

Archaeological Methodology in Israel

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It is generally supposed that there have been three significant approaches to archeological excavation in Israel: The British method developed by Wheeler and Kenyon, the American method which is traced especially through Reisner, Albright, and Wright, and the Israeli method of Munya Dunayevsky.

The so-called British method emphasizes a grid of squares (usually 5m by 5m), separated by standing balks which remain in place at least throughout most of the excavation. Careful soil analysis is the key to good stratigraphy. Carefully measured drawing of the vertical sections and three-dimensional recording of finds are the key to accurate interpretation. Buildings are dated by the latest object in the building deposits. Careful vertical stratigraphy is more crucial than wide horizontal exposure of architectural remains.

The Israeli method emphasizes horizontal exposure of architectural remains. Restorable pottery found in situ on the floors of architectural levels is the key element in dating. Recently there has been an increased emphasis on restoration of architectural remains as "field museums".

The American method is generally considered to be an intermediary position between the British and Israeli methods. Its main contributions are considered to be the eclecticism of Wright, careful, daily ceramic analysis in the tradition of Albright, and the increased use of scientific studies in such areas as geology, botany, and zoology.

The different emphasis in these approaches have produced a series of debates on a number of methodological issues.

What is the role of balks? It is an absolute principle with Kenyon that a whole area must not be cleared at once. Balks must be retained throughout the excavation, so that stratigraphy can be double checked as excavation continues. Other advantages of balks are the subdivision of the supervision and the recording of the excavation. The chief criticisms of retaining balks after the lower limits of a level have been reached are that they obstruct the view of architectural remains and hinder the recovery of restorable pottery. Furthermore, the section drawings of balks are a subjective interpretation and give the impression of greater clarity than actually exists. In reality levels cannot be differentiated by soil analysis as accurately as the method claims. Another problem is that it is difficult to keep the excavation in phase when architectural units are arbitrarily broken up.

On the other hand Kenyon maintained that early removal of balks leads to sloppy stratigraphy, which leaves a person with pretty buildings to look at, but no sound dating for those buildings. If balks are to be drawn, photographed, and removed as each level is completed, many mistakes will be made because of uncertainty as to when a new level is actually being reached. There will be no way to double check stratigraphy, except drawings which are only a subjective interpretation of the evidence, not the evidence itself.

Closely related to the balk issue is the question whether emphasis should be placed on wide horizontal exposure of one architectural level of a site or on meticulous vertical excavation of a slice of all the strata of a site in order to establish the history of its occupation. Critics claim that Kenyon's methodology leads to being boxed in to too small an area of the site and failing to get the big picture. The partial state of preservation of most strata means that some strata may be completely missed if excavation is confined to a small area of the site. Kenyon's methods are simply too slow and costly to recover a large portion of a large site. In response Kenyon's defenders would point out the aim of archeology is to recover the history of the site, not just nice plans from one level. Widespread horizontal excavation will lead to neglect of some levels of occupation of the site.

It is apparent that neither method is the ideal which will solve all problems. Kenyon's methods are best applied to sites of complex stratigraphy, especially where the principal building material has been mud brick. Here careful soil analysis is the key to successful interpretation. Kenyon's methods are also ideal when the main

aim of an excavation is to establish the chronology of a site. This may be done to obtain a pottery chronology for general application as at Deir Alla, or to compare the occupation of secondary sites with the occupation of the main tell being excavated in a regional study. A portion of every site should be excavated by Kenyon's method unless it consists of only one period of occupation or a few periods which have clearly outlined architectural remains. Kenyon's methods are especially appropriate when the aim of an excavation is to clarify or correct the stratigraphy of previously excavated sites (Jericho and Gezer). Kenyon herself recognized that her methods were much more applicable to the mud brick complexes of Jericho than to the monumental stone architecture in parts of Jerusalem. The presence of large amounts of stone rubble often made it difficult to get readable balk sections at Jerusalem.

Kenyon has been quite adamant in maintaining that her methods are equally applicable to a site of any *age*. It is not so clear that she maintains that her methods are equally applicable to a site of any *type*. Both Wheeler and Kenyon distinctly emphasize the need for horizontal exposure of architecture to recover as much as possible of the life of the people who inhabited the site. In *Archeology From the Earth* Wheeler states that once vertical stratigraphy has established the history of an area, a lot of horizontal excavation is necessary to give us the history we are aiming for. In *Beginning In Archeology* Kenyon plainly says that in prehistoric sites (apparently meaning small camp-like sites) large horizontal excavation is the way to go. She also says that a grid is not used in substantial buildings. In this case units of excavation are formed by rooms, not balks.¹

I believe that "British method" is somewhat of an oversimplification and misnomer to begin with. I do not believe there ever was a "British method" of the uniformity implied by some of the archeological literature. First of all, there is not a universal standard of excavation accepted by all British archeologists even within the Near East. In England itself Barker and Coles, British-Romano archeologists who consider themselves to be disciples of Wheeler, offer the same criticisms of an excessive vertical emphasis in excavation as the Israelis. Barker's "cumulative section" technique of recording and removing balks as each level is completed is practically identical with the technique advocated by most Israelis. Seton Lloyd's *Mounds Of the Near East* was written to attack the notion the British Romano methods are, applicable to Near Eastern tells and to defend his architectural approach to excavation in Mesopotamia.

