibändiges Werk, das mehrere Karten des jungen Kartographen Heinrich Kiepert enthielt. Mit diesen Karten wurde ein neues Narrativ im historisch-geographischen Diskurs eingeführt, das zu einer neuen Identitätskonstruktion des Heiligen Landes führte.

Keywords: Palästinaforschung; Kartographieggeschichte; Edward Robinson; Eli Smith; Heinrich Kiepert

This paper is part of the German-Israeli research project *Robinson, van de Velde, and German Holy Land cartography in the mid-19th century*, realized by the authors at the Leibniz Institute for Regional Geography, Leipzig (Germany) and Tel-Hai College (Israel) and funded by the German-Israeli Foundation for Scientific Research and Development.

1 Introduction

“The formation and transformation of space and knowledge in ancient civilization” was the leading motif of the Topoi Excellence Cluster workshop *Mapping Ancient Identities*. Its purpose was to discuss “cartographic identity-construction within the antiquity sciences,” or “mapping ancient identities.” When deciding upon this direction, somebody must have had in mind the test case of the Holy Land and its historical-geographical reconstruction, mainly (but not solely!) within the Christian world.

Since the 1970s, studies on the history of the disciplines have increasingly focused, inter alia, on questions concerning research practices. Various investigations have shown that scientific facts, evidence and norms for interpretation are the results of social group processes and, therefore, outcomes of negotiation in which local and implicit knowledge play a crucial role. Instead of final scientific results it is rather the processes of scientific knowledge production themselves that have become the center of attention. Researchers have concentrated on conceptions, on everyday acts of research practices that are also influenced by tacit knowledge and on technical facilities involved in the production of knowledge.¹ This is evidently true for the transformation of Holy Land studies, seen mainly during the 19th century and primarily led by two central figures, Edward Robinson (1794–1863) and Eli Smith (1801–1857).

The fact is that the Holy Land emerges here as an unique phenomenon, not as another part of the known and newly discovered world, but as a geographical (though not political!) identity, which excels in its uniqueness, and in the influence of its ancient history – on its historical development as well as on its modern study.² The geo-historical exploration and study of the Holy Land underwent a process of ‘rediscovery’ during the 19th century. The region was already known from various historical sources but had to be explored and rediscovered according to the advanced criteria of the new era.³ Needless to say, the Holy Scriptures were

the main historical source, but the question was what weight to place upon them, whether to study them using a text-oriented philological approach, or as an historic-geographical document.⁴

2 A network of actors in Palestine research

The New England theologian Edward Robinson, accompanied by the American Board of Commissioners of Foreign Missions (ABCFM) missionary Eli Smith, who had been stationed in Beirut, traveled in the Holy Land in 1838, and later again in 1852 (Fig. 1 and 2). Their pioneering role in the research of the Holy Land, their methodological toponymy and detailed reconstruction of the Scriptures as an historic-geographical source was acknowledged by all relevant contemporaries.⁵ Carl Ritter (1779–1859), the most influential protagonist and scientific celebrity of modern geography, and furthermore extraordinarily interested in Palestine research, wrote that “this work marked an epoch in biblical geography,”⁶ and Robinson received the 1842 Gold Medal of the Royal Geographical Society of London (RGS) for his outstanding studies.⁷ To date his work is recognized as one of the most important breakthroughs in the modern period of scientific study of the country he described.⁸

Robinson was a student at Andover Theological Seminary, a stronghold of Protestant conservatism. Ever since the founding of the school in 1809, Hebrew instruction had been one of the cornerstones of its curriculum, supporting a text-oriented philological approach to Bible study. Robinson, a student and protégée of Andover’s first, perhaps epoch-making Hebraist, Moses Stuart (1780–1852), was appointed instructor of Hebrew after studying the language for only one year. Stuart sent him for four years of advanced study to Europe, where he spent most of the time at the German universities of Halle and Berlin, married a German woman and entered Prussian academic and cultural ‘high society.’ Returning to Andover, he was nominated as Professor of Sacred Lit-

