

CHAPTER FOUR  
METHODOLOGY

INTRODUCTION

The purpose of this study was to examine and present the pattern and nature of settlement in the Chalcolithic and EB I in the southern Jordan Valley and the desert fringes of Samaria. To this end a methodology was decided upon that combined the two accepted research methods in archaeology – excavation and survey.

The archaeological survey draws a map of the settlement in a specific period and region. There are advantages and disadvantages to the survey (see below), but there is no disputing that this method is the only one that makes it possible to obtain comprehensive spatial information. The excavation draws a much more precise picture, but in an area that is limited both chronologically and geographically. The combination of the two methods produces a more reliable picture of the settlement in the study region during the two periods we are addressing.

Completion of the initial processing of the survey data from all of the sites in the study region gave a starting basis. An examination of the data revealed a number of problems, the most basic of which was the disparity in the quality of the surveys, and hence the lack of correct identification of the settlement periods in the different sites.<sup>1</sup> Consequently, we decided to re-examine all 123 sites that were identified in the various surveys as Chalcolithic or EB I.

For this purpose the following measures were taken:

1. All the existing publications of the sites were examined.
2. All the boxes of artifacts from the different surveys were physically examined. About 10% of the material was lost or is not in the country.
3. All the existing sites were re-surveyed, and material was collected, except at those sites that were already destroyed, or were inaccessible. The sites were analyzed in the field, and many of their physical-environmental characteristics were defined for the purpose of spatial analyses (the parameters are presented below).

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<sup>1</sup> Esse (1991) also identified a similar problem in his work on the surveys of the Jezreel Valley.

4. A regional pottery typology was constructed, based on the survey data from sites where the chronology is very reliable.
5. The period when the site was inhabited was redefined after reviewing all the information, and the reliability of the chronological ascription was determined (see the principle of probability below).

In addition, five sites were excavated:

1. 'Ein Hilu – a Chalcolithic site located in the desert fringe of Samaria. This is the first site excavated in the desert fringes of Samaria, and we excavated it in order to learn about the period in this unknown region. The site was radiometrically dated to the third quarter of the 5th millennium BCE.
2. Fazael 2 and Fazael 7 – two Chalcolithic sites in the Fazael Valley – in the southern part of the study region, which were excavated for the purpose of learning about the later phases of the Chalcolithic period. Fazael 2 was radiometrically dated to the first quarter of the 4th millennium BCE. Based on existing data, this is one of the latest settlement sites in the Jordan Valley and southern Levant where the radiometric dating is reliable.<sup>2</sup>
3. Sheikh Diab 2 and Fazael 4 – two EB I sites in Wadi Fazael that were excavated in order to examine the planning of the rural settlement in the EB I.

The information derived from the excavations assisted in a more accurate segmentation of the survey sites so as to determine chronological definitions more precisely.

After implementing these measures – the survey and excavations – it was possible to construct a settlement picture of Chalcolithic and EB I. This also allowed us to conduct various environmental analyses of those sites that have a medium or higher chronological reliability.

## TERMINOLOGY AND CHRONOLOGY

The terminology and chronology of the Chalcolithic and EB I are still not agreed. The debate is centred on the Pre-Ghassullian–Beer Sheva

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<sup>2</sup> A reliable dating that is significantly later was only received from the Cave of the Treasure in Nahal Mishmar and the Cave of the Warrior in Katef Jericho. These were not habitation sites, but burial sites or places where artifacts were concealed. Later settlement sites were in the Golan Heights (Carmi *et al.* 1995), the Beer Sheva Valley, and probably also at 'Ain Assawir (Yannai 2006) and Modi'in (van den Brink 2011), but no relevant radiometric information was collected from the two latter sites.