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Submerged Stories from the Sidelines of Archaeological Science: The History and Politics of the Keban Dam Rescue Project (1967-1975) in Eastern Turkey

By

Laurent Dissard

A dissertation submitted in partial satisfaction of the requirements for the degree of

Doctor of Philosophy

in

Near Eastern Studies

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Marian H. Feldman, Chair Professor Benjamin W. Porter Professor Margaret W. Conkey

Spring 2011

Abstract

Submerged Stories from the Sidelines of Archaeological Science:

The History and Politics of the Keban Dam Rescue Project

(1967-1975) in Eastern Turkey

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Laurent Dissard

Doctor of Philosophy in Near Eastern Studies

University of California, Berkeley

Professor Marian Feldman, Chair

The Keban Dam Rescue Project was initiated in 1967 to record and study the history of the Keban region in Eastern Turkey about to be inundated. The project brought scholars of several disciplines together to document, in a relatively limited amount of time, the past and the landscape of this threatened Upper Euphrates area. The international and multidisciplinary salvage excavations are perceived today as a turning point for Turkish archaeology. The archaeological excavations seem to mark a rather unstable moment within the history of Turkish archaeology. Nevertheless, if teams were operating under different theoretical paradigms, in the end, they all agreed that knowledge about the history and prehistory of the Keban region needed be produced scientifically, that is in an organized and systematic manner. This dissertation scrutinizes some of archaeology's taken-for-granted scientific techniques which contribute to the emergence of the field laboratory. As experiments are performed in the outdoors laboratory of archaeology, several divides between nature and culture, present and past, the local and the universal simultaneously occur. Archaeologists thus define their object of research as relating to the universal and past culture of humankind, disregarding other objects of potential research belonging to nature or to the local present. The rescue project at Keban allowed certain kinds of evidence to be selected and made visible while others were, if not completely invisible, marginalized. In the Keban site reports, knowledge about a site is placed to the foreground while the conditions of its production are placed to the sidelines. In other words, as archaeologists make their discoveries visible to the world, they simultaneously make themselves invisible. In addition, local people only make unexpected appearances on the margins of the reports. This dissertation uses the scientific accounts of archaeology to make some of these submerged stories come back to the surface. Viewed from a different perspective --or from a different "situated" stand-point-the agency of archaeologists, the local stories from villages, the negative effects of dam construction, among other things supposedly excluded from the scientific process of archaeology, can be retrieved and placed to the foreground.

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 \vec{A} mes parents Georges et Marie-France Dissard

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I dedicate this dissertation to my parents and to my family in France (Mamie, Amélie, Alain, Katicha, Xabi, Jone, Maialen, Etienne, Mikel), in the United States (Marianne, Jean-Michel, Lamia, Lubna) and in Turkey (Tuğrul, Sara, Murat).

Last but not least, I would like to thank my wife Ece Okay for her patience, her love, and her understanding during this never-ending process of dissertation writing. Guess who's next...

INTRODUCTION

On Emotions Erased

The Euphrates River finds its source in the mountains of northeastern Turkey near Erzurum. The Karasu River originates northeast of Erzurum in the Kargapazarı Mountains. More to the southeast is the birthplace of the Murat River, between Lake Van and Mount Ararat. The Karasu and Murat rivers, flowing from the north and east respectively, join near the town of Keban at an elevation of more than 600 m above sea level to form the Euphrates River proper. This point of confluence was chosen for the location of a dam built in 1974, which inundated large parts of the Upper Euphrates area. A desire on the part of the Turkish government to provide work and develop the region economically, the construction would also produce electricity for the country. Today, the edifice stands 200 m high in a deep canyon overlooking Keban. After its completion, an artificial lake slowly formed east of the city. By 1975, it had created a 125 km long water reservoir between the cities of Elazığ and Tunceli.

Besides tens of thousands of people forced to relocate, the rising waters of the Keban Dam also presented a great danger to the region's cultural and natural heritage. Anticipating this threat, the Keban Dam Rescue Project (KDRP) was initiated in 1967 under the supervision of Ankara's Middle East Technical University (METU). The rescue project was set up in order to learn about Eastern Turkey's ancient past and record some of its monuments and sites. Survey work in 1966 and 1967 documented and studied some of the ancient monuments and settlements in the soon-to-be-flooded area. In 1968, multidisciplinary teams of archaeologists from Turkey and abroad began excavating 28 sites that remain underwater today. These archaeological surveys and scientific excavations lasted until 1975 when water levels would not permit any further work.

The salvage excavations brought a community of scientists together in order to produce knowledge about the past of a region. One of these archaeologists was Hayri Ertem who came to Keban with his University of Ankara team to excavate the site of Korucutepe. In the *METU Keban Project Publications*, a collection of site reports describing the rescue excavations undertaken before the construction of the dam, he writes:

"This year, when we heard that the dam reservoir was shortly to be brought up to required height, we arrived at the mound at the end of April. There we saw the mound gradually turning into an island... On 2 May 1975 the mound became an island 150 m distant from the mainland. The excavation team and the workers traveled to and from the mound in a small hired motorboat... Whereupon the flood waters began to penetrate into the trench, which had to be abandoned before the complete architectural plan could be exposed... an attempt was made to find Hittite level IV. Two rooms were partly uncovered here, but the flood waters began to seep into the trench, making further work impossible. The large trench, and in fact the entire mound, had to be abandoned."

¹ Hayri Ertem, "Korucutepe Excavations 1974-1975," Keban Project 1974-5 Activities (Ankara: Middle

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In these descriptive volumes, archaeologists "announce their discoveries" and allow the larger archaeological community to "witness" their excavations. This particular passage divulges to the reader the last days of the site before its destruction. As Ertem reveals, the team arrived early and continued working until it was no longer possible. Despite the rising waters, the archaeologists continued their research by hiring a small motorboat (Fig. 1). The director's last efforts are dedicated to achieving yet another goal of the scientific mission; uncovering more architecture and finding the last Hittite levels. He describes the team's ultimate activities using a detached, impersonal scientific tone. His last words remain within the acceptable scientific prose of archaeological formulas.

Unfortunately for the team, it was already too late. The passage, in the end, is not directed against the dam responsible for the destruction of the site. Despite the flooding, it remains a formulaic and stylized description of the activities on site. Scientific texts, in fact, do not usually leave much room for everyday sentiments. Human feelings associated with loss are normally not expressed in archaeological reports. Yet, during these emotional goodbyes, the reader can feel the sense of urgency in this situation. The cold and rational voice of science is betrayed by the despair of human beings working against time. The passage is a rare example where the team's anguish seems to seep through the scientific account. The emotions of the archaeologists emerge and break apart the imperturbable scientific narrative of the reports. The short text reveals implicitly the anger of the team forced to abandon the site. Not expressed directly, the sadness of the researchers can almost be "witnessed."

In this dissertation, I use the site reports of the Keban rescue project as my primary source of evidence in order to find specific instances where, like the passage above, scientific certainty breaks apart. During seven years, archaeologists and other scientists worked in collaboration to study Keban's rich but threatened cultural heritage. This dissertation makes use of an unusual and unexploited wealth of evidence to bring to the surface some of the submerged and marginalized stories behind the rescue project. It draws upon a set of unconventional data located in the footnotes of texts, on the margins of photographs, on the outer limits of the scientific laboratory to make the Keban region's inundated past emerge once again to the surface. As scientific knowledge about the past is produced, archaeologists defined their object of research in a specific manner.

As scientific laboratories emerge from the ground, different forms of inclusion and exclusion simultaneously occur. Other narratives, histories, pasts, facts, evidence, data are, as in any other process of knowledge production, excluded. At Keban, archaeologists privileged the topics of interest to the community they belonged to and marginalized, if not entirely excluded, other kinds of objects, evidence, sites and histories. As certain choices are made by archaeologists on what to study, document and preserve, other things, by necessity, become, if not completely ignored, placed to the sidelines. By carefully sieving through the gray literature of the KDRP, I have tracked down the stories sidelined from the scientific process. My dissertation brings back to the surface some of the stories behind these particular salvage excavations. It places in the foreground some of the narratives that, if not completely erased, have been left in the margins of science.

CHAPTER I A "Turning Point" for Turkish Archaeology

"Turkey... has recently witnessed an extraordinarily effective salvage operation... to salvage the historical heritage of a vast area in the eastern part of the country due to lie under the new lake of the Keban Dam."²

Introduction

Between the years 1966 and 1975, archaeologists and other scientists carried out archaeological excavations in the Keban region in the hope of learning about Eastern Turkey's ancient past. The goal of Keban Dam Rescue Project (KDRP) was to recover and protect the endangered sites and monuments of the Upper Euphrates. This chapter examines the history of this multi-disciplinary and international salvage project. The salvage project allowed archaeologists to deploy new ideas and innovative methods in an effort to recover some of Keban's threatened cultural heritage. Despite the initial skepticism on the part of the archaeological community at the outset of the project in Eastern Turkey, the KDRP is thought of today as a success. Besides the safe removal of some monuments, the project has contributed to our knowledge of Eastern Turkey's past. It also provided opportunities for a new generation of archaeologists to receive field experience and experiment with new methods and techniques. The rescue project was also successful in bringing international and multi-disciplinary teams to study the Keban region from different disciplinary angles.

This chapter will introduce and retrace some of the achievements of this salvage project. It will explain why the Keban project is perceived as a "turning point" for Turkish archaeology. The history of the KDRP also constitutes an interesting case-study in order to ask questions of an epistemological nature. The KDRP brought scholars of several disciplines together to document a landscape and record a past soon to be destroyed in a relatively limited amount of time. How did these archaeologists, architects, ethnographers, etc. identify objects in a landscape? What were the criteria to assign particular values to them? What choices were made to save certain artifacts while ignoring others? What type of information was emphasized and what type was sidelined? These questions surrounding the nature of archaeological evidence constitute a theme in this chapter and throughout the dissertation.

Initial Skepticism and First Surveys

In the mid-1960s, archaeologists did not place much hope in a rescue project in Eastern Turkey. Traditionally focusing on Western Anatolia and its Greco-Roman heritage or Central Anatolia and its earlier Bronze Age civilizations, Turkey's

² Cevat Erder, "Lessons in Archaeological and Monument Salvage The Keban Experience," *Monumentum* 17 (1978): 1.

archaeological community remained pessimist. They believed that nothing of cultural significance would be found in the "East." If money and energy were to be spent, so it was thought at the time, why not spend it in Western Turkey where excavations had already proven to be fruitful? The KDRP did not generate much enthusiasm at first. The assumption that nothing significant predating the Urartian period and certainly no important Bronze Age or Neolithic material could be found in Eastern Anatolia was indeed prevalent. Besides not knowing what to expect from such a salvage project and in addition to the lack of optimism, as news of the dam's construction emerged, the majority of Turkey's established professors and academics simply were not interested in such a project.

When European and American institutions were invited to participate in the KDRP, much skepticism was again encountered. Most foreign archaeologists seemed somewhat reluctant to work in the Keban region. Southeastern Anatolia, in the 1960s, was considered a cultural backwater in comparison to the centers of Near Eastern archaeology. Before the Keban Dam, the Northern Euphrates region played only a secondary role in the development of the discipline in the Middle East. The foremost archaeological sites were located in southern Iraq and Iran. If today the boundaries of this core have expanded to include Northern Iraq and Syria, the upper reaches of the Euphrates River are still considered a "periphery of Mesopotamia." Foreign institutions, at first, did not see the interest of partaking in excavations on the outskirts of the region which had defined Near Eastern archaeology in the past. Foreign teams from the United States, Great Britain and Germany did finally join the rescue efforts in this *terra incognita*; some perhaps only seeing it as a duty towards the Turkish Ministry of Culture in view of obtaining more promising sites in the near future.

Despite the pessimistic atmosphere, the Keban region was first surveyed from October 18th to 29th, 1966 by a team from the Middle East Technical University (METU) in Ankara. With a group of students from the Department for the Restoration and Preservation of Historic Monuments, Cevat Erder carried out this preliminary assessment of monuments "doomed by the dam." At the time, he believed that the dam would be

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³ According to Mehmet Özdoğan (*pers. comm.*, February 2008), except for Halet Çambel, no one could have been convinced of the contrary. Even Halet Çambel and Robert J. Braidwood, *Prehistoric Research in Southeastern Anatolia I* (Istanbul: University of Istanbul, Faculty of Letters Press, Publication 2589, 1980), which presents the results of a 1963 survey in an area now threatened by the Ilisu Dam south of the Keban region, could not help break these preconceived ideas. Besides excavations at Carchemish, Nemrut Dağ and explorations by Charles Burney, modern archaeology had not yet gone further east in Turkey.

⁴ Before the 1960s, the most important excavations took place in western or central Turkey (Troy, Ephesos, Çatal Höyük, Hattusha, etc.). In the Middle East, most activities had taken place in Iraq, Iran and Syria. Turkey's "East" was and has remained, archaeologically speaking, backward. Mehmet Özdoğan, "Neolithic in Turkey. The Status of Research," *Readings in Prehistory, Studies Presented to Halet Çambel* (Istanbul: Graphis, 1995). Later on, due largely to political reasons (among other things, the Islamic Revolution in Iran and the Gulf Wars in Iraq), it became more convenient for foreign archaeologists to move their research to Turkey.

⁵ Cevat Erder, *Doomed by the Dam* (Ankara: Middle East Technical University, Faculty of Architecture, Department of Restoration, Publication No. 9, 1967). Erder, the chairman of this "exercise" in archiving, cataloguing and documenting, carried out the survey with the help of Paul Stopp, Peter P. Pratt, Ömür Bakırer, Ayşıl Tükel, Necva Tayga, Linda Rhodes, Emre Madran, Alpay Özdural, Okan Üstünkök and Mustafa Niksarlı, the photographer.

built within three or four years. Acting in a state of emergency, the team nevertheless achieved a lot. Their efforts concentrated on the northern shores of the Murat River near Eski (Old) Pertek, a village that had gradually been abandoned by its inhabitants in favor of more productive lands elsewhere. More than a dozen Ottoman-period buildings were recorded, catalogued and photographed around the village. All dated to the 16th century, these stone-built monuments (shops, schools, churches, mosques and one hamam) were, at the time of the survey, all abandoned or used as hay storage. In poor condition with their roofs having collapsed, only their foundation walls were still up. Around the village of Til Ağası or Korluca, some more churches were photographed and measured. The team also surveyed three caravanserais and documented five bridges in the region.⁹

Never regarded as comprehensive, the survey was initially designed as a field exercise in documenting historic monuments for first year graduate students. Working from Elazığ with a jeep, the team was split into a scout and a survey group. The first group located sites while the second recorded them. The scout group turned up more monuments in two weeks than the survey group could document. For instance, the second group would spend from three hours to three days recording one particular building but only took notes and photographed the many höyüks found. 11 Their final results were published in a booklet entitled Doomed by the Dam widely disseminated and accompanied by public exhibits. 12 Thus, this brief project, which located only a small number of sites, went beyond recording monuments. It gave an indication of the wealth

⁶ Ibid., 2.