1 E.g. Latour and Woolgar 1979; Knorr-Cetina 1981.

2 Goren 1998; Aiken 2010, 1–56.

3 Ben-Arieh 1979; Goren 2003, 29–67.

4 Bewer 1939.

5 Berghaus 1840, 531; G. A. Smith 1974 [1894]; Benzinger 1903, 585; Bliss 1907, 184–223.

6 Ritter 1850, 72–77 (citation 73: “weshalb dieses Werk Epoche macht in der biblischen Geographie”).

7 See for example the letter exchange at Hamilton Burke Archive, Edward Robinson Papers, April 23 to May 29, 1842, and the Gold Medal itself kept in the collection.

8 Ben-Arieh 1979, 85, 91; Goren 2003, 83–91.



Fig. 1 Edward Robinson (1794–1863).



Fig. 2 Eli Smith (1801–1857).

erature and became librarian. His 1836 appointment at the Union Theological Seminary in New York led finally to his first visit to the Holy Land.⁹

The voyage to Egypt, Sinai and the Holy Land produced a very detailed three-volume publication, which was simultaneously published in Halle (in German), London and Boston (in English).¹⁰ It included various maps, drawn by the young Berlin cartographer Heinrich Kiepert (1818–1899).¹¹ These maps established a new narrative within the historic-geographical discourse of the Holy Land, leading to an unprecedented new 'Identitätskonstruktion' of the Biblical Holy Land as a historic-geographical text.

Eli Smith was the local expert within the project, he knew the country and its people and was proficient in the languages. Robinson implemented their method, combining geographical information with historical, analyzing both and synthesizing them into a new understanding of the geographical (natural and cultural) re-

ality and identity of the country and the region (the 'space') in Biblical times (the 'time').

Robinson adopted many of Carl Ritter's ideas and theses in his research and publications (Fig. 3).¹² The accepted argument is that Robinson's highest ambition was to explain and illustrate the Holy Bible. His goal was to investigate the relatively well-known historical country of the Holy Scriptures, the Holy Land, between the Mediterranean and the Jordan, from Dan to Beer-Sheva.¹³ Robinson, who regretted having only met Ritter towards the end of his early studies in Germany, had accepted the latter's teleological and deterministic beliefs.¹⁴ Therefore, the study of the Holy Land required knowledge of the mutual relations between its physical characteristics and historical development. Accordingly, Robinson paid special attention in his books to the morphological outlines.¹⁵

Ritter and Robinson saw the uniqueness of the country in its historical periods and in its position in

9 H. B. Smith and Hitchcock 1977 [1863], 46–66; Bliss 1907, 188–223; and the most detailed study: Williams 1999. To Moses Stuart: Giltner 1988.

10 Robinson and E. Smith 1841c, Robinson and E. Smith 1841a, Robinson and E. Smith 1841b.

11 Kiepert 1841.

12 H. B. Smith and Hitchcock 1977 [1863], 89; Goren 1999.

13 Cf. Ben-Arieh 1991.

14 Robinson's Journal, 29.1.1828, cited by Williams 1999, 162. Cf. Richter 1905; Beck 1981.

15 Robinson 1865; cf. Bliss 1907, 221–222; Ben-Arieh 1979, 154.



Fig. 3 Carl Ritter (1779–1859).

the Jewish and, especially, the Christian religions. The richness of proof and evidence in the field that could be linked with the historical sources contributed to the almost exclusive focus of their studies on the past, on the historical periods. If they paid any attention to the present situation of the country, it was only when it helped them to establish and explain the past.¹⁶

The new identity-construction demanded a new explorative approach, even in technical matters such as the choice of routes and data collection and analysis, as Ritter described:

Following their uniform plan of travel, Robinson and Smith did not lodge in the convents, but in the open air, or in the houses of the people, employed the Syrians as their guides, and struck across the country through the most retired and unexplored byways. Nor did they ask direct questions, which usually get the answer which the Arab thinks the questioner wants; but by the most indirect interrogatories and



