

Kathleen M. Kenyon and her Place in Palestinian Archaeology

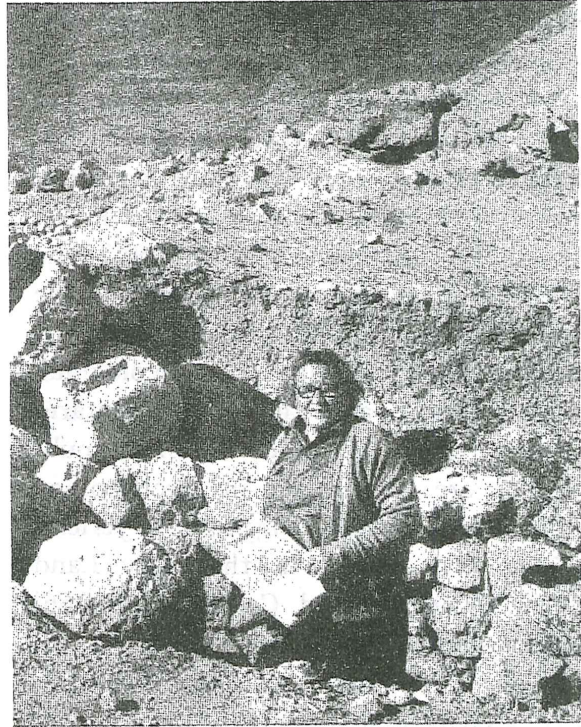
by

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(Presented on the occasion of her
seventieth birthday in January 1976)

Introduction

Since early in her archaeological career, Kathleen M. Kenyon has been dedicating the greater part of her time and scholarship to excavations and research in the Holy Land. Though primarily a biblical archaeologist, Miss Kenyon's field of interest includes almost every aspect of Palestinian archaeology from prehistoric ages to modern times. Before starting her lifelong career in Palestinian archaeology, Miss Kenyon had already attained a high standard of academic and archaeological training. The daughter of Sir Fredric Kenyon, director of the British Museum from 1909 to 1930, Kathleen Mary Kenyon was born in London in 1906. She was educated at St. Paul's Girls' School in London, and at Somerville College, Oxford, where she read history. In spite of her family connections with the British Museum, of which she is a trustee, it was only by chance that she first became concerned with archaeology; this was when she was given the opportunity in 1929, of assisting in the British Association excavations at Zimbabwe, Southern Rhodesia. For the next five years she learned the craft of archaeological field work under the direction of Dr. R.E.M. (now Sir Mortimer) Wheeler and Mrs. Wheeler at the Romano-British town of Verulamium (St. Albans). During this period she also began her lifelong association with biblical archaeology, as an assistant at the excavations in Samaria-Sebaste sponsored by the British School of Archaeology in Jerusalem, under



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the direction of Mr. J.W. Crowfoot, where work continued until 1935. In this year, Miss Kenyon became secretary of the newly established Institute of Archaeology at the University of London, a post which she held until 1948 when she became lecturer in Palestinian archaeology at the Institute. In 1962 she resigned this post to become principal of St. Hugh's College, Oxford, a post which she held until her retirement in 1973.

For a time Miss Kenyon's excavations were confined to Roman and Iron Age sites in England; at Leicester, Vericonium and the Wrekin, Shropshire, Southwark,

London, Breedon-on-the-Hill, Leicestershire, and Sutton Walls, Herefordshire. During the war she served in the British Red Cross. Her first excavation after the war was conducted abroad in North Africa at Tripolitania.

In 1952 Miss Kenyon became director of the British School of Archaeology in Jerusalem, and in this year resumed excavations in Palestine. From 1952 to 1958, she excavated at Jericho on behalf of the British School, the Palestine Exploration Fund, and the British Academy, in collaboration (in some years) with the American Schools of Oriental Research and the Royal Ontario Museum. From 1961 to 1967, she excavated in Jerusalem on behalf of the same three institutions, with collaboration from the *École Biblique et Archéologique de St. Étienne* and the Royal Ontario Museum. Among her many important publications are, *Beginning in Archaeology* (1952; 1953; 1961), *Digging Up Jericho* (1958), *Archaeology in the Holy Land* (1960), *Amorites and Canaanites* (1966) and *Jerusalem* (1968). But before we embark on a discussion of Miss Kenyon's major archaeological contributions, a brief sketch of the history of Palestinian archaeology is not out of place. On the contrary, it is essential for a better understanding and fuller appreciation of Miss Kenyon's work.