⁷ The survey's catalogue describes: 1. a kantariye or shop, 2. a han or imaret, 3. a medrese, 4. a kiosk, 5. two churches, 6. two türbes, 7. three hamams, 8. the Bay Sungur Mosque and 9. the Çelebi Ağa Mosque with its fountain and minaret. Ibid.

⁸ Erder's team recorded a 12th century Assyrian church and an 18th century Armenian church, used for storing hay, both owned by Ekrem Yolga. The Assyrian church had mural decorations on the apse and the Armenian church some mural decorations and plastered walls. Although both in moderately good condition, the walls and roof of the Armenian church were blackened by smoke. A third twin-apsed church, also used for hay storage, was found in similar conditions and noted. No photographs of it were taken

⁹ These were 1. a 13th century Artukoğulları-style caravanserai in Han Ibrahim Şah near Esenkent. Owned by the vakıflar, it had also been used for storing hay. Although its interior winter part was in good condition, the foundations of the exterior summer part were no more than visible. 2. A 16th century Ottoman caravanserai owned again by Ekrem Yolga near Murat Han built during the Baghdad expedition of Sultan Murat IV. Except for the northern façade, the walls of this structure were found in a ruinous state. 3. A Seljoukid-style caravanserai called Makit Han in Denizli near Ağın. It was also owned by the vakıflar and used for storing hay. The decorations of this building were in poor condition. Even though located outside of the future reservoir area, it was still recorded due to its proximity. The bridges were 1, the Karamağara bridge on the Arapkir Çayı, 10 km away from Ağın; 2. the Sivdin bridge on the Karar Deresi near Çemişgezek dated to the 12th or 13th century Seljuk period. It was found in good condition still being used by sheep and shepherds. 3. The Cemisgezek bridge located 3 km away from Cemisgezek which was not directly threatened by the dam. Owned by the Bayındırlık Bakanlığı, it bears an inscription dated to 1906 reading "Maşallah." 4. The Değirmen bridge on the Karasu river near the city of Alişam and 5. the remaining base of a bridge and mill near the village of Ağın. Ibid.

¹⁰ Ibid., 4 and Erder, "Lessons Keban Experience," 1.

¹¹ Erder, *Doomed by the Dam*, 4.

¹² Erder, "Lessons Keban Experience." 2.

of this unexplored region and, as Cevat Erder had hoped, raised concern about the remaining task to be accomplished. 13

University of Michigan's Robert Whallon Jr. and University of Istanbul's Sönmez Kantman organized a second survey from June 30th to September 7th, 1967. Financed by a research grant from the National Science Foundation and carried out on a larger scale than the 1966 survey, its results achieved more systematic and broader results. During more than two months, this team covered 45% of the future reservoir area. Fifty-two settlements were found, 47 located within the reservoir area and directly threatened by the dam. A second zone representing 30% of the first area assessed was covered more intensively. Twenty-six sites from this zone were more methodically scrutinized. In Altinova, more careful fieldwork revealed 38 settlements, 32 of these being mounds. By paying particular attention to the Altinova Plain and the Aşvan region, Whallon and Kantman had covered the two principal areas where further work would take place.

This second survey did more than just guide archaeologists to sites needing attention in the near future, however, it also defined the research questions of the whole rescue project itself. It went beyond recovering preliminary information from mounds. By concentrating on the role played by the region during the beginnings of urbanization in southern Mesopotamia, it set the stage for further research. The spread of urban development from the Lower to the Upper Euphrates region and the developing economy of the Near East in the Early Bronze Age became a foundational concern at Keban after Whallon and Kantman's survey. In correlation to this, the two archaeologists formulated a hypothesis on the distribution of cities, towns and villages in the Altınova plain and Aşvan region. While the largest mounds were recorded as having the "central settlement character" of cities, the smaller mounds were simply labeled as towns or villages. This "rank-size settlement hierarchy" would later be adopted, somewhat uncritically, by most of the project's archaeologists. The Keban excavations are still acknowledged today for the comparative material obtained in the same region from cities, towns and villages.

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¹³ Ibid., 5.

¹⁴ The team led by Robert Whallon Jr. and Sönmez Kantman was made up of Turhan Birgili, Sina Ünsaldık, Gevher Gürpınar, Fatma Günbulut and Altan Atılgan Çilingiroğlu, all students attending Istanbul University's Faculty of Letters' Prehistory Department. Robert Whallon Jr. and Sönmez Kantman, "The Survey of the Keban Dam Reservoir, 1967," 1968 Summer Work (Ankara: Middle East Technical University Keban Project Publications, Series I, No. I, 1969), 7. Science plays a more preponderant role in Whallon and Kantman's work. For instance, they use scientific sampling methods such as "gridded strips" and "randomized grid," which allowed them to gather surface finds on the sites in a more systematic way. Once gathered and recorded, the surface finds were prepared for typological analysis and percentage studies. In order to save time, some members of the team were using computers for statistical analysis.

¹⁵ More fieldwork would later bring that number from 52 to 70. Erder, "Lessons Keban Experience," 6. ¹⁶ Robert Whallon Jr. and Sönmez Kantman, "Early Bronze Age Development in the Keban Reservoir, East-Central Turkey," *Current Anthropology* 10, no. 1 (1969): 128.

¹⁷ Norşuntepe represented a *city* at a height of 30 to 35 m, dominating the smaller *towns* of Kövenk, Könk, Korucutepe, Tülintepe and Tepecik-Makaraz Tepe, all between 15 to 20 m high and located within 5 km of each other. Around these *towns* are even smaller mounds called *villages*. This emphasis on the Early Bronze Age where settlements are placed into a social-evolutionary hierarchy would later on frame many of the research questions of the KDRP. Whallon and Kantman, "Survey Keban Dam Reservoir," 8-9.

¹⁸ Patrick V. Kirch, "Archaeology and Global Change: The Holocene Record," Annual Review of Environmental Resources 30 (2005), 411 explains how "[t]he introduction of the "settlement pattern" approach marked a shift away from individual site-centered studies to one that examines entire human

The two surveys of the Keban region were opposed in many regards. On the one hand, METU's quick assessment yielded a wealth of monuments from the Byzantine, Seljuk and Ottoman periods. Cevat Erder (an architecture professor) and his students concentrated their efforts on recording churches, mosques and hamams. The type of data the METU team was interested in could be walked to, touched, seen and photographed. They did not have to excavate these abandoned but visible ruins out of the ground. Their objects of research did not require much imagination to visualize what they were like in the past. If these historical monuments, still standing for the most part, were documented extensively, the region's pre-historic mounds, on the contrary, were only noted in passing and photographed. 19 This field-exercise in drawing architecture focused on the description and eventual protection of a selected number of monuments at risk. On the other hand, Whallon and Kantman's survey collected an entirely different type of data from tepes. Each of these mounds, taken as the measure of analysis, was recorded and given a letter and number corresponding to its location. Each site was also attributed to a time period based on a small sample of potsherds collected from their surface. Hundreds of dots of varying size each representing a mound were then placed on a gridded map of the Keban region. Thus, the mounds surveyed by the two archaeologists served as a sample to establish a settlement hierarchy and analyze site distribution.

In the end, the goals, data, methods, vision of the two teams, both surveying the same area, were very much apart. Cevat Erder and his team recorded ruins to warn people about the threats of the dam. Their goal was to protect the monuments by keeping an archive that would keep their memory alive. It was an architectural survey serving to witness a region's ancient cultural remains before their disappearance. Their gaze had stopped on the bucolic ruins. Their cameras captured stylized black-and-white shots of the monuments *doomed by the dam*. Whallon and Kantman, on the contrary, visualized the landscape of Keban as a gridded map filled with dots. They gathered data to be used in later scientific research. They were systematic and rigorous in their collection and constitution of a sample that could later be diagnosed and analyzed. They were also aware of the rich mine of data accumulated in the *tepes* waiting to be excavated.

Launching the Rescue Project

The booklet *Doomed by the Dam* with its scenic, black-and-white, artistic photographs of lone monuments in pristine environments attracted the interest of the mass public. As awareness grew, a fund-raising campaign to protect the cultural heritage of the Keban region was instigated by the national newspaper *Milliyet*. Donations started coming in from all parts of Turkey made by enthusiastic elementary school children, villagers, high government officials and businessmen.²⁰ In two months, the campaign had raised \$60,000. Having reached a wider public, government officials in Ankara became

settlement systems within the context of their geographic landscapes." At Keban, the two archaeologists Whallon and Kantman never put into question some of the assumptions behind this social-evolutionary classification of sites, however.

¹⁹ The non-published records and photographs of the survey are available today in the archives of METU's Faculty of Architecture.

²⁰ Erder, "Lessons Keban Experience," 8.

convinced that a rescue operation was needed. The initial sum raised by Milliyet was matched by the Turkish government's central treasury. Within a few months, \$250,000 was available for a rescue project in the Keban region. The project might have started with little money. But, over the seven years of rescue work, a mix of public and private funding was able to finance each season's operations. If Erder's survey informed people about the threat of the dam, Whallon and Kantman's survey caught the attention of the archaeological community. With this preliminary assessment, archaeologists realized what the larger purpose of excavating these sites was and saw what needed to be done. The survey defined the research questions of the project and delineated the area where salvage work would take place.²¹ It placed the future excavations into a larger scientific project and shifted the emphasis from rescuing to researching. A scientific agenda had now been defined which went beyond recording ancient mounds but fit within the larger research themes of Near Eastern archaeology. Archaeologists would no longer simply be documenting sites or collecting treasures but collecting scientific data on the ancient past of Northern Mesopotamia, its earliest urbanization, its settlement hierarchy and site distribution.

Despite the growing interest in the scientific community and the raising concern in the country's population, the dam still caught many by surprise. In Turkey, no official organization was set up to organize a rescue project of this scale. Kemal Kurdaş, president of METU at the time, formed the Committee for the Salvage of Cultural Property in the Keban Dam Area. 22 This committee had to act quickly, however. Kurdaş, who also served as the project's public relations, was at the start of the public exhibits and media events advertising the rescue project. In addition, he was the one who sought political and legal backing for the KDRP. Among other things, he negotiated the cooperation, at times problematic, with those in charge of construction. His experience within the Turkish government, the academic and financial world, as well as his concern for Turkey's antiquities, proved to be decisive in the success of the salvage project.²³ The rest of the committee was composed of professionals (archaeologists, architects, administrators, financial consultants) with diverse backgrounds, nationalities and institutional affiliations.²⁴ As a group, they provided the coordination necessary to launch the project. Without directly participating in fieldwork, they advised in their specific fields of expertise and set the broad guidelines of the project.

More specifically, the Executive Committee attributed sites to each team, freed each director from financial responsibilities, organized facilities in Elazığ and provided assistance for publication. The committee's first task in 1967 was to decide who would excavate where. Once archaeologists and institutions had manifested their interests in

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²¹ A total of seven regions were surveyed: Ağın, Pulur, Aşvan, Han Ibrahim Şah, Pertek, Altınova and Haraba.

²² Kemal Kurdaş, "Önsöz," *1968 Summer Work* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 1, 1970), v-vii.

²³ Erder, "Lessons Keban Experience," 21.

²⁴ The Executive Committee was also composed of archaeologists (Halet Çambel and Robert Braidwood), an architect (Cevat Erder) and administrators (Aptullah Kuran, Hikmet Gürçay and Uluğ Iğdemir). Furthermore, full-time administrators (Nejal Erem, later Ekmel Derya, both from METU's Faculty of Architecture) also contributed to the decision process. Kurdaş, "Önsöz" and Erder, "Lessons Keban Experience."

excavating at Keban, the committee was faced with the challenge of assigning sites to each director. If the main criterion behind attributing sites was each individual director's knowledge and competence, many of the decisions occurred in the project's backstage.²⁵ Matching excavation sites with archaeological teams was a challenging exercise in diplomacy. The site of Norşuntepe, for instance, was the largest in size and promised the most results. A University of Chicago team had expressed its interest in it. Before the project was launched, Harald Hauptmann, benefitting from the good reputation of the German Archaeological Institute in Istanbul was awarded the prestigious site. During informal meetings and conversations that have left no traces today, he convinced the committee that his team was the most dedicated and enthusiastic.²⁶ He was able to demonstrate how his team would make all the efforts necessary to achieve success in the excavations. In the end, the Americans had to settle for the smaller Korucutepe.

Besides this first role, the Executive Committee also raised, allocated and disbursed the funds for the project. The committee's administrators distributed money to the teams at the start of the season and entrusted each site director with the freedom to use the money as they wished. This financial guarantee relieved archaeologists from heavy accounting responsibilities and allowed them to concentrate solely on archaeology.²⁷ The Executive Committee also organized the project's field facilities in Elazığ. The city, 40 km away from Keban itself, was naturally chosen as a headquarter for the KDRP given its proximity to all of the sites. Its Academy of Engineering and Architecture provided a space for the organization of field operations. It served as a central meeting place as well as a point of transit for visitors who spent the night upon their arrival before reaching the sites the next day. Because there was no archaeological museum in Elazığ at the time of the KDRP, the academy's storage area was also used to store excavated objects from the sites as well as excavation material during the off-season.²⁸

The Executive Committee also facilitated the publication of the project's scientific results. At the end of each work season, the directors of each team wrote short articles on their on-going progress. These field reports were then gathered and published in Ankara under the supervision of METU in seven volumes ensuring that results were made available in a timely manner.²⁹ After sending these preliminary reports to the press, the committee also offered assistance to some teams with their final publications while

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²⁵ The final choices, of course, belonged to the committee. But, informal meetings and casual conversations within the offices of METU's Restoration Department and Istanbul University's Prehistory Department also played a role in deciding which team was going to excavate where. Harald Hauptmann, *pers. comm.*, January 2009.

²⁶ Ibid.

²⁷ Erder, "Lessons Keban Experience," 8 & 22.

²⁸ In reality, this was far from being an ideal solution as many problems, such as flooding, theft, degradation of material, etc. came up in relation to the storage area in Elazığ. Harald Hauptmann, *pers. comm.*, January 2009.

²⁹ An editing office was quickly set up by Irem Acaroğlu and Sevim Perkman. Erder, "Lessons Keban Experience." Preliminary reports were published in two languages (Turkish and English or German) for each season from 1968 to 1974. The last report published in 1982 comprised the 1974 and 1975 seasons just before the rising waters completely submerged the Keban area. It is these reports which constitute the main data for my dissertation.

other were free to publish with their own means and on their own terms.³⁰ Having taken over the responsibility to launch the project and put in place the most important matters in terms of organization and finance, the Keban Dam Rescue Project was ready to be launched. Some of the duties of the Executive Committee could now be handed over to other institutions and teams.