Fig. 4 Heinrich Kiepert (1818–1899).

cross questions, and by comparing the answers gained from different persons, they at last felt, in most cases at least, that they had in some measure attained the actual facts. The services of Mr Smith, who had for many years been a missionary in Syria, and was perfectly familiar with the popular speech, were indispensable.¹⁷

3 The Palestine expedition and Kiepert's maps

Born in Berlin, Heinrich Kiepert (Fig. 4) studied philology in its young university, and eventually found his way to Ritter's lectures, which had an immense influence on him.¹⁸ Kiepert's first maps, dedicated to the classical world, were published as early as 1839. This was a year before his first Palestine maps, the first fruit of his work with Robinson.¹⁹ The earliest large map, on a scale of 1:400,000, edited – when published – by Ritter, was based on the maps of the Holy Land drawn by 'Ritter's

¹⁶ G. A. Smith 1974 [1894], 90.

¹⁷ Ritter 1866, II, 74.

¹⁸ Partsch 1901; Zögner 1999.

¹⁹ See in detail Goren 2017.

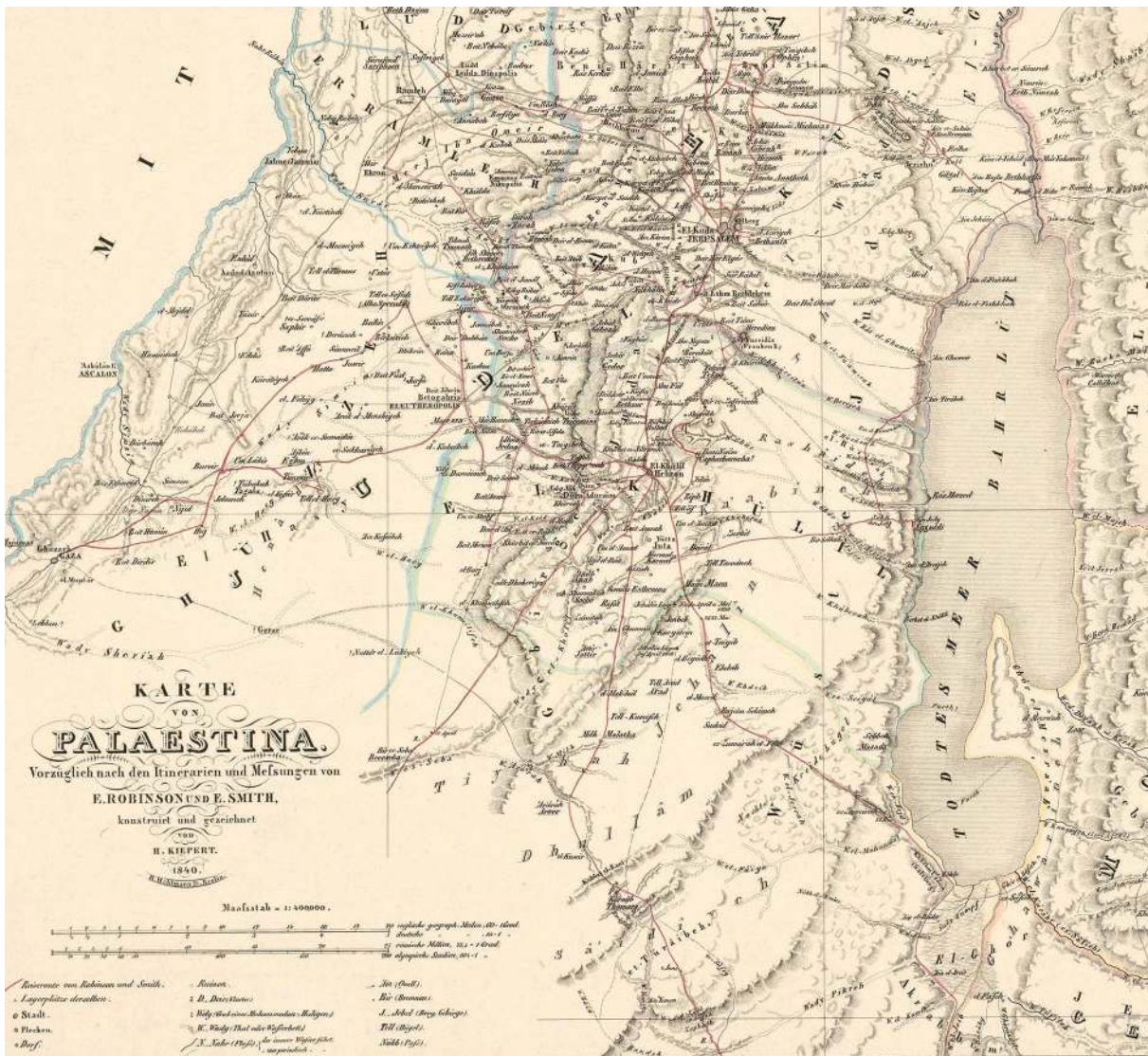


Fig. 5 Kiepert's first map of Palestine (extract).

cartographers' Julius Ludwig Grimm (1806–1834; map 1830) and Heinrich Berghaus (1797–1884; map 1835). The *Memoirs* following the maps were highly important for Kiepert as well as for anyone dealing – even today – with the history of Palestine's cartography. Kiepert used these maps and added the carefully studied data collected by Robinson and Smith.²⁰ Added to the first edition of the *Biblical Researches* was a five-sheet atlas and Kiepert's own *Memoir*.²¹ (Fig. 5)

The perception and theory behind the project were Edward Robinson's responsibility, finally leading to the production of the book, the abovementioned *Biblical Researches*. Eli Smith added his deep knowledge of the region, its people and their languages and dialects, and we argue that his role, influence and importance should be re-evaluated, as so far scholars have tended to underestimate it. Smith's contribution to the most important achievement of the voyage, to the relocation of hundreds

20 The first manuscript map is probably: Kiepert, Heinrich, Karte von Palaestina vorzüglich nach den Itinerarien von E. Robinson u. E. Smith, 1838, mit Benutzung den Jacotin'schen Aufnahme, und den Itinerarien von Burckhardt, Buckingham, Irby & Mangles, von Prokesch, Berggren,