As in all other branches of knowledge, archaeology in Palestine had a modest beginning, and it is only after a long period of experiments in digging and classification of

archaeological materials, that it has now reached a high degree in reliability and refinement both in the techniques and interpretations. Before the turn of the nineteenth century, archaeology depended mainly on the accounts of travellers and pilgrims who carried on the mediaeval tradition. But early in the nineteenth century, a new spirit of inquiry appeared in the works of the German explorer, Ulrich Jasper Seetzen, the Swiss, Johann Ludwig Burckhardt, and the Englishmen, C.L. Irby and James Mangles. Seetzen was the first to explore East Jordan scientifically. Burckhardt discovered Petra and was the first to record Arabic place-names correctly throughout (1801–1812); he eventually became a Muslim, travelling as Sheik Ibrahim and his tomb is in a Muslim cemetery in Cairo. Irby and Mangles discovered Araq el-Emir, an excellent Hellenistic site, in East Jordan. In 1821, the English, John Silk Buckingham published the first plans of the ruins at Jerash. In 1838, the American theologian, Edward Robinson and his friend, Eli Smith, identified a good number of biblical places for the first time, and traced the line of the Agrippan Wall of Jerusalem. In 1863, F. de Saulcy cleared the so-called Tombs of the Kings near Jerusalem.

The year 1865 marks the establishment of the Palestine Exploration Fund, and its aims were defined as «the accurate and systematic investigation of the archaeology, the manners and customs of the Holy Land, for biblical illustration.»¹ Two

1. Kathleen M. Kenyon, *Archaeology in the Holy Land*, London, 1960, p. 3; the objects of the fund are now as follows «To obtain and disseminate information respecting ancient and modern Syria, Lebanon, Jordan and Israel, and the ancient and modern inhabitants there of respectively, the History, Li-

terature, Ethnology, Mineralogy, Numismatics, Topography, Geography (physical and political), Geology, Zoology, Botany, Meteorology, Natural History, and the manners and customs of the same countries...» cf. Recent issues of the *Palestine Exploration Quarterly*.

years later, Charles Warren, a young British ordnance officer, was sent out by this organisation to excavate at Jerusalem. Although Warren misdated several of his finds, he, nevertheless, laid the foundations for all subsequent work on the topography and history of Jerusalem. From 1872 to 1878, the same organisation sponsored a British expedition under the leadership of C.R. Conder and H.H. Kitchener (Lord Kitchener of Khartoum), which made a thorough survey of Western Palestine. This survey remains indispensable for the archaeologist and the topographer. In 1870, the American Palestine Exploration Society was established on the same lines as the British organisation. In the same year a French diplomat, Charles Clermont-Ganneau, recovered the famous Mesha Stone and sent it to the Louvre. Meanwhile, the German, G. Schumacher, a member of the Tempelgesellschaft made a cartographic and archaeological survey of the Hauran (southern Syria) and northern East Jordan.²

The discovery of the importance of pottery as a dating tool was achieved in less than a decade after Schlieman's excavation at Hissarlik, when Furtwängler and Loeschcke produced the first publication which considered the chronological significance of decorated pottery.³ Ten years later, in 1890, Sir W. Flinders Petrie, recorded for the first time the stratification Tell el-Hesi, south-west of Hebron, and demonstrated the importance of the use of

pottery for dating purposes, by his ability to give fairly accurate absolute dates to certain strata which contained Syrian-Palestinian pottery identified with that previously found in datable Egyptian Tombs.⁴ He also discovered the fundamental principle of sequence-dating by which it is possible to extend relative chronology into periods where there are no stratified remains for direct comparison.⁵