The attacks have in reality not been directed at a "British method" but at the work of one particular dominating and outspoken individual. In the literature which I examined there were more attacks and criticisms aimed directly or indirectly at the work of Kathleen Kenyon than at all other archeologists combined. Part of this may be due to her prominent position, to her own blunt statements, and to her anti-zionist political position.

Generalized attacks on Kenyon's work as indications of shortcomings of a "British method" miss the mark. Her approach to Jericho was very appropriate to the site and the problems involved there. Undoubtedly justifiable criticism can be made of Kenyon's work at Jericho or Jerusalem since it is always much easier to put a method on paper than to practice it in the complexities of a field. Most of the criticisms are really not of flaws inherent in the method, but of defects in one individual's attempts to practice that method in the field.

For example, it is frequently alleged that the detailed analysis of the Wheeler-Kenyon method makes it impossible or very difficult to produce final site reports within a reasonable length of time. It would be much more accurate to say that the long delay and ultimate failure to deliver final reports of the Jericho and Jerusalem excavation was not due to any inherent defect in, the method of excavation, but to Kenyon's inability to delegate responsibility and authority to subordinates. She drew every section herself. She selected the significant pottery for study. Her philosophy of an excavation was well expressed in *Digging Up Jerusalem*, "There is much to be said for a dictatorship".

Careful vertical stratigraphy and wide horizontal exposure of architecture both have their place in archeology in Israel. At most tells both methods should be used in conjunction. In the future I believe that the real issue will be the extent to which an emphasis on the horizontal exposure of architecture leads to the loss of underlying evidence from the site. There is a significant trend in Israel to the restoration and preservation of architectural remains as national heritage parks. Masada, Beersheba, and Arad are leading examples. At Masada

¹ Pages 76, 77, 86, 89, 102.

and Beersheba it's not likely that much of importance has been lost by the restoration and preservation of significant Herodian and Iron Age remains. However, at Arad the situation may be different. Arad is a key site for the large scale urban development of the Early Bronze Age. But if the Israelite sanctuary on the acropolis is maintained, it will be impossible to recover all of the Bronze Age evidence below. The new excavations at Lachish and the City of David are both being undertaken with a national park or restoration program prominent in the planning. If interesting architectural remains from the time of David are found on Ophel, should they be kept and restored, or is gaining the earlier Canaanite evidence which may lie underneath more important? At Tel Michal is it more important to keep the Hellenistic winepress for tourists to visit, or to dig down to recover the Bronze Age ruins known to underlie it?

Again there is no perfect answer. There are enough sites so that some will only have the stratigraphy checked by a small vertical excavation. Some can be more extensively excavated with major emphasis on recovering city plans. Some especially outstanding remains can be preserved and restored on a larger scale. Some sites will have to be neglected entirely. Nevertheless at key sites which have many levels of occupation there will be inevitable conflicts between the desire of some to retain architectural remains for tourism and national heritage purposes and the desire of others to recover potentially valuable evidence which may underlie them. In some cases choices and trade-offs will have to be made. What is the most important priority of an archeological excavation: to put the ruins of the past on display or to recover the maximum amount of information about all periods of occupation at a site even if this means the destruction of interesting architecture? As vertical and horizontal excavation are being more and more combined in most excavations, I believe the question of architectural restoration versus recovery and recording of evidence will be the most significant left-over from the "British-Israeli" debate of archeological methodology.

A significant side issue in the British, American, Israeli debate is the role of pottery in dating of buildings and in determinations of stratigraphy. The British have dated architecture by the latest object in the building deposits. The American practice is similar since it dates buildings by the pottery on the floor levels. Critics maintain that this is poor practice because materials from above tend to accumulate on floor levels, and that materials-which can be connected to the *construction* of the building must be used for accurate dating. It seems to me that *all* evidence should be weighed whether it is on the floors or in the building deposits, and conclusions should be proposed which best explain all available evidence.