E. Smith (1834), Bertou, u. a. so wie der Seetzen'schen Karte, 1840, SBB-PK, Kart. D 6940; its publication: Kiepert 1840, Kiepert 1843; cf. also: Grimm 1830; Berghaus 1835a, Berghaus 1835b; Ritter 1866, II, 82–83. 21 Kiepert 1841.

of Biblical geographical names, was probably outstanding. He had already traveled extensively in the Holy Land in 1834 and returned with a long list of Arabic place names, making it possible for him and Robinson to pre-plan their voyage, to look for identical or similar place names, and then to verify them on their journey.²²

Following the voyage, Robinson returned to Berlin, where he immediately started working on the book, whereas Smith went to Leipzig, where he worked with local producers of oriental typography for his Arabic print in Beirut. As for the maps, after learning that Heinrich Berghaus, who produced one early map of the journey in the Negev²³, would never have the time to work on the maps needed to accompany the text, Robinson started working with Kiepert.

Their unique cooperation was one of the main reasons leading to their special and pioneering achievements within the study of the Holy Land. This was of course presented thoroughly in the text, but at the same time also followed by the cartographic depiction. The material collected by Robinson and Smith and introduced into the maps, wrote Kiepert, led to the “great changes” exhibited in them, “in comparison with all former labours of the like kind.”²⁴ Highly aware of this point, Jay G. Williams wrote in his *Times and Life of Edward Robinson*:

Perhaps, Robinson’s most important accomplishment, however, was the drawing of new maps of the whole region. For this purpose he hired a young German map maker, Heinrich Kiepert, who provides in Appendix B of Volume III a “Memoir [...]”? In this memoir he discusses the various sources used and how Robinson engaged himself in the minute details of the work. It was an amazing and fruitful response for his teacher’s [Moses Stuart] cry for “Maps, Maps, Maps.”²⁵ Through his efforts the maps of ancient Israel were thoroughly revised and im-

proved; modern cartography of the Holy Land begun.