In 1898, the Deutsche Orient-Gesellschaft was founded and sponsored many excavations, most important of which was in 1907–1909 when Ernst Sellin and Carl Watzinger excavated Jericho in the Jordan Valley. This was the first properly staffed major excavation, and when the report was published, it contained superb plans and photographs, and the pottery was adequately treated with drawings and photographs to illustrate a detailed text.⁶ In 1908–1910, George A. Reisner and C.S. Fisher excavated Samaria for Harvard University. Reisner applied a new archaeological technique which he had already developed in Egypt; a combination of the British methods of Petrie and the German methods of Dörpfeld and Koldewey.⁷

In 1920, the British Mandatory Government in Palestine established a department of antiquities, headed by John Garstang, an experienced archaeologist of the University of Liverpool, and at the same time a similar department was founded in East Jordan, headed by George Horsfield. This resulted

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2. Gottlieb Schumacher, *Northern Aglun*.
 3. Adolf Furtwängler und Georg Loeschcke, *Mykenische Thongefässe*, Berlin, 1879.
 4. W. Flinders Petrie, *Tell el Hesi (Lachish)*, London, 1891.
 5. W. Flinders Petrie, *Gerar*, British School of Archaeology in Egypt, 1928 and by the same author, *Ancient Gaza*, I-IV, British School of Archaeology in Egypt, 1931-34;

Cf. Paul W Lapp, *Palestinian Ceramic Chronology*, Jerusalem, 1961, p. 1; W.F. Albright, *The Archaeology of Palestine*, (Pelican) 1961, p. 29.

6. E. Sellin and Carl Watzinger, *Jericho*, Leipzig, 1913.
7. G.A. Reisner, C.S. Fisher, D.G. Lyon, *Harvard Excavations at Samaria*, Cambridge, Mass., 1924.

in a liberal policy towards foreign excavators, and the number of archaeological enterprises increased steadily between 1921 and 1936. The most remarkable advance in Palestinian archaeology during these years has been in the field of prehistory. In 1925, an Englishman, F. Turville-Petre, discovered the first stratified prehistoric deposits in caves near the Sea of Galilee. In one of these caves, he found a typically Neanderthal skull in an equally typical Mousterian context.⁸ Four years later, Miss Dorothy Garrod, on behalf of the American School of Prehistoric Research and the British School of Archaeology in Jerusalem, undertook a series of campaigns in the caves of Wadi el-Mughara, running from Mount Carmel to the Mediterranean, which resulted in the discovery of the new Natufian culture, which extends from the Middle Palaeolithic to the Mesolithic Age.⁹

One of the land-marks in the history of Palestinian archaeology has been the excavation of Tell Beit Mirsim, south-west of Hebron, by W.F. Albright and M.G. Kyle in 1926–1932, on behalf of the American School of Oriental Research in Jerusalem. The importance of the excavation is derived not from the intrinsic merits of the remains revealed, but in the successive layers of occupation dating from late in the third millennium to sixth century B.C., and in the thoroughness with which the objects recovered, especially the pottery, were studied and published.¹⁰ It has provided

a standard basis of comparison for Palestinian ceramic chronology in the Middle and Late Bronze Ages, and in the Iron Ages I and II.

From 1933 to 1946, Nelson Glueck made a remarkable systematic archaeological survey of East Jordan from the Syrian border to the Gulf of Aqaba. The survey was published in the *Annual of the American Schools of Oriental Research*, in which appeared maps showing more than 1500 ancient sites.¹¹ Glueck concluded, on the basis of surface finds (mainly sherds), that most of East Jordan (except the Jordan Valley and the Northern part of the country), was occupied only in relatively short periods, separated by long periods of nomadism between the end of the Middle Bronze I period and the beginning of Iron Age (1850–1250 B.C.). This theory is now considered obsolete due to the discovery of ancient remains including pottery of those periods in many places south of the Zerka River.¹²

The excavations at Tuleilat el Ghassul, in the Jordan Valley, by the Jesuit Fathers of the Pontifical Biblical Institute, between 1930 and 1938, brought to light the new Ghassulian culture which lies within the Chalcolithic period in the fourth millennium, and the recovery of mural frescoes in polychrome from this site indicate the high level of culture in Palestine nearly six thousand years ago.¹³

8. Cf. W.F. Albright, *op. cit.*, p. 37.

9. D.A.E. Garrod, and D.N.A. Bate, *The Stone Age of Mount Carmel*, I., Oxford, 1937; D.A.E. Garrod, *The Natufian Culture*, *Proceedings of the British Academy*, XLIII.