Excavations and Other Rescue Projects

The rescue excavations could now begin. From the sites surveyed and inventoried, 28 sites were selected and excavated between the years 1968 and 1975. In June 1968, twelve teams, representing four different nationalities (Turkish, British, American, German) began their work. Seven areas were chosen to conduct this fieldwork recovering material and information from all time periods. Turkish teams from the University of Ankara excavated six sites from 1968 to 1974 recovering material from the Neolithic to the Seljuk periods.³¹ A team from the University of Erzurum led by Hamit Z. Koşay excavated the prehistoric sites of Pulur near Sakyol from 1968 to 1971 and Yeniköy in 1972. But, the largest Turkish excavations took place in the Altınova plain from 1968 to 1974. The University of Istanbul excavated the mounds of Tepecik and Tülintepe. 32 Another team led by Refik Duru from the same university also worked at the site of Değirmentepe in 1973. The two main Turkish universities, Istanbul and Ankara, involved at Keban took a leading role in the rescue project as host institutions. As the KDRP moved forward, some of the Executive Committee's responsibilities were transferred to METU's Restoration Department and Istanbul University's Archaeology Department. Already involved in the beginning of the rescue efforts by organizing the initial surveys, they would later assume their role of home institutions by taking up more responsibilities in the organization and supervision of the salvage project.

Teams from the British Institute of Archaeology at Ankara (BIAA) also participated actively in the rescue efforts at Keban. A Roman fort located above an Early Bronze Age mound called Kaspinar or Pağnik Öreni in the Ağın region was worked on by Richard P. Harper's team from 1968 to 1971. Most British efforts, however, were concentrated in the Aşvan project. Five sites dated from the Neolithic to the Medieval period were excavated using methods and following theories associated with the new

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³⁰ Hâmit Zübeyr Koşay, *Keban Project Pulur Excavations 1968-1970* (Ankara: Middle East Technical University Keban Project Publications, Series III, No. 1, 1976); Refik Duru, *Keban Project Değirmentepe Excavations 1973* (Ankara: Middle East Technical University Keban Project Publications, Series III, No. 2, 1979) and Hayri Ertem, *Keban Project Han İbrahim Şah Excavations 1970-1971* (Ankara: Middle East Technical University Keban Project Publications, Series III, No. 3, 1982) were published by METU.

³¹ University of Ankara teams were represented by, among others, Ümit Serdaroğlu and İ. Kıliç Kökten excavating at Ağin, Kalaycik Tepe, Hereser, Han Ibrahim Şah, Kilise Yazısı and Şimşat Kale.

³² After the Turkish Railway Construction Company decided to replace the soon-to-be-submerged Elazığ-Bingöl railroad, the mound of Tülintepe was requisitioned. The earth of the mound was used to make the embankment of the new railroad. During the Fall of 1966, bulldozers removed the upper layers of this 16 m high mound. Earth was carried off leaving Tülintepe at the same level as the surrounding plain. The team from Istanbul was then able in 1971 to start excavations with the upper layers already removed. This was a chance for the Istanbul team to investigate the untouched Chalcolithic levels without having to dig through the upper layers. Ufuk Esin, "Tülintepe Excavations, 1971," *Keban Project 1971 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 4, 1974).

archaeology.³³ A few American teams also joined the rescue efforts. The University of Chicago's Oriental Institute and the University of Amsterdam collaborated on the large multi-layered site of Korucutepe in the Altınova. The University of Ankara replaced the American team in 1972 for three seasons.³⁴ Robert Whallon Jr. expanded his 1967 survey work with another American team south of Aşvan in 1969 at the site of Fatmali-Kalecik-Adsiztepe labeled N52/3 in the survey literature. Last but not least, the site of Norşuntepe was excavated by a dedicated German team led by Harald Hauptmann from 1968 to 1974.³⁵ Hauptmann's German team also excavated the nearby site of Körtepe in the year 1972.

If these archaeological expeditions tend to take center-stage in any conversation about the KDRP, they only made up one part of it. In their initial meetings, the Executive Committee wished to achieve results beyond excavations. In parallel to the work of archaeologists, the project brought to the Keban region, like Napoleon's "Savants" in Egypt, architects, engineers, geologists, geophysicists, botanists, statisticians, social scientists and economists to tackle a diverse array of problems. The KDRP also included more surveys, the salvage of three historical monuments, ethnographic and socioeconomic research, as well as studies of household and contemporary rural architecture. In addition to the 1966 and 1967 surveys, Kılıç Kökten from Ankara University carried out a Stone Age survey between the years 1969 and 1972.³⁶ Kökten had already surveyed the Keban region in search of Paleolithic material in the 1940s. He published in 1947, along with his surface-finds on sites and mounds, a map of rock-shelters of the region. When news of the Keban Dam emerged in the 1960s, the Turkish archaeologist came back to the region to complete his studies of Paleolithic sites. His work did not however omit other time periods as a Byzantine church near Ağın is also described in his final report. From this survey, Kökten's team was able to draw another map of rockshelters, caves, working areas, open-air sites and workshops, previously unnoticed mounds and collect and describe miscellaneous surface finds.³⁷ Furthermore, a general Paleolithic stratigraphy for the area was drawn up and Kökten's soundings provided evidence for, perhaps, the earliest habitation in this region.

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³³ Led by David French from 1968 to 1972, this project will be more detailed in the next chapter.

³⁴ Located in the Altınova region, the American team directed by Maurits Van Loon and Hans Gustav Güterbock excavated the site from 1968 to 1970. The Turkish team worked for three seasons at Korucutepe after the American team left. In the final reports, Ertem states that the site was abandoned "for no apparent reason." Hayri Ertem, "Korucutepe Excavations, 1973," *Keban Project 1973 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 6, 1979), 37. The real reasons why Van Loon left Turkey and started working in Syria remain unclear and unstated in the scientific report.

³⁵ While most teams only worked in the region during the summer months, the German team would usually make their season last from August until December. The last 1974 season before flooding, for instance, ended on December 25th 1974 under the heavy snows the region between Elazığ and Bingöl receives in winter (Fig. 2). I discuss in the next chapter German archaeology's great tradition by using this site as an example.

³⁶ For the last survey, see İ. Kılıç Kökten, "Stone Age Explorations in the Keban Dam Lake Area, 1972," *Keban Project 1972 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 5, 1976), 5-8. Previous results appear in the 1971, 1972 and 1974 publications.

³⁷ İ. Kılıç Kökten, "Stone Age Explorations in the Keban Dam Lake Area, 1971," *Keban Project 1971 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 4, 1974), 11

Ali Yaramancı from the University of Istanbul's Department of Applied Geophysics carried out several geophysical surveys in the years 1968 and 1969. Along with a team of engineers, geophysicists, topographists and students, Yaramancı's aim was to apply a relatively new geoelectric resistivity method to survey some of the Keban sites. The geophysical survey could determine the location of stone and mudbrick buildings inside the mounds. In collaboration with the archaeologists, his team provided help by locating architectural structures before sites were actually excavated. After the results of the survey were obtained, excavations could then be carried out following these indications of architectural remains. During the first summer of excavations in 1968, Ağın, Tepecik and Norşuntepe were chosen to test the method in the hope of improving the application of geophysics to archaeology. As "faith" in the geophysical findings increased, more archaeologists asked his team to investigate larger and newer areas. Later, the mounds of Haraba, Körtepe, Pertek, Tülintepe and Aşvan were also surveyed. Work was also carried out near Pertek in order to establish the location of the settlement in relation to two mosques described below.

In addition to excavations and surveys, Alpaslan Koyunlu, an architect from Istanbul University, researched the ethno-history of Munzuroğlu, a village of about 45 dwellings whose economy was based primarily on agriculture. 40 Oya Silier, from METU's Department of Economics and Statistics, carried out a socio-economic study, between the years 1968 and 1971, on the impact the Keban Dam would have on people forced to move out of their home. 41 Financed by METU, Silier gathered data and provided answers related to resettlement questions and the adjustment of people to new environments. To collect information, her team relied upon village inventories provided by the Ministry of Village Affairs and also selected more than 1000 heads of households to interview. Yusuf Durul researched the tradition of weaving rugs (long established in Anatolia but not well studied) of the Keban region. 42 By carrying out an ethnography, Durul was hoping to answer some of the many questions related to carpet-weaving and handmade textiles. Durul describes the techniques used for weaving and the rugs' motifs. He also offers some interpretations about their symbolism and suggests some ideas about the identification of different ethnic and social groups, their cultural interactions, based on carpet motifs and techniques.

These teams were approved and sponsored by the Executive Committee because it was felt as a necessity to document the quick socio-economic changes taking place in

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³⁸ The first survey was published in Ali Yaramancı, "Keban Project Geophysical Survey 1968 Preliminary Report," *1968 Summer Work* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 1, 1970), 21-28.

³⁹ Ali Yaramancı, "Geophysical Survey, 1969," *Keban Project 1969 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 2, 1971), 12.

⁴⁰ Alpaslan Koyunlu, "The Village Settlement of Munzuroğlu - Observations on Housing," *Keban Project 1974-5 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 7, 1982), 249-265 and "The "Agha Konak" in the Village of Munzuroğlu," *Keban Project 1974-5 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 7, 1982), 273-278. I will come back to this research later in the conclusion.

⁴¹ Oya Silier, *Keban Köylerinde, Sosyo Ekonomik Yapı ve Yeniden Yerleşim Sorunları* (Ankara: Orta Doğu Teknik Üniversitesi İdari İlimler Fakültesi Yayınları, 1976).

⁴² Yusuf Durul, "Baraj Gölü Çevresi Dokuma Sanatları," (Ankara: Orta Doğu Teknik Üniversitesi, Keban Projesi Yayınları, Seri II, Yay. 1, 1969).

Turkey in the late 1960s as well as record the quickly vanishing traditions of the Keban region villages. Within the framework of the rescue project, these ethnographic and socio-economic studies were undertaken prior to the construction of the dam. The Keban Dam directly affected the lives of more than 30,000 people and destroyed at least 212 towns or villages. It was, at the time, Turkey's largest public resettlement of internal migrants. The project included more than ethnographies recording the last days of villages, sociological and economic analysis of the Keban area and studies of contemporary village traditions such as carpet-weaving, however. Other researchers also felt the urgency to record the lives of villagers who were being the most disturbed by the construction of the dam. Studies of household and contemporary rural architecture and other ethnographic projects were also undertaken. 44

The Rescue of Monuments

Another example showing the broad range of research that took place at Keban was the protection of endangered monuments. The Baysungur and Çelebi Ali mosques of old Pertek, described in the 1966 METU survey, were dismantled and rescued from the waters of the dam. An agreement between the Director General of the Religious *Vakfi*, 45 the Director General of the State Water Supply, the Supreme Committee of Ancient Buildings and Monuments and the Middle East Technical University was signed in 1968. The work, supervised by Ayşıl Tükel and Ömür Bakirer from METU's Restoration Department, was financed by the State Water Supply department. At first, no one knew if the project was even feasible. After considering some alternative solutions such as transferring the mosques as single units, the cheaper method of dismantling the buildings stone-by-stone was chosen. 46 Each stone was measured, numbered, photographed and

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⁴³ The wide research scope of Keban was unique. Later rescue projects before the construction of the Atatürk, Birecik and Ilisu dams will not take on this dimension for political and security reasons.

⁴⁴ Except for Hâmit Zübeyr Koşay, *Pulur Etnografya ve Folklor Araştırmaları, Tamamlayan ve Yayına Hazırlayan Duygu Arısan Günay* (Ankara: Orta Doğu Teknik Üniversitesi, Keban Projesi Yayınları, Seri II, Yay. 2, 1977) and Duygu Günay Arısan, (yay. haz.), *Keban Baraj Gölü Yöresi Halkbilim Araştırmaları, der. Hüseyin Yanıkoğlu, Mesut Şener ve Ferhan Memişoğlu* (Ankara: Orta Doğu Teknik Üniversitesi, Keban Projesi Yayınları, Seri II, Yay. 3, 1980), which were published in Series II, the other projects carried out by Peters W. Eckhart, Doğan Kuban, Ayla Alpöge Ödekan, Alpaslan Koyunlu and Ümit Serdaroğlu can be found in the Middle East Technical University Keban Project Publications, Series I.

⁴⁵ Vakıflar (plural form of Vakfı) are privately run foundations in Turkey that raise money to carry out, among other things, educational or cultural activities. In the case of the two Pertek mosques, the Vakfı concerned was the Foundation for Pious Endowments. Cevat Erder, "Rescue Operations of two 16th Century Mosques in Eski Pertek," Keban Project 1971 Activities (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 4, 1974), 165-167.

⁴⁶ At first, transferring the mosques as single units was considered. Then, moving large sections of the buildings together was contemplated. From the experience in the Aswan Dam region in Egypt, the alternative of constructing a large coffer around the two mosques, elevating them on hydraulic jacks and moving them to their new location was also considered. Two graduate students from METU were asked to evaluate each of these options and find the best one. Gouhar Shemdin, "The Mosque of Çelebi Bin Ali Bey," (Master's thesis, Middle East Technical University, 1970) and Osman Burat, "Baysungur Mosque in Pertek," (Master's thesis, Middle East Technical University, 1970). They even took into consideration the option of encasing the mosques in a strong framework, building concrete pontoons under them and letting the structures simply float to the desired location. In this case, the removal and relocation of the mosques

catalogued. The mosques' decorative elements were also recorded, copied and molded. The blocks were then transported to their new location in the new town of Pertek. Furthermore, excavations were carried out at the original site to learn about the stratigraphy of the mosques' foundations and record a *medrese*, a *türbe* and a latrine built adjacent to them. ⁴⁷ A photogrammetric survey was also carried out and, after all of the information produced from these sites were passed over to the Elazığ Museum, the two 16th century mosques were reopened. Today, the religious edifices continue to serve as places of worship in their new locations.

Parts of the 5-6th century Karamağara Bridge near Cemişgezek were also recovered. This project was led by İsmet İlter in 1970 and 1972. In reality, only the Greek inscription, a passage from the Bible written on the façade of the bridge, was removed. A first agreement was signed on October 21st, 1969 between the General Directorate of Highways and the Middle East Technical University. The operation was more complicated than anticipated, however. To access the bridge located in a 120 m deep valley, a 7 km road from Ağın had to be built. The structure was then reached on a narrow and winding footpath. If lowering equipment down this trail proved to be difficult, pulling the bridge's stone up from the gorge was almost unmanageable. The team began by measuring and recording each individual letter of the inscription. A 3 m high scaffolding and a pulley mechanism were then erected to start dismantling the stones. As work began, nearby villagers thought the team from Ankara would dismantle the entire bridge. One alarmed local notified the *jandarma* and, after two policemen came to the site, work had to be interrupted for 24 hours. The matter was settled after the governors of Ağın and Elazığ were contacted. 48 Because the team only wanted to move the inscribed stones, not the entire structure, villagers were still able to cross the river until the construction of the Keban Dam.