During this period he consulted not only his old teacher, Gesenius, but geographers like Carl Ritter and Alexander von Humboldt and philologists like Roediger. He also read before the Geographical Society of Berlin [...]²⁶

In his memoir, Kiepert does not include astronomically observed positions, as they were provided by Berghaus and, so he claims, there is so far nothing new to add. But “the routes of Robinson and Smith, which, in minute specification of every kind, leave far behind them the reports of all other oriental travellers, [...] have been naturally adopted as the highest authority.”²⁷ “Next to Berghaus and van de Velde²⁸, he [Kiepert] indeed takes up the first place among the Palestine cartographers,” according to the very critical scholar, Titus Tobler (1806–1877), in his pioneering bibliography of Palestine literature published in 1869.²⁹ It is only natural that Ritter praised Kiepert’s work, but nevertheless, it seems important to cite his comments:

The maps, which were constructed with the rare skill of Dr Kiepert from the voluminous data furnished by Robinson, the result of his innumerable measurements, [...] raised the cartography of Palestine one step higher even than Berghaus had placed it; and they remain perhaps the very finest efforts of skill which have appeared either in or out of Germany [...]³⁰ [...] that it was necessary to construct a new and independent map of Palestine, which should, so far as the eastern shore of the Jordan is concerned, do little more than repeat what Berghaus had already given, but which in all that makes up Palestine proper, should be an original work. This task, which was to illustrate Robinson’s *Biblical Researches*, was accom-

22 Stoddard 2009, 202; Dodge 1972; Kark 1993; Abel 1939, 365; Rules of the orthography of Arabic and Turkish names and words, in Roman letters. Adopted by the Syrian Mission of the A.B.C.F.M., April 1838, Eli Smith Letters, Houghton Library, Harvard, ABC 60.

23 Berghaus 1839; Robinson 1839. See also: Goren and Schelhaas 2015.

24 Kiepert 1841, 29.

25 See Williams’ 1999 detailed discussion concerning Stuart’s directions and instructions (Williams 1999).

26 Williams 1999, 260.

27 Kiepert 1841, 30.

28 The Dutch naval officer, cartographer and landscape painter Charles William Meredith van de Velde (1818–1898) traveled in 1850/1851 and 1860/1861 to Palestine. His important *Map of the Holy Land* was published in 1858 in Gotha. See in detail Faehndrich 2017.

29 Tobler 1867, 239: “Nächst Berghaus und van de Velde nimmt er wol die erste stelle unter den palästinischen kartographen ein.”