10. *Annual of the American Schools of Oriental Research*, XII, XIII, XVII and XXI-XXII; W.F. Albright, *op. cit.*, p. 43.

11. *Annual of the American Schools of Oriental Research*, XIV, XV, XXV-XXVIII.

12. H.J. Franken, «The Other Side of the Jordan», *Annual of the Department of Antiquities of Jordan*, XV (1970), pp. 6f., N. Glueck, *The Other Side of the Jordan*, 1970, p. 141.

13. A. Mallon, R. Koepfel, R. Neuville, *Teleilat Ghassul I*, Rome, 1934; R. Koepfel, *Teleilat Ghassul II*, Rome, 1940.

The discovery by chance in 1947 of the Dead Sea Scrolls opened up an entirely new area for exploration and brought into the focus of scholarly attention a segment of history at the beginning of the Christian era, which before had been virtually neglected by archaeologists. A burst of scholarly work in the study, discussion and publication of the new materials has created what may appropriately be termed a new discipline of study. However, the most important discovery in connection with the Dead Sea Scrolls, from the archaeologist point of view, was the recovery of a considerable amount of stratified Hellenistic and Roman pottery from the ruins nearby the caves which contained the Scrolls.¹⁴ This has been very useful in dating more closely the Palestinian pottery types of the period between 200 B.C. and 70 A.D.

Archaeologists in recent years, have had the advantage of new techniques. Assisted by such specialists as the palaeoethnobotanist, hydrologist, zoologist, anthropologist, nuclear scientist and many others, the archaeologist has been able to utilize a variety of new clues to gain a picture of many formerly neglected aspects of ancient life, such as the description and origin, crafts, industries, foods, water sources, of the people that lived at a site. Moreover,

the radiocarbon test, known as Carbon-14, for measuring the age of samples of carbon, has become a particular boon in enabling the archaeologist to be more certain than ever before about the date of his discoveries, especially those from remote ages.¹⁵ It is against this background that the remarkable archaeological enterprises of Miss Kathleen Kenyon were carried out at Samaria, Jericho and Jerusalem.

A New Classification of Sigillata Wares:

When the joint British-American-Hebrew-University Expedition continued the excavation of Samaria, where Reisner had left off, Miss Kathleen Kenyon, who was a student of the British School in Jerusalem at the time, had the wonderful opportunity of showing her keen instinct for scientific archaeological analysis and interpretation and her unusual talent for engineering and organizing archaeological work. Large sections of the first and third volumes on the buildings and objects from Samaria are her work.¹⁶ The results provided good evidence for the complete history of the site, from the ninth century B.C. until the Byzantine period. Through close observance of stratified deposits, it was possible to clear up the chronology of Reisner, e.g. the

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14. R. De Vaux, Fouille au Khirbet Qumran: Rapport Préliminaire, *Revue Biblique*, LX, 1953, pp. 83-106; Rapport préliminaire sur la deuxième campagne, *Revue Biblique*, LXI, 1954, pp. 206-36; Rapport préliminaire sur les 3e, 4e, et 5e campagnes, *Revue Biblique*, LXIII, 1956, pp. 533-77; Cf. J.T. Milik, *Ten Years of Discovery in the Wilderness of Judaea*, translated, by J. Strugnell, Naperville, Illinois, 1959; Cf. F.M. Cross, Jr., *The Ancient Library of Qumran*, Garden City, 1958.
15. Carbon-14 was first developed in Chicago by Dr. Libby in 1944, see W.F. Libby, *Radio-carbon Dating*; There are now very many

books dealing with scientific techniques that can be utilized for the use of archaeologists; To mention only a few: F.E. Zeuner, *Dating the Past, an Introduction to Geochronology*, London, 1950; I.W. Cornwall, *Bones for the Archeologist*, London, 1964; and *Soils for the Archeologist*, London, 1958 R.J. Forbes, *Mettallurgy in Antiquity*, Leiden, 1950.