Later on that same year, during the rainy season, water levels rose and a flood carried off the scaffolding. Expecting more destructive floods, further work was postponed until 1971. 49 A second agreement had to be signed on April 5th, 1971 to restart work that summer. But, after an earthquake devastated the nearby Bingöl region, the machinery had to be sent off to the disaster zone and the rescue of the bridge postponed for another year. 50 When the team came back in 1972, some of the team's belongings, too heavy to carry back and hidden in a nearby cave, had disappeared. 51 Despite these misfortunes, the scaffolding was re-erected and dismantling finally began on August 28th, 1972 when the 500 kg keystone was the first to be pushed out and lifted up. In order to lift the heavier stones, some weighing up to 1500 kg, another machine that could not be brought to the site was needed. Without it, the team had to find an alternative solution. The heaviest ten stones --out of a total of 58-- were first cut and removed as two or three

would have had to wait for the Keban reservoir to form in order for its water to carry the mosques to their new village. In the end, these ideas were abandoned and reconstruction began using a method already known for the removal of several fountains in Istanbul. Erder, "Rescue Operations Eski Pertek."

⁴⁷ Erder, *Doomed by the Dam*, 2.

⁴⁸ İsmet İlter, "Dismantling of Karamağara Bridge," *Keban Project 1972 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 5, 1976), 206.

⁴⁹ The flood took place on the night of October 14th, 1970. Ibid.

⁵⁰ Ibid., 207.

⁵¹ Ibid., 208.

lighter separate pieces. After much ordeal, the inscribed stones of the Karamağara Bridge were finally moved to the Elazığ museum.⁵²

In the end, the KDRP was not only archaeological excavations. It included projects that considered different types of data to collect. The researchers mentioned just now adopted a different vision of the landscape and of the past. These projects make up another type of documentation system from the excavations taking place on *tepes*. If archaeologists focused with their techniques on recovering evidence from mounds, these examples of non-archaeological projects offer a broader scope for the KDRP. The diversity found in the types of research at Keban constitutes one of its achievements. Let us now consider the other reasons why archaeologists working in Turkey today consider the KDRP a "success."

The Project's "Successes"

Despite the initial pessimism, the KDRP is considered today a success by the archaeological community. If the initial response did not provide enough volunteers and teams, ⁵³ the project still exceeded many expectations. More than four decades later, it is considered a "turning point" for Turkish Archaeology. "Quite unexpectedly," as Cevat Erder explains, "the dam which appeared to be a threat at Keban turned out to be an unusual benefactor for archaeologists and art historians." The research contributed immensely to our knowledge of the successive cultural and historical phases of Anatolian civilizations. The project placed southeastern Turkey on the archaeological map and, in the end, skeptics who thought that at best some Urartian remains would be found, were forced to reconsider some of their assumptions concerning Anatolia's Ottoman, Seljuk, Byzantine and Roman periods as well as their misconceived ideas of earlier civilizations.

Among other examples, two 16th century mosques at Pertek were drawn, photographed, dismantled, reconstructed and are still used today. A team from Ankara was able to retrieve invaluable data on Seljuk pottery and architecture at the medieval fortress of Simsat Kale. The inscribed Byzantine stones of the Karamağara Bridge dated to the 5th century were carefully transported to the Elazığ museum for preservation and further study. Work at the fortress of Pağnik Öreni by the British Institute of Archaeology at Ankara has revealed precious information on the eastern frontiers of the Roman Empire. Material collected from other tepes also testifies to the presence of earlier civilizations in eastern Anatolia. For example, Harald Hauptmann's patience and dedication at the site of Norsuntepe has broadened the understanding of Early Bronze Age complex-state formation. Mysterious shrines decorated with animals and human heads at Pulur have informed archaeologists on the religious practices of the Chalcolithic period. What scientists knew of Neolithic settled communities had to be reevaluated after the work of Ufuk Esin and her University of Istanbul team at Tepecik. "In spite of its rich past," as Erder explains, "this remote region in Eastern Turkey [was] still a virgin territory for the art historian and archaeologist, its settlements and structures largely

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⁵² During several visits to the Elazığ Museum, I was not able to locate the stones, however.

⁵³ Mehmet Özdoğan, pers. comm., February 2008.

⁵⁴ Erder, "Lessons Keban Experience", 20.

unrecorded."⁵⁵ For many archaeologists in Turkey, in the end, the Keban rescue project is perceived as a success for these reasons.

In addition, excavating in the same region and living close from one another, teams benefitted from this proximity. Archaeologists working at different sites would observe each other's work and spend time together during weekends. This was especially true for the teams in the Altınova plain. Ufuk Esin at Tepecik, for instance, mentions in the *METU Keban Project Publications* the visits of the Korucutepe and Norşuntepe teams. She also writes about the talk (followed by an interesting discussion) given by Professor Robert Braidwood on the beginning of food-producing stages as well as a lecture on the Aswan Dam by an UNESCO representative. ⁵⁶ During these visits, fruitful exchanges were made which provided alternative ideas for researchers to think about their sites. The KDRP "also gave young archaeologists in training unusually rich field experience; close at hand they could compare the results of varying approaches with their own team's." A young generation of scholars (Harald Hauptmann, David French, Ufuk Esin in their 30s) was at the head of large excavations. Numerous students also benefitted from the training they received at Keban.

The international and collaborative aspects of Keban positioned it on the forefront of discussions concerning methods and theory. The Germans at Norsuntepe and the British at Asvan, became the first teams in Turkey to replace "trenching" techniques, still used at Pulur for instance, with the grid system, to be discussed later in this dissertation. Furthermore, for the first time in Turkey, archaeological projects became multidisciplinary. The Keban excavations brought to the sites, ethnographers, zoologists, botanists, ornithologists, etc. These specialists were present during the excavations themselves. As Cevat Erder notes, this collaborative work "of architects, engineers, photogrammetrists, geologists, geophysicists, botanists, statisticians, social scientists and economists should leave its mark in the next decade."58 Never before in Turkey had such a diverse range of researchers with different interests been brought together under the same project. Turkish teams also began to experiment with modern excavation techniques and borrow ideas from the international archaeological community.⁵⁹ In the end, this exchange contributed to the development of methods and theory in Turkish archaeology. The multi-disciplinary approach at Keban was a parcel of the new sense of archaeology's "scientific" pursuit. Thus, it participated in the changes taking place throughout the field as a whole and not just within Turkish archaeology. As archaeologists began to adopt this new multi-disciplinary approach, the amount and type of data also began to proliferate and shift considerably.

Other techniques, which we take for granted today in excavations, such as dendrochronology, radiomagnetic surveys, computers to record finds, carbon-14 tests,

⁵⁵ Erder, *Doomed by the Dam*, 4.

⁵⁶ Ufuk Esin, "Tepecik Excavations, 1970," *Keban Project 1970 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 3, 1972), 149.

⁵⁷ Erder, "Lessons Keban Experience," 9.

⁵⁸ Erder, "Lessons Keban Experience," 20.

⁵⁹ Harald Hauptmann (*pers. comm.*, January 2009) explains how, after showing photographs of Norşuntepe's cleaned squares during an annual conference where archaeologists working in Turkey are invited to present their results, the following year, all of the Keban teams also produced similar pictures imitating the German team's presentation.

water sieving, etc., were introduced and experimented with at Keban. Water sieving, after being tried at Aşvan, became a consistent feature in most Keban excavations. In an experimental stage at first, the sieve would allow archaeologists to analyze, for instance, carbonized plant remains. Information was now collected more meticulously and systematically. Sieves allowed the archaeologists to collect smaller type of data, such as plant and animal remains. Sieving helped to obtain better samples which could be analyzed in a more systematic manner. In addition, the use of this new tool is also described and presented in a more systematic way. With the assistance of this new sieving technique, data recovery is no longer left to chance and can follow elaborate sampling strategies. As a consequence, the definition of what constitutes data shifts. For the new archaeology program at Aşvan, the new techniques would collect different kinds of information useful to answer questions related to their new interests. For example, evidence was collected meticulously to research how human adapt to their environment. In the following chapters, this systematic and meticulous quest for scientific data at Keban used to produce knowledge about the region's past will be analyzed further.

Conclusion

In this chapter, I have outlined the reasons why the archaeological community, today, considers the KDRP a turning point for Turkish archaeology. The project has contributed to our knowledge of Eastern Turkey's past, provided a new generation of archaeologists with field-work opportunities and brought a group of scientists to experiment with new methods and techniques. In addition, the rescue project was exceptional in its international and multi-disciplinary dimension. Finally, two mosques and one bridge were safely removed from the rising waters of the dam. The proximity of archaeological teams in the region not only enabled the exchange of ideas and methods but also created an atmosphere of collegiality and friendship between the teams. 62 The dam was finally constructed in 1974 and the archaeological sites irretrievably lost to its rising waters. But, the 'spirit' of the project still lives on today. Keban was the start of more rescue excavations, unique in the history of Anatolian Archaeology, spanning more than four decades. In the 1980s, before the construction of the Karakaya and Atatürk dams, surveys and excavations followed the Keban model. In the 1990s, salvage efforts were also organized before the construction of the Karkamış and Birecik dams. Today, scientific teams from Turkey and abroad continue a tradition of scholarship started more than forty years ago at Keban before the construction of the Ilisu Dam.

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⁶⁰ David H. French, "An Experiment in Water-Sieving," *Anatolian Studies* 21 (1971) explains how water sieving was first experimented at Can Hasan, a nearby site, in the late 1960s.

⁶¹ David H. French, "1968 Aşvan Excavations Preliminary Report," 1968 Summer Work (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 1, 1970), 60 and David H. French et al., "Aşvan Excavations, 1970," Keban Project 1970 Activities (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 3, 1972), 56 exemplifies the need on the part of the British team to make explicit, in the report, the manner in which it was processing soil through a 1 mm squared mesh water sieving machine. Not only are the new archaeology scientists sieving, they also make sure to explain that they are doing so in the report.

⁶² Not only did the KDRP reach high scientific standards for its time, according to Harald Hauptmann (pers. comm. January 2009), it was also done in a friendly atmosphere.

The KDRP was composed of a community of scientists which produced knowledge about the past of a landscape in Eastern Turkey. These researchers established a specific way to rescue and document objects and create the facts used to define the history and prehistory of the Keban region. The archaeologists working for the salvage excavations established a way to record monuments and study ancient mounds. But, by facilitating the production of a certain kind of knowledge, the KDRP would favor certain things over others. As the international and multi-disciplinary teams documented certain types of evidence, they also ignored others. In more general terms, as scientific knowledge about the past is produced, defining an object of research involves the inclusion and exclusion of many things. In the rest of this dissertation, I will consider some of these things which became, if not completely erased, marginalized from the archaeological process. The KDRP played a major role in the formation of a "scientific" archaeology that, by its very nature, privileged some types of narratives while occluding others; other stories that could have potentially been of use or interest to members outside of this archaeological community.

CHAPTER II Keban's Fluid Paradigmatic Boundaries

"If two people genuinely disagreed about great issues, they would not find enough common ground to dispute specifics one by one." 63

Introduction

The Keban Dam Rescue Project (KDRP) brought together teams of scientists from different countries and with different research interests to study the past of a region in Eastern Turkey. The previous chapter presented the many achievements of the project as a "turning point" for Turkish archaeology. In this chapter, I will examine how the rescue project fits into the larger intellectual history of archaeology without evaluating whether it represents a "success." The salvage excavations, in fact, epitomize some of the theoretical trends present within the discipline of archaeology in the late 1960s. At least four different theoretical traditions, represented by the teams of Hâmit Koşay, Harald Hauptmann, David French and Ufuk Esin, were operating at Keban. If the different teams interacted in the field quite harmoniously to exchange ideas on archaeological methods and theory, the rescue project, within the history of Turkish archaeology, marks a rather unstable moment. Rather than all espousing the same theoretical outlook for their excavations, different paradigms or "excavating style" were operating side-by-side. 64

In this chapter, each of these different theoretical schools will be described separately. Any overlap between the teams will be, at first, left to the side for the purpose of clarity. But, as I describe the four schools, the boundaries, in the end, will become more and more blurry. Rather than view these schools in conflict, I instead suggest that the different approaches all hold, in reality, one thing in common. Despite their dissimilarities, the archaeologists shared a similar vision of how to study the landscape, people, cultures and history of the Keban region. They approached the production of knowledge about the past in a comparable way. What united these scholars is a specific way to produce knowledge about history in an organized and systematic way. In other words, they were all following a protocol with clearly defined methods. Archaeologists at Keban used specific scientific techniques to collect particular types of data when reconstructing the region's past.

Culture-History at Pulur

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⁶³ Ian Hacking, *Representing and Intervening Introductory Topics in the Philosophy of Natural Science* (Cambridge: Cambridge University Press, 1983), 5.

⁶⁴ "While each has felt the imminent threat of the dam's inundation of the area in selecting his excavating style, each has employed an individual solution." Erder, "Lessons Keban Experience," 9.

The discipline of archaeology played an important ideological role in the formation of the Turkish Republic. 65 As early as the 1930s, archaeological excavations were organized throughout Anatolia in order to construct the past of a newly established nation-state. In the early years of the Turkish Republic, the scientific discipline helped to legitimize the national ideology of the country. Established as a secular state in 1924, the new "history theses" conceived by Turkish intellectuals focused on the Central Asian origin of the Turkish race. The identity of the new country, born in the ashes of the defeated Ottoman Empire, focused on its Bronze Age heritage and was careful, after the War of Independence following World War I, not to focus on the histories of its enemies (Greeks, Armenians, Christians, Kurds, etc.). Archaeology provided the material evidence for the longevity of the Turkish race in the Anatolia homeland. A historical narrative older than the Ottoman Empire and ancient Greece was created which helped a secular Turkey turn its back to its Islamic and Ottoman past. Excavations in the early Republican period were undertaken near the newly established capital city Ankara in Central Anatolia.

All of these political and social changes in Turkey took place when Hâmit Zübeyr Koşay was still a university student. Born in 1897 to a family of scholars and intellectuals in Tatarstan, he was sent at the age of 12, with the financial support of his relatives, to a middle school in Thessaloniki, at the time, still part of the Ottoman Empire. In 1916, Koşay moved to Istanbul and began his training as a teacher. While in Istanbul, he also studied Hungarian and Ethnography. He would later decide to pursue his studies further in Hungary where he received a doctoral degree in Turcology. After moving to Berlin in 1924 to continue his research, Koşay returned to the new capital city Ankara and accepted an administrative position at the Ministry of National Education. He would afterwards become inspector of Libraries for the Department of Culture, director of the Department of Antique Works and Museums and director of the Ethnography Museum. Koşay was also one of the founding members of the Turkish Historical Society. Today, he is also remembered as a statesman, an ethnographer, a folklorist, a writer and, of course, an archaeologist.