The other principle controversy concerning the use of pottery in stratigraphy flows from the methodology of Albright. Should pottery be used to help determine stratigraphy or only to date stratigraphy which has been determined by other means? Albright used pottery finds, which were analyzed daily, to help determine the extent of strata. He also arranged pottery typology on the basis of stratigraphy. Interpretation was a conversation between typology and stratigraphy. It is apparent that this technique is filled with dangers of circular argument and excessive subjectivism. Only very good judgement and extreme care will avoid the danger of finding what you expect or want to find. This methodology is best avoided as a general practice.

The debate about American, British, and Israeli methods (which I believe was exaggerated to begin with) is rapidly becoming a moot question as most excavations in Israel are being conducted with methodology which is a synthesis of insights from all sides of the question. Wright's comments on his methodology at Shechem are really instructive in this regard. He acknowledges his debt to Reisner, Albright, Kenyon, and Yadin for the methods which he is using.² The further development of this synthesis at Gezer and the large number of Gezer alumni working in Israel today have speeded up this process. The absence of British excavators and the frequency of joint American-Israeli excavations are combining to produce a greater standardization of methodology.

In some sense all excavations are using a variation of what has been called the Wheeler-Kenyon method. differences are largely differences of degree, not differences of kind. This emphasis of careful stratigraphy is largely a British contribution, passed through Kenyon. However Reisner can share in the credit for pioneering in this technique, and its acceptance in Israeli circles is largely through American Israeli co-operation.

² Shechem, pages 48-56

Americans have also contributed a growing emphasis on scientific testing and a careful study of the whole ecology of a region. Almost all major excavations in Israel at the present are part of regional studies which are trying to put together as complete as possible a picture of the ecology and habitation of an entire region. Observation of the flora, fauna, and geology in and around a site are part of almost all excavations now in progress.

The debate about methodology in Israel has proved worthwhile. Even though all sides were rather dogmatic and harsh in their judgements at times, in the long run the debate has contributed to greater flexibility in methodology. Thinking has been sharpened, and the archeologist is (or should be) more aware both of the value and the limitations of various approaches. This increases the excavators responsibility to make intelligent use of the options available to him and to put together a methodological package which is particularly suitable to the characteristics of the site which he is excavating, and which is adapted to beat achieving the particular goals of his excavation.

Even the best theoretical methodology will only be as good as the care and honesty with which it is put into practice in the field. Most of the criticism in archeological writing has really not been of methodology as such, but of failure to achieve in the field the standards which this methodology calls for. Wright believed that he was following the best of Kenyon's methodology at Shechem and was disappointed that Yadin was not following her methodology more closely at Hazor. But Lapp was very critical of Wright's work at Shechem as falling far short of the standards set by Kenyon's work. Lapp highly praises Franken's work at Deir Alla,³ but these two excavations were very different in purpose and scope. Too much criticism has been a comparison of apples and oranges which is unfair and of limited value. Too much criticism has been too generalized. Kenyon was sharply critical of Israeli methodology on the basis of Hazar's stratigraphy in Jerusalem, but even many Israeli's would concede that Mazar's stratigraphy was not up to very high standards in this case. Much criticism has been

too vague to be of much practical value. For example, Aharoni and Amiran maintain that Kenyon's dating is consistently one period off, but their contention is not supported by evidence specific enough to do much good.⁴

For all these reasons it is extremely difficult to evaluate the methodology used at a particular site fairly except in terms of general applicability to the site, unless one has actually observed the excavation in progress. Site reports can easily imply much greater care in excavation and clarity of stratigraphy than actually existed on the site. This is not due to deliberate deception, but to the simple fact that it is much easier to see flaws or excessive subjectivism in someone else's work than in our own. It is a natural tendency to refine out of data much of the ambiguity, which would better be left in. Since no methodology is ever going to work as well in practice as in theory, archeologists should use a blend of the most appropriate methods with the greatest care possible, and their reports should reflect the unresolved alternatives and the ambiguities which remain in the evidence. At present this is about the best we can hope for.

Chart I: Archeological Influences Indicated In The Literature Read For This Report

	<u>Stratigraph</u> <u>y</u>							<u>Architecture</u>	
	Pitt Rivers				Hliss		MacCalister and other early excavators	Dunayevsky Aharoni Yedin other Israelis	Lloyd
	Wheeler				Reisner				
Barker	Kenyon					(Fischer)			

³ Biblical Archaeology and History, pages 66-86.

⁴ IEJ 8, 1958, page 180.

Coles				Wright	(Albright)				
	Parr Bennet Kirkbride Hennessy K. Wright Franken Moorey		Lapp	Dever Lance Walker Seeger Coles others	Kelso	Glueck	DeVaux		
	Hammond								

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[American view]

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[Sites]

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