16. J.W. Crowfoot, K.M. Kenyon, E.L. Sukenik, *Samaria-Sebaste I: The Buildings*, London, 1942; J.W. Crowfoot, G.M. Crowfoot, K.M. Kenyon, *Samaria-Sebaste III: The Objects*, London, 1957.

latter dated the round towers lining the acropolis to the Iron Age, when in fact they were proved to be Hellenistic, being thus reduced nearly five centuries in date. Moreover, when Miss Kenyon published her study of the stratification and pottery of Samaria,¹⁷ she contributed a solid basis of subsequent chronological studies, especially in the Iron Ages I and II, and the Hellenistic and Roman periods. Her proposed scheme for classifying sigillata wares is a sound and very important innovation. Under the old system, sigillata wares are vaguely classified into 'Pergamene' and 'Samian'; the first term designates the pale ware either whitish yellow or buff and the latter the red ware. In a full discussion, supported by evidence from sealed deposits, Miss Kenyon¹⁸ proves the invalidity of this early classification and suggests a much safer method by which the wares are divided into three classes: Eastern sigillata «A», «B» and «C» of which «A» is the latest and commonest in Palestine and the rest of the Eastern Mediterranean Seaboard. She further sub-divides Eastern sigillata «A» into two main types: Ware 1, is buff and consists of two sub-types: 1a, is so pale as to be true cream with a «fairly dark red» glaze, «sometimes lustrous» with «occasional brownish patches or dark spots» and sometimes just «dull»; 1b, is pinkish with visible «brush strokes». Both varieties have no «mica». Ware 2, «is also buff, but warmer in tone», with either light or dull glaze. Ware 1, was common during the pe-

riod between 57 and 30 B.C. followed by ware 2 which became predominant. According to Miss Kenyon the subsequent development of Eastern sigillata «A» is not yet clear, though the evidence from Samaria» shows that it has a comparatively long history after the Augustan period.»¹⁹ Miss Kenyon concludes from the Samaria evidence that sigillata had come into «fairly common use» in Palestine by about 60 B.C., «but that a date much earlier than this cannot be proved.»²⁰

The Wheeler-Kenyon Improved Trenching Method:

In 1952, Miss Kenyon wrote an excellent hand-book on the subject of archaeology as an independent branch of the modern sciences. A second, enlarged edition was published in 1953, and a third revised edition, including sections on American archaeology by Saul S. and Gladys D. Weinberg, in 1961.²¹ Writing with first-hand knowledge of the technique of field work and the principles of excavating, Miss Kenyon's hand-book provides an indispensable basic framework not only for beginners in Palestinian archaeology, but indeed for all would-be archaeologists. Most of the techniques and principles described in this book, had already been devised and applied successfully by such eminent archaeologists as V. Gordon Childe,²² Sir Flinders Petrie,²³ Sir Mortimer Wheeler,²⁴

17. *Samaria-Sebaste III: The Objects*, pp. 90-133, 198-209, 217-234, 281-305.

18. *Ibid.*, pp. 281-305.

19. *Ibid.*, p. 288.

20. *Ibid.*, p. 285.

21. Kathleen M. Kenyon, *Beginning In Archaeology*, New York, 1961.

22. V. Gordon Childe, *What Happened in History*, London, 1960, *Man Makes Himself*,

New Light on the Most Ancient East, London, 1964, *Piecing together the Past*, London 1956.

23. W.M. Flinders Petrie, *Seventy Years in Archaeology*.

24. R.E.M. Wheeler, *Archaeology from the Earth*, Oxford, 1954; by same author *Still Digging*, London, 1955.

W.F. Albright,²⁵ G.A. Reisner, C.S. Fisher,²⁶ and many others. But when in 1952–8, Miss Kenyon applied Sir Mortimer Wheeler's improved trenching method to the excavation of Jericho, the results were so brilliant that this method is becoming rapidly popular. The new Wheeler-Kenyon techniques, as they are now called, essentially involve careful use of test trenches in order to determine exact stratification before digging an area, followed by additional test trenches at right angles to walls as they are cleared. The sides of these trenches (which are usually less than a metre in depth) are smoothed with a trowel, and all signs of floors, ash levels, deposits of debris, filling etc., are drawn to scale and used to guide further excavation.²⁷ This method has become indispensable particularly in mud-brick sites.