After the establishment of the Republic in 1924, Hâmit Koşay led some of the earliest and most important archaeological expeditions in Turkey. ⁶⁷ Koşay represents a generation of scholars whose work took part in the construction of the Turkish nation during the early Republican period. For instance, he excavated the Bronze Age site of Alaca Höyük, visited by Mustafa Kemal Atatürk himself, in Central Anatolia from 1934 to 1937. The objects from Alaca Höyük constitute some of Ankara's Anatolian Civilizations Museum's main attractions. Monumental copies of the "standards" of Alaca Höyük are still displayed in the center of the capital city today. Reminding the passers-by

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⁶⁵ For more details, see Wendy M.K. Shaw, "Whose Hittites, and Why? Language, Archaeology and the Quest for the Original Turks," in *Archaeology Under Dictatorship*, ed. Michael L. Galaty and Charles Watkinson (New York: Kluwer Academic/Plenum Publishers, 2004), 131-153.

⁶⁶ Like many other important figures of the early Republican period, including Mustafa Kemal Atatürk himself who came from Thessaloniki, Koşay was born outside of the borders of present-day Turkey.

⁶⁷ "The first republican-era excavation took place under the guidance of the Director of Museums, Hâmit Zübeyr Kosay, at a Hittite site near the town of Ahlatibel, 16 kilometers from Ankara, in 1933. Excavations of other prehistoric sites in central Anatolia–at Karalar (1933), Göllüdag (1934), Alacahöyük (1934-37), Etiyokusu (1937), and Pazarli (1937), soon followed (figure 7.1)." Shaw, "Whose Hittites," 133.

of Anatolia's glorious past, these objects have become icons for the modern state of Turkey and served to strengthen national cohesion. Koşay's work at Alaca Höyük has contributed to Turkey's nation-building process and provided the concrete objects and tangible "proof" for its imagined past. In other words, it constitutes a classic example of what Bruce Trigger calls nationalist archaeology. In a seminal article for the field of Politics of Archaeology, Trigger explains the links between nationalism and the culture-history approach. In the rest of this section, I will describe how Koşay's work at Pulur, in fact, fits both of these labels.

After retiring from his public positions, Koşay became involved in the KDRP to lead the rescue excavations at Pulur and Yeniköy from 1968 to 1972. If the Pulur excavations did not influence as much the construction of Turkey as did, for example the work at Alaca Höyük, they still reflect this nationalist bias in many ways. The project at Pulur replicated some of the same ideas and excavation techniques already used at Alaca Höyük. Emphasis in his excavations was placed on finding "treasures."

"If at some time in the future the Early Bronze Age cemetery should be unearthed it is possible that valuable objects, including metal objects and jewellery, that had been offered to the dead may be discovered. At the moment tens of thousands of pottery fragments have been found in the Pulur excavations, while the number of metal objects does not exceed four."

The Pulur excavations were carried out within a culture-history framework. Within this particular theoretical paradigm, a specific definition of culture and time was adopted. A chart displaying some of the finds made at Pulur placed in a chronological framework exemplifies this theory. 71 It presents Pulur's "constituent artifacts" such as "Pottery, lids and seals, decorated wares, idols, figurines, bone and stone objects, projectile points" in columns "according to their building levels and periods." (Fig. 3) As one moves up and down the columns of the chart, changes in the style and shape of objects appear. The table is an attempt to represent variations in artifact typology through time, i.e. as building levels and archaeological layers are removed. At Pulur, the "best" objects unearthed were selected as representative of the culture and history of the region. These constituent artifacts were then organized in a chart according to their chronology and typology. Published as early as the 1920s in the discipline of archaeology, these charts, representative of the culture-history framework, were used to organize and represent ancient cultures. In a way, they are a chronological marker in the history of the discipline. They are similar and reveal the same concern as Vere Gordon Childe's table of European prehistory resembling a sort of jigsaw puzzle where each piece, more or less important in size, represents a culture in time. This chart allowed Childe to systematize and classify visually a complex mosaic of people at a specific time in the past.

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⁷² Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007).

⁶⁸ Bruce G. Trigger, "Alternative Archaeologies: Nationalist, Colonialist, Imperialist," *Man* 19 (1984).

⁶⁹ Koşay even brought the men he had worked with at the Central Anatolian site more than 30 years ago to Eastern Turkey.

⁷⁰ Hâmit Zübeyr Koşay, "Pulur (Sakyol) Excavations, 1970," *Keban Project 1970 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 3, 1972), 134.

⁷¹ For example, Hâmit Zübeyr Koşay, "Pulur (Sakyol) Excavations, 1969," *Keban Project 1969 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 2, 1971), plate 79.

In the Pulur chart, in row X dated to the Late Chalcolithic under the column labeled "Idol and Figurine" are depicted three shrines (or horse-shoe shaped hearths). These were also photographed and published in the successive reports. (Fig. 7) One can follow a year-by-year evolution of these shrines. As work on the site continued each summer, the shrine seems to have become better defined physically. The final picture shows Hâmit Koşay himself posing by its side. He stands proudly by the unearthed object, cleaned up and arranged for its final exposition. Koşay was interested in treasures such as these. His discoveries always seem to be the most important of this type up to date in Anatolia.

Besides idols and figurines, Koşay and his team also unearthed pottery, ovens, hearths, cult objects, shrines, clay statues, lids, seals, decorated wares, projectile points, grave goods and stone objects. At Pulur, objects were carefully collected for their artistic value. Material artifacts found by Koşay's team were made available for the newly established museums of the nation:

"Among these 6th, 9th and 11th had big fires and these are most important ones. It is thought that, when all these levels are opened in the following years, a lot of new material will be found for the museums."⁷⁵

Koşay was looking for aesthetically pleasing objects and artistic museum pieces. Koşay was collecting a multitude of objects (valuable, cult, metal, etc.) to be displayed in the Elazığ Museum. To Other pieces, he believed, could be used as historically representative for secondary school classroom material as the following sentence indicates. The museum pieces found in these rooms were carefully collected, and fragments reconstructed and completed with plaster. This excludes pieces to be used as classroom material for study in secondary schools. Thus, in addition to museum pieces, some of the most significant finds will, hopefully, be inserted into the country's schoolbooks. Museums and schools, where generations of Turkish children learn about their history, have played an important role in the country's national imagination. Archaeological sites such as Alaca Höyük and Pulur have provided the material evidence for the imagined past of the new, modern, secular country.

Besides the culture-history chart, Koşay also adopts a specific definition of culture in relation to this theoretical framework. Culture is defined as certain types of

⁷³ The purpose of these potstands, also known as sacred hearths or tripods, remains unclear. "Although it is possible to compare the Pulur shrines with the contemporary Beyce Sultan shrines in the vicinity of Çivril, the latter are much plainer. These shrines are thought to have been dedicated to the goddess of fertility and her consort. In the rooms in which these shrines are to be found and in the rooms around these, jars and other objects of very high artistic value have been found, with relief of birds of prey, the symbol of the goddess of fertility (pl. 77)." Koşay, "Pulur (Sakyol) Excavations, 1969," 104.

⁷⁴ Like at Alaca Höyük, Koşay also likes to find skeletons: "In level VIII (Photograph 2) quite strong

⁷⁴ Like at Alaca Höyük, Koşay also likes to find skeletons: "In level VIII (Photograph 2) quite strong buildings and the first human skeleton was found. The head of this skeleton is placed towards west, feet towards east and the knees are bent. In the vicinity no artifacts were found except a few broken ceramic pieces." Hâmit Zübeyr Koşay, "Pulur (Sakyol) Excavations, 1968 Preliminary Report," *1968 Summer Work* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 1, 1970), 144.

⁷⁵ Ibid

⁷⁶ Hâmit Zübeyr Koşay, "Recent Archaeological Research in Turkey," *Anatolian Studies* 21 (1971): 7.

⁷⁷ Hâmit Zübeyr Kosay, "Pulur (Sakyol) Excavations, 1969," 104.

remains or constituent artifacts such as pottery, lids, seals, etc., which constantly recur together. ⁷⁸ Pottery played the most important role in constituting culture.

"The examination of pottery produces reasonably reliable results as to the identification of cultural levels and relations with other cultural environments. This is the most effective expedient in damp regions where organic material cannot survive."

The Pulur pottery will provide better results than the dates obtained from organic material according to Koşay. Within the culture-history theoretical framework, changes in culture are explained by migrations or diffusionism. Karaz-type pottery, for instance, known in many other places, has been brought by migrating people: "This distribution is of course related with the mass migrations which took place around c. 3000 B.C." Change can only occur when a foreign culture invades another or migrates into the area.

Following another characteristic of culture-history, Koşay associates a culture with the name of a people. In this instance, the name is based on written evidence. He explains how pottery types and written sources are used to "ascribe tribes."

"We are now faced with the problem of what tribe or tribes the Old Bronze Age objects at Pulur are to be ascribed to. According to the evidence offered by the written sources the Subar tribe dominated eastern Anatolia around 2200 B.C. This tribe, which was later known as the Hurri, taught the arts of civilisation to the Hittites, who began to infiltrate into Anatolia towards 2200 B.C., and founded their Empire from 1750 B.C. onwards... Humanity is much indebted to the Subars for ensuring the fusion of different cultures by carrying on trade with Mesopotamia and Central Anatolia." ³⁸¹

Material culture dated to the Bronze Age found at Pulur is associated with the name of a tribe. Using evidence offered by written sources, a culture is identified with a name. The use of written texts in order to identify ancient cultures further legitimizes Koşay's finds and makes his site, literally, enter history.

Koşay's excavations thus seem to neatly fit within the theoretical paradigm of culture-history. Two other projects from Pulur are also worth noting here. The Turkish excavations were not "multi-disciplinary" in the new archaeology sense I describe below. Nevertheless, Koşay did publish in a separate volume an extensive ethnography of Pulur's nearby modern village. The scope of this research, focusing on contemporary material culture, remains descriptive and within the realm of culture-history, however. Furthermore, the Turkish archaeologist-ethnographer also experimented with interpretive ideas one might not associate with the culture-history paradigm at first. In a small book *Cincik, A Potsherd from Keban*, Koşay narrates the story of the Keban rescue excavations

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⁷⁸ See Vere Gordon Childe's similar definition of archaeological culture cited in Bruce G. Trigger, *A History of Archaeological Thought* (Cambridge: Cambridge University Press, 1989), 244.

⁷⁹ Koşay, "Pulur (Sakyol) Excavations, 1969," 104-5.

⁸⁰ Koşay, "Pulur 1968 Report," 146. Diffusionism "provided a theoretical framework that allowed archaeologists to account for the evidence of spatial as well as temporal variation that was becoming obvious as archaeological data accumulated across Europe" Trigger, *A History of Archaeological Thought*, 223. It was criticized by processual archaeology in the 1960s as just descriptive without really explaining anything.

⁸¹ Koşay, "Pulur (Sakyol) Excavations, 1969," 106.

⁸² Kosay, "Pulur Etnografya ve Folklor."

from the point of view of a potsherd. 83 Towards the end of the book, in a surrealist moment, the author also retells a dream he has had with a woman from ancient Pulur. This ancient inhabitant suddenly appears in Koşay's hotel room and begins to tell him the story of her life in the ancient village. Perhaps feeling the limitations of his culture-history approach and the confinements imposed by the charts he drew up, Koşay found a way to express his frustration in this final, imaginative, interpretative tale. In order to do this, the archaeologist had to step out of the boundaries imposed by the culture-history approach. In this chapter, I will suggest even further, that any attempt to categorize excavations in one particular paradigm, if one considers enough details, becomes a somewhat difficult task.

Germany's Great Tradition at Norşuntepe

If the excavations at Pulur seem, for the most part, to have followed the criteria defining culture-history, Hauptmann's excavations at Norsuntepe belong to Germany's Great tradition. In her book *Down from Olympus*, Suzanne Marchand traces the German tradition of archaeology in Greece and the Near East as far back as the 1870s, one hundred years before the Keban project. In her discussion of Germany's fascination for Hellenism, she recounts the "grand-scale excavations" at Olympia, Greece in the 1870s and 1880s. She argues how this large-scale project, where more than 500 workers were employed, was carried out rigorously and scientifically. The head archaeologists at Olympia, she adds, were not interested, like Heinrich Schliemann, in treasure hunting. Instead, they thought of themselves as carrying out a scientific experiment. 84 German archaeologists have been very influential in shaping the so-called Great tradition of archaeology characterized by 1. meticulous and rigorous excavations carried out on a grand-scale, 2. systematic inventory and careful categorization of artifacts and small finds, 3. thorough and comprehensive publication of finds, 4. archaeology carried out as a scientific experiment free from the vagaries of accidental discoveries, and 5. architects accompanying the dig. 85 At Keban, Harald Hauptmann who excavated at Norsuntepe can be placed alongside Winckelmann, Doerpfeld, Bittel and Blegen as some of the "great men" of German archaeology. According to Colin Renfrew, these archaeologists played an important role in the development of the Great tradition.⁸⁶

When the Deutsches Archäologisches Institut (DAI or German Archaeological Institute) in Istanbul was invited to participate in the KDRP, Hauptmann was awarded the site of Norşuntepe which his team excavated until 1974. Considered the most important ancient city of the Keban region by Whallon and Kantman, Norşuntepe was the largest mound of the Altınova plain at a height of 30 meters. Hauptmann and his colleagues

⁸³ Hâmit Zübeyr Koşay, *The History of a Potsherd from the Neolithic Age... "Cıncık" (The Story of the Keban Dam* (Ankara: Şafak Matbaası, 1975)

⁸⁴ Suzanne L. Marchand, *Down from Olympus: Archaeology and Philhellenism in Germany, 1750–1970* (Princeton, NJ: Princeton University Press, 1996), 87.

⁸⁵ Heinrich Härke, "The German Experience," in *Archaeology, Ideology, and Society: The German Experience*, ed. Heinrich Härke (Frankfurt: Peter Lang, 2002), 187.

⁸⁶ Colin Renfrew, "The Great Tradition versus the Great Divide: Archaeology as Anthropology?" *American Journal of Archaeology* 84, no. 3 (1980): 289.

⁸⁷ Whallon and Kantman, "Survey Keban Dam Reservoir", 2.

made up a remarkably dedicated team. If most teams in the region worked during the summer months only, a normal season at Norşuntepe would last from August until December. One year, the team was still working on December 25th under the heavy snows of Eastern Turkey. (Fig. 2) During the final season, work continued as the mound was slowly turning into an island in the flooded plain. Seven long campaigns were carried out each lasting between four to five months.