30 Ritter 1866, II, 70.

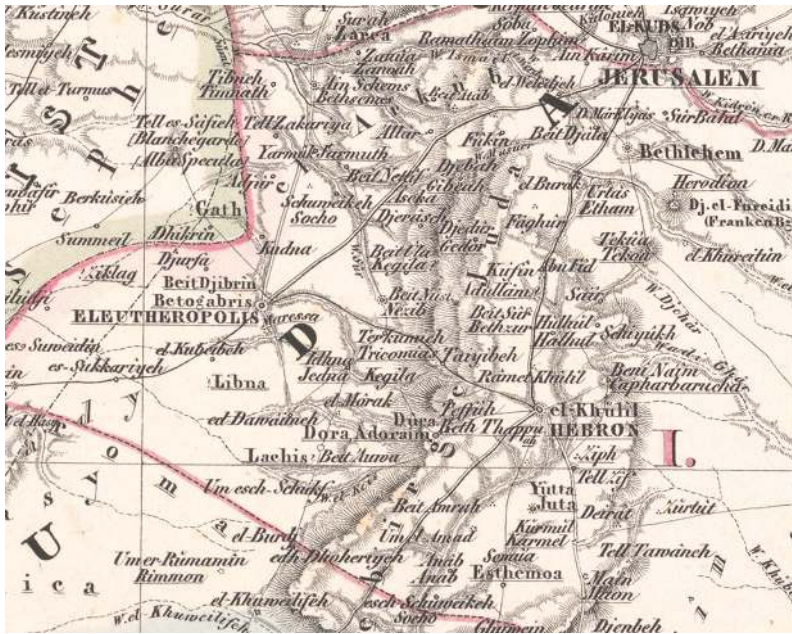


Fig. 6 Kiepert's cartography for the region of Beit Jibrin – Hebron.

plished by H. Kiepert in so masterly a manner, and in every respect so thoroughly scientific a spirit, as to win the applause of all scientific judges, and to be the model for all following works of its kind.³¹

Already while compiling the early maps for Robinson, Kiepert encountered the main difficulty that accompanied all his studies and work concerning the Holy Land, namely the need to compile maps based upon incomplete information. This included sporadic descriptions from historical sources, travelers' and pilgrims' itineraries, and accidental, random and disorganized measurements or other relatively accurate geographical data obtained by professionals using at least relatively advanced instruments. He had to adopt a highly critical approach, to find as many sources as possible, and to study them in the greatest detail. In addition, there was always the problem of the exact transcription and pronunciation of the Arabic names. In Berlin, Kiepert had the advantage of his scholarly environment. Ritter's Berlin network developed into a center for Palestine studies, probably the largest and best informed in Europe. Naturally, all this knowledge and material were available to him.³² In addition to an intensive letter exchange with Eli Smith, they also had the help of some leading Ger-

man orientalists, such as Heinrich Leberecht Fleischer (1801–1888) and Emil Rödiger (1801–1874), as well as the Hebrew lexicographer Wilhelm Gesenius (1786–1842). They, and many others, are frequently mentioned in Robinson's and Smith's letters.

In the years following his first work with Robinson, Kiepert's involvement became increasingly intensive, and he was considered an expert on maps of the region, of its antiquity as well as more contemporary times. His works, as can be seen in the various bibliographies, accompany publications by many scholars who studied the Holy Land, Syria, Sinai and Trans-Jordan.³³ The new identity of Biblical Palestine had been established, more than through anything else, by these two-dimensional descriptions, compiled by Kiepert using data from many sources, mainly collected by Robinson and Smith.

What does Kiepert write in his *Memoir* about different aspects of this new identity formation? For instance, he describes how it was "possible to determine very accurately the position of Beit Jibrin" (Roman Eleutheropolis), and with it also that of the city of Hebron (Fig. 6):

It was likewise possible to determine very accurately the position of Beit Jibrin upon this route; inasmuch as the travellers came to it

31 Ritter 1866, II, 82.

32 Goren 1999; Goren 2003, 68–83, 111–112.

33 Kiepert 1845, 1859; cf. Zögner 1999.

a second time in returning from Gaza by another road. This again aided in ascertaining the situation of Hebron, especially its Longitude; by means of the two routes from Beit Jibrîn by Idhna and Teffûh, and from Idhna by el-Burj and Dûra, to Hebron. In this way there resulted the same position for Hebron, as was found by the route from Jerusalem to Tekû'a and Beni Na'im, a place an hour and a half distant from Hebron, and from thence to Zif; for fixing which latter point again, the route from Hebron to Petra could also be applied. The route from Jerusalem by Tekû'a, in connection with the distance between Hebron and Jerusalem on the direct road, and the ancient specification of this distance, 22 Roman miles, afforded the means for fixing with tolerable exactness the Latitude at $31^{\circ} 32' 30''$ N., differing from Moore's³⁴ Latitude by observation ($31^{\circ} 31' 30''$) only by one minute.³⁵

It is not only the contemporary map that is established here. There is a clear connection with the identification of Scriptural Geography. Through careful examination of Robinson's and Smith's reports and the itinerary table that Robinson compiled following Berghaus' suggestion immediately upon settling in Berlin, Kiepert could establish accurate positions. In some cases, he could also compare them to earlier measured data.