Jericho: Oldest Walled Town:

The excavation of Jericho begun by the Germans was continued by Garstang in 1929–36,²⁸ who discovered the first pre-pottery Neolithic culture but failed due to lack of evidence to establish the date of the fall of the last Canaanite town and was unable to obtain clear evidence of an urban settlement in the Late Bronze Age. Miss Kenyon was challenged to reopen work at

Jericho by a threefold objective: to excavate tombs, to clear important Neolithic remains discovered by Garstang, and to «obtain additional evidence on the date of the fall of the latest Bronze Age city, presumably to be associated with the Israelite invasion under Joshua...»²⁹ As for the latter issue, Miss Kenyon's conclusion is as follows: «It is impossible to associate the destruction of Jericho with such a date (the Exodus in the thirteenth century B.C.). The town may have been destroyed by one of the other Hebrew groups, the history of whose infiltrations is, as generally recognized, complex. Alternatively, the placing at Jericho of a dramatic siege and capture may be an aetiological explanation of a ruined city. Archaeology cannot provide the answer.»³⁰ Nevertheless, the excavations established a sequence of occupation that began in the Mesolithic period, ca. 8000 B.C., and continued until the end of the Middle Bronze Age, ca. 1560 B.C.³¹ The greatest interest of the results lay in the discovery of two highly developed stages of the earliest Neolithic which yielded sensational finds. The two settlements, the first designated Proto-Neolithic and the later, Pre-Pottery Neolithic A, were enclosed by massive defenses, indicating the existence at this early period (6800 B.C.), of a developed communal organization capable of undertaking massive public

25. W.F. Albright, *The Archaeology of Palestine*, (Pelican book) 1961.

26. G.A. Reisner, C.S. Fisher, D.G. Lyon, *Harvard Excavations at Samaria*, Cambridge, Mass., 1924.

27. K.M. Kenyon, *Beginning In Archaeology*, New York, 1961, pp. 77, 95-105, fig. 7.

28. *Palestine Exploration Fund Quarterly Statement*, 1930, 1931, 1935, 1936; J. Garstang and J.B.E. Garstang, *The Story of Jericho*, London, 1948.

29. K.M. Kenyon, *Excavations at Jericho*, Vol. 1, London, 1960.

30. *Archaeology and Old Testament Study*, ed. by D. Winton Thomas, 1967, p. 273.

31. See the preliminary reports in *Palestine Exploration Quarterly*, 1951, 52, 53, 54, 55, 56, 57; K.M. Kenyon, *Digging Up Jericho*, London, 1958; K.M. Kenyon, *Amorites and Canaanites*, The British Academy, London, 1966; Cf. *Archaeological Discoveries in the Holy Land*, compiled by the Archeological Institute of America, New York, 1967, pp. 19-28.

works. Occupation of the site started in the Mesolithic, c. 8000 B.C., and there was a continuous development from that stage into the town of the Pre-Pottery Neolithic period. Other sites have produced evidence for periods approaching the same dates, but Jericho remains unique as the only site that has produced a complete sequence of development from nomadic beginnings to full urbanization.³²

Jerusalem: Excavating 3000 Years of History.³³

Many expeditions have investigated the problems of the archaeology of Jerusalem, but the continuous occupation of the site for thousands of years has rendered excavation very difficult and most of the results have been inconclusive. The first major excavations were undertaken on behalf of the Palestine Exploration Fund by Captain (later Sir Charles) Warren in 1864–67; Warren investigated the walls of the so-called Temple area, and his results were nicely recorded.³⁴ Between 1894 and 1897 F.J. Bliss and A.C. Dickie undertook a widespread archaeological investigation of Jerusalem, again on behalf of the Palestine Exploration Fund, in which both the archaeological and the architectural side were well handled.³⁵ But at that stage strati-