In his description of the Great tradition, Colin Renfrew remarks that true scholarship carefully respects data, the basic material of knowledge which, in archaeology, comes from excavating a site.⁸⁸ Whether or not the Great tradition is true scholarship (and, consequently, other traditions are lesser), Hauptmann, like many other German archaeologists before and after him, recognized the responsibilities which come with excavating, a destructive act in itself. This sense of duty is clear in his detailed excavations and publications of Norsuntepe, which represent, in many ways, a milestone for the archaeology of the region. In addition, thanks to the team's detailed work, the mound's long stratified sequence provides a reliable benchmark for the chronology of Eastern Anatolia. Excavations were also conducted in a larger area of the mound in comparison to other Bronze Age settlements of the region. Thus, a larger sample of material was excavated, recovered and recorded thoroughly from four areas over the course of six seasons. 89 With its meticulous and rigorous grand-scale excavations and with the careful categorization and publication of (small) finds, the German team at Norsuntepe does indeed meet many of the characteristics that have defined the Great tradition for more than a century now.

The recording of architecture also played a large role at the site of Norşuntepe. At Olympia, Marchand explains how trained architects, who came from Germany to participate in the excavations, helped the archaeological expedition. For instance, she argues how these professionals, because of their training, were able to detect variations in construction techniques over time. By determining both architectural and cultural evolutions, these men would end up playing a central role in the archaeological project. At Norşuntepe, besides the team's meticulous excavations and thorough recordings of the mound, Hauptmann's philosophy and work also followed this particular characteristic of the Great tradition. Architecture at Norşuntepe was carefully recovered and studied from the Iron Age levels to the earlier Chalcolithic layers. For instance, Chalcolithic walls from level 10 were, as the following passage illustrates, uncovered, cleaned and recorded meticulously:

"Level 10 yields a structure with three rooms around a large open-court beside a thin, long, open area (probably a street), small rooms built for workshop purposes, and an area with separate structures reminding the texture of a village, on the east. All walls are made of mud-brick, some with traces of red and black paint on the

⁸⁸ According to Renfrew, Germany's "Great Tradition" is on the latter side of the divide between historiographic and nomothetic traditions. "Great Tradition," 289-90.

⁸⁹ The four areas excavated at Norşuntepe consisted of 1. the Acropolis where the Early Bronze Age complex was found, 2. the southern terrace in the northern area with Early Iron/Late Bronze Age houses, 3. the western terrace in the southern area with an Urartian building found in 1969, and 4. the western slope of the acropolis with Early Bronze Age building levels. Harald Hauptmann, "Norşuntepe," *Anatolian Studies* 21 (1971): 21.

⁹⁰ Marchand, Down from Olympus, 87.

plastered, white painted walls. The roof is thought to be flat. It is observed that there may be some single-roomed structures." ⁹¹

This concern with reconstructing the site's architecture, the careful recording and describing of buildings, shows in this last passage about the Early Bronze Age palatial complex. Found on the acropolis and excavated during Norşuntepe's first four seasons (1968-1971), the palace represents the most significant building of this phase and, along with its associated houses and streets, is evidence of the earliest urbanization.

Typical of the Great tradition, Hauptmann spends much effort describing in a very detailed manner the remains of this "baronial residence," a complex made up of rooms with hearths, benches and platforms, a pithos and magazine building as well as a dwelling quarter. Meticulous excavations and the concern for architecture turn every detail at Norşuntepe into a hint towards solving the question of the site's appearance. With only small areas of the site uncovered, Hauptmann was able to guess how the rest of the complex would look like. He writes how there must have been four southern rooms, an entrance from the south, rectangular hearths with decorations in the middle, etc. Further excavations would prove him right. In comparison to Hâmit Koşay's "treasure hunting" at Pulur, Harald Hauptmann was determined to find the layout of the city, the architecture of the houses and palaces. The chronology of Norşuntepe not only depended on the typology of the site's constituent artifacts, but was also determined by the architecture or building levels which make up a continuous sequence carefully excavated from the Chalcolithic to the Middle Iron Age.

Besides architecture, other things were studied rigorously in the Great tradition. At Olympia, for instance, small finds such as thousands of bronzes, potsherds and figurines were also systematically classified and catalogued. Marchand explains how Dörpfeld and Furtwängler were archaeologists with a technical rather than a philological background. This scientific training brought them to pay particular attention to the inventorying and categorizing of small finds. Härke adds how German archaeology deservedly enjoys a reputation for meticulous excavations, thorough publication of findings and, also, carefully studying artifacts and carrying out comprehensive fieldwork. The careful study of artifacts at Norşuntepe has recently been published in two volumes almost 40 years after the excavations were finished. The Great tradition's grand-scale excavations, emphasis on architecture and meticulous study of artifacts was indeed well represented by Hauptmann and his German team at the site of Norşuntepe.

But, perhaps separating culture-history and the Great tradition might seem superficial. Isn't the Great tradition just an extension of the culture-history paradigm?⁹⁵ Like the Turkish team at Pulur, Hauptmann examined data, chose a methodology and

⁹¹ Hauptmann, "Norşuntepe," 21.

⁹² Marchand, Down from Olympus, 87.

⁹³ Härke, "The German Experience," 187.

⁹⁴ Klaus Schmidt, *Norşuntepe I: Die Lithische Industrie* (Mainz: Verlag Philipp von Zabern, 1996) and Klaus Schmidt, *Norşuntepe: Kleinfunde II* (Mainz: Archaeologica Euphratica, vol. 2, Verlag Philipp von Zabern, 2002).

⁹⁵ For instance, Hauptmann states that one of his team's goal was "to obtain a schematic sequence of cultures for this archaeologically unexplored region" and to obtain a more comprehensive picture of certain cultural phases, in particular Early and middle Iron Ages and Early Bronze Age. Hauptmann, "Norşuntepe," 12. These constitute typical culture-history objectives.

produced results. In other words, the culture-history excavations of Koşay and the Great tradition project of Hauptmann are being run systematically and in an organized manner. Perhaps, one could judge that the excavations of Norşuntepe were simply a more meticulous and careful kind of culture-history. I will not try to argue further that the distinction needs to be made between culture history and the Great tradition, however. The Norşuntepe excavations are remarkable in the model they set for other teams to follow. Hauptmann remembers that after showing the photographs of his neatly aligned and carefully cleaned squares during a presentation of his team's results at a conference in Ankara, the following year, many of his colleagues at Keban had adopted the same type of energy to produce similar pictures showing how their squares had also been dug straight and clean. The influence of Hauptmann's excavation techniques as well as his enthusiasm for research in Eastern Turkey (at Keban and at later rescue projects) was contagious and is, today, still quite considerable. The excavations at Norşuntepe remain an example to emulate when interested in learning how to systematically organize, using proper scientific techniques, a mound with accumulated layers of habitation.

New Archaeology at Aşvan

If Hâmit Koşay worked in the direct continuation of a Turkish culture-history, if Harald Hauptmann followed the footsteps of Germany's Great tradition, David French's work at the Aşvan sites was an attempt to dissociate his project from the way archaeology had been practiced in the past. In the following two (somewhat convoluted⁹⁷) passages, this effort to discontinue an established paradigm and not follow in the footsteps of a previous generation emerges. Some of the key themes (modern, experiment, interdisciplinary) behind David French's excavations at Aşvan emerge. David French explains how their programme has been:

"developed largely in order to meet the changing theories and methodology of *modern* archaeology but partly in order to set up a deliberate *experiment* in project work with a modern theme, i.e. work carried out by interested disciplines to a stated theme which would act as the cohesive element. The project was not intended simply as *inter-disciplinary* but as inter-related work. The theme is, thus, a co-ordinated strategy by which the collection of data can be pertinently and economically co-ordinated. This approach is a logical extension of the view that information is largely collected within pre-existing, pre-conceived structures or frameworks." 98

From 1968 to 1972, the different archaeological projects in Aşvan and its surroundings experimented with some of the ideas present, especially in Britain, in archaeological

⁹⁶ Harald Hauptmann, pers. comm., January 2009.

⁹⁷ A characteristic of this new tradition is a somewhat long-winded use of language: "We hope that these investigations will create increasingly accurate tools for optimizing the conceptual system through which we can optimize the real world situation." David H. French et al., "Aşvan Excavations, 1971," *Keban Project 1971 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 4, 1974), 58.

⁹⁸ Ibid., 43, my italics.

discussions of the 1960s.⁹⁹ Even if David French admits that this new approach is still fragmentary and that his team is "still on the threshold of this kind of research," the key principles of a new archaeology are already set in place.

"The Aşvan Project is an attempt to bring together various environmental sciences and archaeology so that a more comprehensive study can be made of man and his environment in the past. The result of this experiment will provide archaeology with a more dynamic conceptual and methodological framework by which it will be possible to understand and evaluate the phenomena of change. The project accepts the following criteria: 1. That archaeology, in its broadest definition, is the study of preceding environments (environment being defined here as the set of all objects and events containing a system that change or are changed by the system's behaviour). 2. That each environment evolves from those preceding it. 3. That it is feasible to extrapolate from the present to the past by means of a model or models based on the present environment..."

Written at the same time as the Pulur and Norşuntepe publications, the Aşvan reports seem to belong to a different age. The Aşvan programme represents an isolated case in the KDRP as well as a shift within the British Institute of Archaeology itself. New methods and approaches of recording data are being experimented with. If the British team represents a break with the past, its innovative, almost revolutionary, methods were slow to come and greatly resisted. In the 1969 season, there is no mention of a new type of archaeology practiced at Keban by the British. A change in overall strategy is initiated in 1970 and expanded during the 1971 season. From that moment on, David French and his team's research is called the Aşvan Project. At that time, excavations are also extended to other sites in the region around the Aşvan village. 102

Archaeology has shifted its alliance from History to Science. This is not to say that excavations were carried out scientifically only at Aşvan. In fact, all teams working at Keban claim to be producing knowledge scientifically. But, in contrast to other excavations, the British team explicitly defines its goals, explains its conceptual and methodological frameworks, and specifies its working hypotheses. If traditionally, a final report is where claims to the discovery of finds are made (as I argue later), for the archaeologists at Aşvan, they are also the place where claims to the discovery of finds are explicated. For instance, not only did archaeologists process soil through a one-millimeter squared mesh using a water sieving machine, they also make sure to explain in the final report how they are processing soil using a one-millimeter squared mesh using a water sieving machine. Furthermore, the Aşvan team is one of the earliest to dig using a grid plan, to set up deliberate experiments and to follow elaborate sampling strategies in an effort to recover information. In the end, David French can claim that, with this new

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⁹⁹ For the most comprehensive view of the entire project, one can consult David H. French et al., "Aşvan 1968-1972: An Interim Report", *Anatolian Studies* 23 (1973): 73-307.

¹⁰⁰ David H. French et al., "Aşvan Excavations, 1973," *Keban Project 1973 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 6, 1979), 11.

¹⁰¹ French et al., "Aşvan Excavations, 1971," 56-57.

¹⁰² Ibid., 56.

approach, the collection of data is no longer left to chance and evidence is analyzed more systematically.

To be more precise, the shift from History to Science takes place from "culture history" to "environmental science." David French was less interested, like Koşay and Hauptmann were, in Man's place in History and more interested in understanding Man's place within his Environment. This shift brings the British team to adopt a different definition of culture. In contrast to other excavations at Keban where cultural interpretations relied heavily on pottery typology, for David French, culture becomes defined, à la Binford, as Man's adaptation to Nature. In the 1960s, archaeological projects around the world pioneered new research whose goal was to determine the link between ancient humans and their physical environments. This work laid the grounds for a new paradigm where the study of nature, for instance faunal and floral remains, was as important as the study of human artifacts.

At Asvan, the team followed this tradition and sought, by carrying out "environmental archaeology," to define the relationship between human populations and their physical environments. By adopting this new definition of culture, French brought to Asvan a team of multidisciplinary scholars in order to shift to the study of the environment. This new approach brought archaeologists to work side-by-side with other specialists. For instance, Gerald Hall, Sam McBride and Alwyn Riddell carried out a general study of the region's environment whose goal was to record at separate moments in time the relationship between humans, plants, animals and the environment. Under the direction of Gordon Hillman of the Botanical Departments of Reading and Mainz Universities, a team of botany and agricultural students gathered material to constitute a reference collection of local plants, seeds and fruits. 104 The team also assembled reference material for crop, carried out a land-use survey, studied the modern agriculture and other floral, faunal and macro-botanical remains in order to create "a background from which an understanding of ancient practices can perhaps be extracted." As they explain, not only is studying the modern environment being done to rescue environmental data which will be lost when the Keban dam is built, but also to extrapolate from modern to ancient practices; the most important step being to record the present-day relationship between man and environment as it forms a basic reference point from which to postulate the relationship in the past.

With this shift, many more specialists came to work on the Aşvan project in order to study the region's environment. Following the new archaeology ideas, a more

¹⁰³ Patrick Kirch cites Clark's excavations at the Mesolithic site of Star Carr in Yorkshire, Braidwood and Howe's investigation of animal and plant domestication and early village life in Iraqi Kurdistan, MacNeish's multidisciplinary study of the transition from hunting-and-gathering to agricultural subsistence in the Tehuacan Valley of Mexico as pioneering projects of this new archaeology. These projects focus on the study of "environmental archaeology" for which Karl Butzer's work was seminal. Environmental archaeology has continued to develop over the past three decades spawning the distinct subfields of zooarchaeology, archaeobotany (or paleoethnobotany), and geoarchaeology. Kirch, "Archaeology and Global Change," 411-2.

¹⁰⁴ "An extensive reference collection which includes a high proportion of these local species is indispensable, therefore, if we are to be able to attempt to identify the plant remains recovered from our sites." French et al., "Aşvan Excavations, 1971," 54.

¹⁰⁵ Ibid., 55.

ambitious framework is put into place whose goal it was to study human occupation and activity and record the consistent patterns in man's exploitation, manipulation, consumption and eventual disposal of nature in both modern and ancient Aşvan. This was done with the intention of recovering an almost complete sequence of material ranging over 4500 to 5000 years that would provide the framework for the study of human occupation and activity. The type of studies being carried out within the multi-disciplinary scope of the project, reveals the shift that is taking place from a (horizontal, deep) study of history to a (vertical, regional) study of the environment. The belief behind this is that archaeology can benefit from a more comprehensive study of man and his environment in the past.

Furthermore, part of the new archaeology at Aşvan included the establishment of models based on the present through the application of ethnoarchaeology. The following passage defines some of what the British team understood by this:

"I. Agricultural-botanical studies of the modern village and area The broad objectives of this part of our work are, firstly, to record any consistently repeated patterns in man's exploitation, manipulation, consumption and eventual disposal of plant materials (particularly archaeologically persistent materials) in modern Aşvan and, secondly, to study vegetation types available both locally and in comparable areas in other parts of Turkey and the actual and potential human resources they represent. These data provide us with measured modern situations as a source of reference in our interpretation of plant remains recovered from our sites, and it is specifically to this end that we are carrying out our modern studies." 106

One of the program initiated was to build up an extensive reference collection in order to find living parallels in the present in order to understand the past. ¹⁰⁷ In a first step, this was done "to provide a model within the modern environment which will be suitable for extrapolation from existing to ancient practices by archaeologists, architects, botanists and any other associated disciplines." ¹⁰⁸ The archaeologists would thus be able to work backwards in time. The second step is then explained:

"We are recording the man/environment, man/animal and man/plant relationships at different points in time including the present but it is the present situation which, being the latest in a succession, forms a basic reference point. One may then postulate a series of older situations, conditions or relationships, which may be tested by the data collected from earlier written sources or from excavated evidence." ¹⁰⁹

By using modern studies as a model, they would then be able to trace human activity in the past using the archaeological record.