Two further examples are provided here, the route that leads from Jerusalem through Samaria and the Jezreel Valley to Nazareth, and the first accurate establishing of the exact shape of the Sea of Galilee. The first, a route only used very rarely by travelers, who preferred to go from Jerusalem to Jaffa, sail to Acre and reach Nazareth from there, was one of the most important off-the-beaten-track routes that Robinson and Smith chose to take. Again, we witness here a combination of early sources, former itineraries and their materials:

From Jerusalem to Nazareth. This route, so often

travelled and described by Frank tourists and pilgrims, could now for the first time be accurately constructed, from the observations and materials of Robinson and Smith. In this way the positions of important places, such as Nâbulus, Sebüstieh, and Jenîn, have been essentially corrected, even as compared with the map of Berghaus. Besides the materials just mentioned, the earlier travellers were also consulted; and a former Itinerary of Smith afforded parallel notes of the several distances in time. The construction showed the data for this route to be very exact and certain, from the fact that it gave for Nazareth almost precisely the same position, which it occupies on the great map of Jacotin³⁶; the latter being here founded on trigonometrical survey.³⁷

Our last example will be Kiepert's establishing of more accurate borders indicating the shape of the Sea of Galilee, constructed according to routes and bearings that they took from some protruding points (Fig. 7):

In like manner, the form of the Lake of Tiberias, especially on its north-western and northern parts, has undergone some change; it not having been included in the more accurate portion of the French survey. The construction here rests on the route of our travellers from Tiberias to the Jordan as it enters the lake, and also upon the many bearings taken at the chief points along the route; which in connection with the bearings of and from Tabor, Tell Hattîn, and Safed, afforded a very complete and consistent net of triangles extending over the whole lake. – The many valuable details which the route of the travellers presented in this region, so important for the geography of the Bible, and particularly for that of the New Testament, rendered it necessary to give here a separate Carton, on a scale twice as large as that of the general map.³⁸

34 George Henry Moore (1811–1870) measured together with William G. Beeke (biographical data unknown) several positions during his expedition to the Dead Sea in 1837. Cf. Goren 2011, 156–206.

35 Kiepert 1841, 42.

36 Pierre Jacotin (1765–1827) was the director of the Corps of Topograph-

ical Engineers of Napoleon's Army. His outstanding *Description de l'Égypte* contains six maps covering Palestine based on trigonometric measurements.

37 Kiepert 1841, 48.

38 Kiepert 1841, 50.



Fig. 7 Kiepert's cartography of the Sea of Galilee.

4 Conclusion

There is not much more to add about the ways, means and techniques employed by Robinson and Smith in constructing this identification of the Scriptural Holy Land in all its stages. It began with travels led by a different perception of the visited regions, diverging from most of their predecessors, and accordingly a different discourse with the landscape that they faced, both natural and cultural. It continued with the double production of a written text and complimentary maps, both examples of a detailed compilation that takes into account all possible former historical and contemporary sources. The new identity is found in writing as well as in the two-dimensional description.

There is one distinct point, different from many former geographic identifications of various parts of the world. We argue, following Yehoshua Ben-Arieh, that we face here a 're-identification'. What is constructed is the identification of a region that was known and strongly identified within a specific 'time', a certain historical period. Robinson and Smith, as well as their cartographer Kiepert, and aided by Ritter and others, produced an outstanding historical-geography masterpiece, which turned out to be an epoch-making work in the study of the Holy Land. Following them, the Palestine literature contains hundreds of works, in many aspects repetitive ones, which accept Robinson's and Smith's re-identification, while arguing with them over one point or another.

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