graphical methods and ceramic chronology had not been developed to assist in dating strata, so errors in dating structures led the excavators to wrong conclusions. Warren dated the Herodian masonry of the retaining wall of the so-called Temple Enclosure to the time of Solomon instead of to the reign of Herod the Great,³⁶ while Bliss thought he had identified the line of the wall, said to have been built by the Byzantine empress Eudocia, above the foundations of the Herodian wall south of the Ophel hill. Later excavations by Mr. R.W. Hamilton³⁷ proved that the wall was built before the time of Eudocia. In 1909 and 1911 the Parker Mission³⁸ carried out many soundings and tunnelling on the Ophel hill, south-east of Jerusalem, generally accepted as the site of the original settlements of the Jebusites and later the early Israelites. The only significant result was to uncover a series of water channels in connection with the Virgin's Fountain. In 1913–14, R. Weill, on behalf of Baron Edmond de Rothschild, conducted excavations on the southern tip of the Ophel hill, in which fragments of a complicated series of fortifications were uncovered.³⁹ The task of interpreting the results of both these expeditions was taken up by Père Hugues Vincent of the Dominican Biblical School.⁴⁰ Between 1923 and 1927,

32. Cf. *Archaeological Discoveries in the Holy Land*, compiled by the Archaeological Institute of America, New York, 1967, p. 20.
 33. Kathleen M. Kenyon, *Jerusalem*, New York, 1968.
 34. C. Warren and E.R. Conder, *The Survey of Western Palestine. Jerusalem*, pp. 195 ff.
 35. F.J. Bliss and A.C. Dickie, *Excavations at Jerusalem 1894-1897*, London, 1898.
 36. Cf. W.F. Albright, *The Archaeology of Palestine*, (Pelican) 1961, p. 26.
 37. *Ibid.* p. 168; Cf. *Quarterly of the Department of Antiquities of Palestine*, vol. I, p. 97; vol. II, pp. 34 ff.

38. Kathleen M. Kenyon, *Archaeology in the Holy Land*, London, 1960, p. 315.
 39. R. Weill, *La Cité de David, I*, Paris, 1920 and *La Cité de David, II*, Paris, 1947; Cf. W.F. Albright, *The Archaeology of Palestine*, (Pelican) 1961, p. 156.
 40. H. Vincent, *Jérusalem sous Terre*, London, 1911; Cf. W.F. Albright, *The Archaeology of Palestine*, (Pelican) 1961, p. 35; Kenyon, *Archaeology in the Holy Land*, London, 1960, p. 315.

R.A.S. Macalister, J.G. Duncan and J.W. Crowfoot, directed excavations on the Ophel hill, for the Palestine Exploration Fund, in an effort to solve the problems of the early history of the city.⁴¹ The site was very much disturbed, and only fragmentary remains were recovered. However, in the 1927 excavation, an imposing gateway was discovered on the inner side of the Ophel ridge, which was in use in the Maccabean period. Between 1934 and 1948, C.N. Johns of the Department of Antiquities of Palestine, carried out scientific excavations at the present citadel and along the lines of the ancient walls. Mr. Johns was able to date stratigraphically the older lines of the wall at the north-west corner of the early city, and to show that the earliest line of wall crossing the Tyropoeon Valley and connecting the points of the western and eastern ridges was not earlier than the Hellenistic period.⁴²

In 1961–67, Miss Kathleen M. Kenyon directed gigantic excavations on the slopes of the Ophel hill and in the garden of the Armenian convent with the objective of establishing the plans of the successive stages of Jerusalem.⁴³ The expeditions were sponsored by the British School of Archaeology in Jerusalem, the British Academy, the Palestine Exploration Fund and the Royal Ontario Museum. Financial contributions were also received from numerous universities and learned societies

chief among which were the National Geographic Society and the Russell Trust and Birmingham City Museum. The supervisory and technical staff was international in all seasons, mainly drawn from Britain, Canada, Jordan, the U. S.A., Australia, Denmark, Holland, Argentina and Saudi Arabia. Collaboration and great assistance from the Department of Antiquities and the Department of Islamic Properties (the Awqaf) in Jordan, has been recorded by the expedition with deep gratitude.