Thus, besides botanists, ornithologists and environmentalists working within this multi-disciplinary project, an ethnographer also collected information from the present-day villages and their houses. For instance, the construction and lay-out of village houses were studied by team members. Agricultural tools used by villagers were also taken into

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¹⁰⁶ Ibid., 52.

¹⁰⁷ Ibid., 54.

¹⁰⁸ French et al., "Aşvan Excavations, 1970," 22.

¹⁰⁹ French et al., "Asvan Excavations, 1973," 11.

consideration. This type of ethnographic work was carried out in the region during the 1970 and 1971 seasons. Originally started by Gordon Hillman, David Williams studied the agricultural tools used by the villagers of the Aşvan region. He travelled to other villages and towns in the Elazığ, Mardin, Mersin and Diyarbakır regions, and visited eleven markets to collect the names and prices of different agricultural tools. The goal of this collection was to record craft-made tools before they were replaced by factory-made products and build up a collection of agricultural technology. The recording of one hundred and ninety tools by measured sketches would serve as a reference for tracing these tools back in time.

The British team not only placed an emphasis on man and his environment, but also on the phenomena or process of change. Thus, environments are viewed as systems that evolve from one period of time to another. These changes were explained within the framework of systems theory using flow charts and diagrams with feedback loops. 112 Within this framework, environments were defined as "the set of all events contained within a system that change or are changed by the system's behavior." Within these changes, the Asvan team also aimed to evaluate the process of cultural evolution; how humans have adapted to changes in the environment or how societies have evolved from tribes to kingdoms to states. In the end, defining environments as systems, looking at environmental changes, studying the process of evolution, setting up experiments, interdisciplinary work, data collection within pre-conceived structures, etc. are some of the characteristics defining the British new archaeology project at Aşvan. This new, scientific, modern approach to archaeology at Keban attempted, in the 1960s, to apply more Science to archaeology. In sum, the Asvan project was pursuing Science (with a capital S) as opposed to the other scientific expeditions at Keban. But, if the Asvan expedition claims to practice Science with regard to the production of knowledge about the past, other archaeologists, for instance, when proposing a hypothesis and testing the hypothesis through experimentation, were also, perhaps not as explicitly, pursuing science in their archaeological excavations.

Istanbul University at Tepecik

The three teams described above appear to belong to a category of their own. The final example, the excavations at Tepecik led by Ufuk Esin from the University of Istanbul, borrowed many ideas from projects carried out by Robert Braidwood. Thus, they seem to also belong to a clearly defined theoretical paradigm. But, when taking a closer look, Esin's work also seems to transgress many paradigmatic boundaries.

¹¹³ Ibid., 56-7.

¹¹⁰ French et al., "Aşvan Excavations, 1971," 54.

¹¹¹ "Simultaneously, a programme was initiated for the collection of modern reference data from the village itself; in particular much attention was given to village-houses, their construction and layout. The implements associated with these houses and the use by the villagers of various tools for agricultural purposes were also studied in a deliberate attempt to extrapolate from modern to ancient practices." Ibid., 55.

¹¹² "Some of the relationships under study in present-day Aşvan and the questions being asked in each case. In the interpretation of archaeological samples, we attempt to work backwards from the persistent fractions on the fight of this diagram." Ibid., 53.

Excavating from 1968 to 1974, the University of Istanbul team worked through continuous levels of occupation dating from the Neolithic to the Bronze Age as well as a later Middle Age cemetery. 114 The project borrowed many theoretical and methodological insights from Robert Braidwood's previous work in Iraq and Turkey. Robert John Braidwood, an American archaeologist, had, when the Keban project began, already established a methodology to study archaeological sites in the Near East scientifically. 115 In the early 1950s at Jarmo, for instance, Braidwood assembled the first interdisciplinary team in the Near East composed of specialists in the natural sciences (botanists, zoologists, geologists, etc.). Remains of wheat and barley as well as bones of animals constituted a new type of data being collected to learn about the ancient environments of the Near East. Braidwood created a research design that has become standard operating procedure since the 1950s in many places around the world.

Later, Braidwood with Halet Cambel, head of the Prehistory Department at Istanbul University, would establish the Joint Prehistoric Project, Istanbul-Chicago in 1963 to carry out surveys of Southeastern Turkey and excavate the site of Cavönü. 116 This joint project was also international and multidisciplinary in its scope. Not only were plant remains and animal bones collected, but several obsidian sources were surveyed, microfauna from lakes were obtained for paleo-climatic studies and a team of architects was brought in from Germany to record and interpret the buildings of Cayönü. The Joint Prehistoric Project has had a significant influence on the way archaeological expeditions are run in Turkey. It served as a model for many excavations carried out by Turkish teams, including the work at Tepecik.

The Istanbul team at Tepecik, led by Ufuk Esin in close collaboration with Halet Cambel, also adopted the Braidwood model. Not only archaeologists, but anthropologists, architects, draughtsmen, restorers, plant and animal remain specialists, archaeobotanists, archaeozoologists, geologists and photographers composed the multidisciplinary team which participated in the rescue efforts at Keban. Radiocarbon experts were also part of the team like in any Braidwood expedition. In addition, Ali Yaramancı from the University of Istanbul's Department of Applied Geophysics carried out several geophysical surveys in the years 1968 and 1969 at the site. 117 Computers were also tested during the first season of excavations by Henry Wright and Mehmet Özdoğan. 118 This experimental project was to test whether or not the surface finds from Tepecik matched the classification already established by Whallon after his survey. In the end, all of these

¹¹⁴ Esin, "Tepecik Excavations, 1970," 151.

¹¹⁵ Patty Jo Watson, "Robert John Braidwood," Proceedings of the American Philosophical Society, Vol. 149, No. 2 (2005).

Cambel and Braidwood, Prehistoric Research.

Yaramancı carried out a geophysical survey at Tepecik before excavations took place on the cone of the mound and on its surrounding terraces. There is a very experimental feel to Yaramanci's project as he was developing and improving this new technique. Yaramancı, "Geophysical Survey 1968," and "Geophysical Survey 1969." When the method worked, the survey team rightly believed that much time and effort had been saved. However, because the methods were applied for the first time, the survey sometimes became more detrimental than useful, requiring more space and time archaeologists were sometimes willing to offer to this new technique. Harald Hauptmann, pers. comm., January 2009.

¹¹⁸ Ufuk Esin, "Tepecik Excavation 1968 Campaign, Preliminary Report," 1968 Summer Work (Ankara: Middle East Technical University Keban Project Publications Series I, No. 1, 1970), 160 and Esin, "Tepecik Excavations, 1970," 149.

new techniques (grids, computers, geophysics, etc.) made the project at Tepecik adopt more rigorous and systematic standards. Descriptions of results could now be made more specifically and in a more detailed manner.

But, if much of the research design at Tepecik borrowed ideas from Braidwood's projects and followed new archaeology types of methods, it is difficult to categorize Ufuk Esin's work as a separate category on its own. Esin's work, for instance, also had many similitudes with the culture-history approach. Her team is guided by some of the same principles applied, for instance, at Pulur by Koşay. She explains how one of the team's goals was to establish chronology in a culture-history framework:

"During the 1970 season the problem of the stratigraphy of the Tepecik mound was solved, and a definite conclusion was reached concerning the settlement patterns for each period. Apart from small details the whole cultural history of Tepecik mound has been revealed, beginning from the 5th millennium B.C. The place of the Altınova mounds in the history of Anatolia and their development can be traced in parallel in Korucutepe and Norşun Tepe as well as in Tepecik." ¹¹⁹

Another one of the team's concerns also demonstrates an affinity with culture-history. The Tepecik team asks what role the site played within the cultures of the Caucasus, Northern Mesopotamia, Syria and Central Anatolia, and what interactions did the Altınova plain, where the site is located, have with these larger regions. The goal here, as stated in the team's research question, is to place Tepecik within a regional cultural geography. In order to achieve this, the site's archaeological sequence is compared to other established chronologies of neighboring regions. The goal was to also make all archaeological layers fit within an established chronology. Pottery again plays an important role in order to establish chronology at Tepecik. Again, like other culture-

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¹¹⁹ Ibid., 158. The following two passages also demonstrate the concern for pottery typical of culture-history: "In the depth soundings in 9-K and 8-H, from the level of the same pottery including some with painted ornamentation and others known from the large Hittite centers were found. There was not, however, as rich a variety of shapes here as found in those centers." Ufuk Esin, "Tepecik Excavations, 1969," *Keban Project 1969 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 2, 1971), 122.

¹²⁰ Ufuk Esin, "Tepecik Excavations, 1973," *Keban Project 1973 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 6, 1979), 112. The following passage also shows the typical culture-history concern for defining cultures and chronology. "As seen today Tepecik seems to have been the meeting place of Southern, Eastern and to some extent Central Anatolian cultures in most periods and an important center of Early Bronze Age painted pottery. However, the answers to many of the questions raised about the historical and chronological development of Tepecik mound will have to wait until the results of future excavations are compiled." Esin, "Tepecik Excavation 1968 Campaign," 170

¹²¹ For instance, the Uruk phase VI-IV in southern Mesopotamia or the Chalcolithic period of the central Anatolian sites of Alişar and Alaca Höyük. Ufuk Esin, "Tepecik Excavations, 1972," *Keban Project 1972 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 5, 1976), 117.

^{122 &}quot;The aim of the Tepecik excavations was to establish the relations between the EBA III, II and I layers extending along the southern slope of the plateau... With these aims in view it was decided that work should be carried out in the following trenches..." Ufuk Esin, "Tepecik Excavations, 1974," *Keban Project 1974-5 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 7, 1982), 96. "Although not absolutely identical, the general plan of this first building closely resembles the plan of a building in an Uruk settlement in Tall Qannas, where excavations were carried out in connection with the Tabka Dam on the Euphrates." Ibid., 110.

history projects, it is archaeological layers and pottery which define what culture is. Comparisons are made with other sites to establish the site's historical and geographical context. Cultural boundaries are established to determine which culture the site belongs to exactly. Similarly to Pulur, the team at Tepecik also uses ancient texts to name the Altınova plain and, by doing this, establishes the site within the cultural geography of the region. As this passage illustrates, the site of Tepecik is now connected to a known civilization:

"Tepecik is an example of a small settlement in the late Bronze Age in the Altınova region in what possibly could be referred to as ISUWA in light of the Korucutepe bullae. It seems that Tepecik had close relations with both the large Hittite centers in central Anatolia, and the Mitannis." ¹²⁴

Ironically, the name chosen was ISUWA. In the same volume of the *METU Keban Project Publications*, Hamit Koşay, representing a different generation within Turkish archaeology, makes the same claim for his site. Finally, again like Koşay, it seems that Ufuk Esin was also interested in finding "treasures" as the following passage illustrates:

"The rhyton of a three-headed pig made of baked clay found within it constitutes a fine, indeed, at this moment, matchless example of Hittite plastic art (pl. 102)."

But, unlike Koşay, Ufuk Esin is not as interested in finding the lost Anatolian civilizations for Turkish museums and schoolbooks. If pottery, chronology and texts play a predominant role at Tepecik, as in any culture-history project, typologies are described more meticulously and measurements are given more precisely. The precision in these measurements is a characteristic the reader will not find in Pulur's excavation reports. In this respect, the Tepecik excavations reminds us of the meticulous work of Hauptmann at Norşuntepe. In another instance, a very detailed and meticulously written section, reminiscent of the rigor and discipline of the Great tradition, describes the field soundings of 1971: "[a] third culture layer was encountered at a depth of -18.00 ms.... After -18.33 a new culture soil begins..." ¹²⁶ In addition, research at Tepecik focused on the site's architectural layers and information was gathered about the region's Late Bronze Age rural buildings just like any archaeological team working in the Great tradition would. ¹²⁷

Attempts were also made at Tepecik to emulate some of the new scientific ideas experimented with at Aşvan by the British. The team did not embrace all of the characteristics of the "new archaeology" however. Ufuk Esin's wordings to describe the

¹²³ "The type of pottery found in the 8-O deep sounding at Tepecik, in the early chalcolithic layers at Korucutepe, and also at Körtepe and Norşuntepe, are of great interest in indicating Altınova as a probable northern boundary of the Halaf culture." Esin, "Tepecik Excavations, 1973," 122. At the site of Tülintepe, cultural boundaries are established with a core and a periphery. Throughout the Chalcolithic, the site is under the influence of northern Mesopotamia and northern Syrian cultures, the northern limit of the spread of Halaf and Obeid cultures. Ufuk Esin, "Tülintepe Excavations, 1972," *Keban Project 1972 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 5, 1976), 162-3.

Esin, "Tepecik Excavations, 1969," 127-8.
 Ufuk Esin, "Tepecik Excavations, 1971," *Keban Project 1971 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 4, 1974), 128.

¹²⁷ At Tepecik, an older Early Bronze Age III building was unearthed. Second millennium BC stone foundations, mudbrick walls and a large architectural complex were also damaged by later Iron Age period settlers. Esin, "Tepecik Excavations, 1972," 117.

research goals do not focus so much on "man and his environment" and use much less jargon than David French. But, applying new techniques and experimenting with new methods was a way, like the British team's new archaeology, to break away from previous archaeological traditions. The interest in social evolution (i.e. how societies have evolved from tribe to kingdoms to states) and cultural evolution (i.e. how humans have adapted to changes in the environment) typical of the new archaeology was also present at Tepecik and in the other Turkish and German teams. Other ideas and *techniques*, such as the grid system, were borrowed from the German and British expeditions and experimented with at Tepecik. During the 1971 season, a grid plan appears in the final accounts of Tepecik. ¹²⁸

Thus, if Ufuk Esin followed many of the ideas implemented by Robert Braidwood in his excavations, her project was not immune from other outside influences. Like the other teams at Keban, placing the Tepecik excavations in a nicely shaped theoretical box is not as easy as it first seems. But, if the paradigmatic boundaries were more fluid than expected between Koşay, Hauptmann, French and Esin, one recurring trait reappears in all of the teams. "Science," as we will see in the next chapters, plays a predominant role in all Keban excavations. That is to say, what unites all of the teams I have described above is an attempt, despite the diverse theoretical paradigms, to produce knowledge in a systematic and organized way. To discuss this further, however, the next chapter will focus on the specific techniques employed on site.