The main objective of the excavations was achieved with nearly complete success. It is now possible, for the first time, to give a plan of Roman Jerusalem (Aelia Capitolina),⁴⁴ based on evidence revealed by the excavations. Former plans of Roman Jerusalem are based totally on descriptions and fragmental finds.⁴⁵ The new discoveries have also enabled the excavator to produce plans of the Jebusite city in the Late Bronze age, the Davidic and Solomonic cities of the Iron Age, Post-Exilic city ca.440 B.C., and the plan of Herodian Jerusalem.⁴⁶ The evidence for these plans is in part «reasonably certain», and the early history of Jerusalem can now be written with more clarity. One of the most important discoveries was a cache of bronze vessels and iron objects at the base of a wall dated eighth-seventh century B.C.⁴⁷ In Palestine, bronze vessels have been found in tombs (mostly of a rather later date) but

41. R.A.S. Macalister and J.G. Duncan, Excavations on the Hill of Ophel, Jerusalem, 1923-5, *Annual of the Palestine Exploration Fund*, IV, London, 1926, J.W. Crowfoot, in, *Annual of the Palestine Exploration Fund*, V, London, 1929.

42. *Quarterly of the Department of Antiquities of Palestine*, Vol. V (1935), pp. 127-135; Cf. vol. XIV (1950), pp. 121 ff.

43. *Palestine Exploration Quarterly*, 1966; See also vols. of, 1962, 1963, 1964, 1965, 1967;

Cf. K.M. Kenyon, *Jerusalem*, New York, 1968.

44. Cf. *Palestine Exploration Quarterly*, 1967, p. 66.

45. Cf. W.F. Alnright, *The Archaeology of Palestine*, (Pelican) 1961, p. 168.

46. Cf. *Palestine Exploration Quarterly*, 1966, pp. 73-88, figs. 1, 2, 3, 4.

47. Cf. *Palestine Exploration Quarterly*, 1967, p. 67, pl. XVI B.

none at all on a town site. This is the first evidence that has survived the damaging effects of the soil of Palestine of what were probably quite ordinary household and table vessels.

Epilogue.

In conclusion, one may say that the chief contributions of Miss Kathleen Kenyon to Palestinian archaeology, and consequently to our knowledge of Near Eastern pre-historic and historic periods, are first, the improvement of the technique of field work, and secondly, laying more stress on the scientific approach in the interpretation of discovered material. Her methods and interpretations supplement and clarify rather than displace previous works. We have seen from the brief outline of the history of Palestinian archaeology that Miss Kenyon has not invented altogether new principles of excavation, but by carefully and systematically applying Sir Mortimer Wheeler's im-

proved trenching method to the excavation of Jericho, she was able to produce such brilliant results that this method is rapidly gaining ground. She has been able to objectively evaluate Professor Garstang's evidence for the latest date of the fall of the Canaanite town of Jericho, and her work has, clarified chronology throughout, and yielded sensational results for Pre-Pottery Neolithic. Likewise, her work in Samaria is an ideal example of what an archaeologist can achieve by careful systematic digging. Her excellent scientific argument concerning the ceramic chronology of Iron Ages, Hellenistic and Roman pottery in Samaria, has provided a solid basis for future research in this field. Miss Kenyon's excavations in Jerusalem have brought many results of great historical importance, clarified several lingering chronological questions, and contributed a good deal to our knowledge of the early history of the holy city.

Adnan Hadidi

BIBLIOGRAPHY

The following is a list of the books written by Miss Kathleen M. Kenyon, in addition to numerous articles and preliminary reports which are to be found mostly in the *Palestine Exploration Fund Quarterly Statement*, the *Palestine Exploration Quarterly*, *Annual of the Palestine Exploration Fund*, *Eretz Israel* (Annual of the Israel Exploration Society) and the *Annual of the Department of Antiquities of Jordan*.

1. K.M. Kenyon, *Excavation at the Jewry Wall Site*, Leicester, Oxford, 1948.
2. *Archaeology in the Holy Land*, London, 1960.
3. *Digging Up Jericho*, London, 1960.
4. *Beginning in Archaeology*, New York, 1961.
5. *Excavations at Jericho*, Vol. I, London, 1958.
6. *Amorites and Canaanites*, London, 1966.
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