Conclusion

In chapter 2, I outlined the history of the KDRP where different archaeological teams worked hand-in-hand during seven years to study the past of the Keban region. In this chapter, I differentiated between four different archaeological traditions each represented by a team working at Keban. But, the boundaries between the different schools of thought, in reality, are more fluid than we would expect at first. Information was continuously being exchanged between teams working near one another. Archaeologists from one team were inspired by other teams and borrowed ideas on methods, like the grid system which I will discuss further in the next chapter, and theories from one another. At Keban, many of the techniques used at one site were later also used at another site. These exchanges between teams were not slowed down by the theoretical boundaries separating them. As we have seen with the Tepecik example, being inspired by the British or German team did not make its excavations belong to the new archaeology or the Great tradition. In fact, the excavations present at Keban had more in common than it seems. We should also not forget that the way teams portray their work in archaeological reports can also differ considerably from the reality of the field. If, for example, the British team at Asvan claimed high and loud in the report to have adopted a new type of archaeology, in reality, their excavations might not have been that different from their colleagues'. In fact, the most significant difference between archaeological paradigms might be found in the way teams present their research and write up their results. The reality of the field had perhaps more similitudes than the manner in which it was presented.

¹²⁸ Esin, "Tepecik Excavations, 1971," plate 97.

More importantly than this, if the different schools of thought present at Keban disagreed on a certain number of points, they all seemed to have agreed on the essential ones. In the following chapters, we will see how all of the teams working for the KDRP agreed on carrying out their excavations "scientifically." Archaeologists, no matter where they came from, what their research interests were, what paradigm they adopted, all established scientific laboratories to carry out archaeological experiments. They used specific techniques which, as we will see, helped to define their object of research. They were all in basic accordance with the way to document a region's landscape and create knowledge about its past. This had to be done in an organized and systematic way. The archaeologists working for the KDRP shared the same scientific language and scientific vision. Knowledge about a region soon to be destroyed was produced by favoring some information over other and certain narratives over others. This process of inclusion and exclusion present in archaeological science, however, will be the theme of the next chapters.

CHAPTER III Archaeological *Techniques*, Grids and Laboratories

"That which unifies archaeology across multiple local traditions is perhaps best identified as a technique, a specific way of finding out about the past, which, in turn, privileges a particular kind of evidence." 129

Introduction

"Digging" is perhaps the first word someone will associate with archaeology. The activities on an archaeological site however cannot be narrowed down to "digging" only. Or rather, if excavating is the only work people think archaeologists do, in reality, hundreds of different acts, most of them having nothing to do with removing earth from the ground, constitute the practice of archaeology. Even forgetting, for a moment, all of the work done by archaeologists outside of archaeological sites, in laboratories and museums, libraries and offices where archaeologists spend most of their time working, excavating a site never limits itself to simply "digging." The archaeological excavations of the Keban Dam Rescue Project (KDRP) did not differ from this rule. In the METU Keban Project Publications, Ufuk Esin, director of the Tepecik team, enumerates a series of activities taking place at her excavation site:

"The time remaining from the actual work of excavation was, as in previous years, devoted to the restoration, classification, filing, card-indexing, photography and sketching of the excavation material. At the same time "systematic surface collection" was carried on with the aim of establishing the distribution area of both the Tepecik and Tülintepe mounds." ¹³⁰

Besides "the actual work of excavation," by which, we can assume, Esin refers to the activities on the mound of Tepecik itself, this passage reveals a diverse array of practices constitutive of archaeology's technology. These include techniques such as drawing, sketching, recording, organizing, cleaning, cataloguing, archiving, sorting, analyzing, identifying, processing, storing, filing which take place before, during and after the actual "digging" of objects out of the ground. These make up some of the rational acts and calculated strategies performed by archaeologists in order to produce knowledge about the past. Generally not mentioned in the final site reports, this quote is a rare instance where the archaeologist's agency and the team's practices are exposed. It is this wide range of techniques that organize archaeological excavations and give them their scientific legitimacy. The technology of archaeology not only helps to retrieve

¹²⁹ Nadia Abu El-Haj, Facts from the Ground: Archaeological Practice and Territorial Self-Fashioning in Israeli Society. (Chicago: University of Chicago Press, 2001), 13.

¹³⁰ Esin, "Tepecik Excavations, 1971," 123. "[R]estoration, classification, storing and filing of the finds" are also mentioned as acts taking place on an excavation site. Esin, "Tepecik Excavations, 1972," 109.

information from a site but also arranges and orders it in order to produce knowledge about it.

The goal of this chapter will not be to describe meticulously all of these activities and take the reader from the beginning to the end of an excavation. 131 Neither will this chapter attempt to make sense of everything that happens on an excavation site. Instead, by first defining the concept of techniques in archaeological science, I will examine the scientific experiment of archaeology itself. In the previous two chapters, we have seen how the KDRP brought archaeologists together to study the Keban region. If the project is considered a success, what I am interested in for this dissertation are the choices made by teams, institutions, archaeologists and scientists in order to produce knowledge about the past. Each team of archaeologists represented different traditions, different schools of archaeological thought, but, in the end, they adopted a similar approach in order to produce knowledge. In other words, what unites these teams is their use of techniques to create the past of the Keban region. As these techniques are employed to establish scientific laboratories, several epistemic divides simultaneously occur. These splits help to define the discipline's object of study. But, they also exclude a multitude of other things. This chapter will begin to analyze the ways in which the process of knowledge production in archaeology marginalizes and excludes other types of narratives.

Defining Archaeology's Techniques

Archaeologists use specific techniques to excavate sites. This technology of archaeology is key to the production of scientific knowledge about the past. The concept of technique or technology is a widely used one in the social sciences. In her book *Facts from the Ground*, Nadia Abu El-Haj analyzes how places in the settler-nation of Israel are turned into archaeological laboratories. Within these delineated spaces of science, objects are unearthed from the ground and converted into material artifacts standing for the past. Facts are "discovered" scientifically through the use of archaeological techniques. Abu El-Haj defines "the term technology in its most basic sense, as a set of tools and machines (pickaxes, shovels, bulldozers, and so forth)." In this dissertation, I will not limit myself to the analysis of tools and machines. Abu El-Haj, in another, does not narrow her definition as much. She describes excavations as the central technique used in the scientific discipline of archaeology:

"That which unifies archaeology across multiple local traditions is perhaps best identified as a technique, a specific way of finding out about the past, which, in turn, privileges a particular kind of evidence. Archaeologists who are housed in different disciplines and institutional locations (anthropologists, classical archaeologists, biblical archaeologists, Israeli archaeologists, and so forth) are linked, broadly speaking, by the practice of excavating." ¹³³

Here, techniques are specific ways of discovering the past that favor certain types of data. It would not be fair, however, to narrow down archaeology to the sole practice of

¹³¹ Steve Roskams, *Excavation* (Cambridge: Cambridge Manuals of Archaeology, 2001), for example, takes the reader through many of the steps of archaeological excavations.

¹³² Abu El-Haj, Facts from the Ground, 286.

¹³³ Ibid., 13.

excavating. What precise calculated techniques transform the simple mounds of earth in Eastern Turkey into the archaeological sites of the Keban Dam Rescue Project, places suitable for the scientific study of the region's ancient past? Can the rational steps and carefully chosen acts which give the process of digging a mound of dirt its scientific legitimacy be isolated? Scholars writing about the politics of the discipline have too rarely considered the process of archaeology at the micro-level of techniques. More time should be spent scrutinizing the specific techniques of archaeology in their most minute manifestations. Analyzing the practice of archaeology at this scale permits an investigation into the ways in which the discipline's object of research becomes defined. Focusing on the smallest of scale makes visible the countless number of other things that become, if not completely erased, marginalized in the process of archaeological science. In other words, I am interested in, not just what but, how things become excluded from the narratives of archaeology.

Before going any further, a broader definition of archaeological techniques needs to be adopted. For my purposes here, techniques are any specific means to an end, any precise calculated strategies, any rational acts or scientific practices, chosen by archaeologists to investigate a site. Archaeological techniques help to collect things, objects, data, facts and artifacts from the ground, whether or not they are going to inform us about the past. This more inclusive definition, techniques are no longer just the tools and machines archaeologists use to "dig" a site. Techniques comprise a wider array of activities including, as Ufuk Esin listed, restoring objects, classifying pottery, filing data, indexing cards, photographing excavated areas, systematically collecting surface finds, etc. On the one hand, this definition might, at first, seem too general and inclusive. Any act with the intention of learning about the archaeology of a site would seem to fit this definition. On the other hand, this definition is sufficient because it allows to consider what the larger effects of these techniques are in the social and political world. Later, after analyzing in more details the grid system, one specific archaeological technique, the chapter will discuss, not the way techniques are implemented but, instead, how implementing them creates effects outside of the discipline of archaeology.

Having defined the term *technique*, let us now return to the archaeological excavations of the Keban Dam Rescue Project. As I have explained previously, the project brought together teams representing different disciplinary (Chapter 2) and intellectual (Chapter 3) traditions. Scientists came to the Keban region to study, in a limited amount of time, its history and prehistory. Despite superficial differences, this community of scholars agreed on the general direction the rescue project should take. All teams approved, in its broader terms, what the rescue project should be. Everyone agreed on the vision of the KDRP, more precisely, how the region should be studied and how information about it should be produced and recorded. Despite differences outlined previously, it is the similarities I am interested in for this dissertation. Every researcher participating on the KDRP, whatever their nationality, research interests, school of thought, would have agreed that the rescue project needed to be carried out scientifically.

Before objections are raised and the question is asked whether there can be any other way besides science to produce knowledge, let us consider the etymology of the word. From the Latin *scientia* or *scire*, to know, science refers to knowledge. Any form of knowledge production could thus be considered scientific. By adopting a general

dictionary definition of science as the systematically organized body of knowledge on a particular subject, we immediately notice, however, that not all forms of knowledge production can be labeled scientific. The emphasis in this last definition, is placed upon 'systematic organization.' The archaeological excavations at Keban were indeed scientific in the sense that archaeologists attempted to systematically organize knowledge. What bonded the archaeological teams together is the belief that knowledge about the Keban region should be produced methodically and systematically. To support this statement, the following example illustrates the way archaeologists at Keban were carrying out systematically organized excavations.

From 1968 to 1974, year after year, archaeologists working for the KDRP enunciated clear objectives in their site reports. The objectives of the previous, of the current and of the future seasons were stated. The British team at Aşvan expressed research questions in terms of hypothesis testing. Strictly established hypotheses within an elaborate research "programme" 134 (following the terminology of the new archaeology) were tested following criteria with affinities to the natural sciences. In contrast to other expeditions, the "programme" at Aşvan was a more rigid set of rules and the preliminary goals set by David French directed all of the activities on site. At other sites, looser strategies that served more as guidelines defined the goals of the excavations. During the 1968 and 1969 seasons at Tepecik, Ufuk Esin, for example, framed her object of research around the questions of identifying settlement patterns, setting up connections from the slopes to the terraces, investigating thoroughly the Early Bronze age levels and reaching virgin soil in order to draw up a complete stratigraphy of the mound. But, at Tepecik, the project's scientific goals were guiding principles rather than rules set in stone. From the first campaign on, they helped the project follow a certain logic. Whether termed as hypothesis or perceived more as guidelines, research strategies, once adopted, were followed in the subsequent seasons and altered only if absolutely needed. When things went more or less according to plan, teams at Keban remained faithful to their declared objectives only with some minor changes. 135

But, if most projects remained loyal to their aims, sometimes plans had to be altered and strategies had to shift from one season to another. For instance, when work could not be finished one year, expectations for the next season had to be lowered. In some instances, the goals could not even be achieved. At Değirmentepe, the archaeologist writes how enlarging one of the trenches and descending to cultural levels beneath the Iron Age was going to be impossible to achieve in the second season. "It was therefore possible to work for only one year instead of the projected two, and the results anticipated

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¹³⁴ "The results of this year's work have made clear the outline of the sequence of occupation on the mound, and have provided the artifactual and non-artifactual evidence which we sought to accompany this sequence. The primary part of our programme is therefore completed." David H. French, "Aşvan Excavations, 1969," *Keban Project 1969 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 2, 1971), 37.

¹³⁵ Excavation strategy remained faithful to the objectives determined in the years 1968 and 1969, and were based on the results of the excavations of those years" Esin, "Tepecik Excavations, 1970," 150. "The excavations were planned and carried... in accordance with the knowledge obtained from the excavations at Tepecik in the years 1968-1970, and without departing essentially from the strategy established in previous years." Esin, "Tepecik Excavations, 1971," 124. These two passages show how the team remained loyal to their objectives during the 1970 and 1971 seasons.

could not be achieved."¹³⁶ Archaeologists sometimes anticipate wrongly results before excavations actually begin. But, departing slightly away from the initial strategies or not achieving the goals established at the outset of excavations is not something scientists shy away from. The accumulation of knowledge obtained in previous seasons influenced the type of questions asked in the following. During the KDRP, goals were altered based on accumulated data. Archaeologists admit in the report to not being able to reach certain conclusions. They spend time explaining other unexpected results and describe constraints and changes they had to deal with on the site.

In the end, research goals help to systematically organize the way knowledge is produced. Whether termed as hypothesis or research strategies, they serve as the first step of the scientific experiment. Defining and following these objectives constitute a technique which helps archaeologists begin their scientific experiment. Once these goals are set, all other activities on site can be justified scientifically. Carrying out excavations within these strategies, every activity on the site is given a purpose. Nothing is left to chance since everything is done for a final goal. All activities during the archaeological experiment are thought through logically and carried out rationally in the hope of achieving this specific scientific aim. Setting scientific goals and establishing research strategies assist in systematically organizing knowledge. Each team, by asking these more or less specific research questions, transforms and justifies the simple act of removing earth from the ground into a scientific endeavor. What united the diverse approaches at Keban is the similar use of techniques to produce knowledge about the past. For the scientists working on the rescue project, knowledge was not just produced randomly. It followed a plan. It set itself objectives. Through the use of archaeological techniques, knowledge is organized and ordered systematically. Only after its objectives are defined can the scientific experiment of archaeology begin. Techniques exemplify the process by which "digging" becomes excavating and collecting becomes scientific. The mundane activity of digging earth is converted into an archaeological experiment. Excavations are done using scientific techniques and the collection of objects now follows a scientific purpose and scientific logic.

The Grid System

At the beginning of excavations, a key moment for the success of the scientific expedition, archaeologists superimpose an artificial grid, horizontal and vertical lines oriented to the four cardinal points, on the site they wish to excavate. At the time of the KDRP, in the late 1960s, the use of the grid system was still in an experimental stage. If, today, the technique is widespread, at the time of the Keban excavations in Turkey, it was not something archaeologists took for granted. Attempts to use the grid were, in fact, uncertain and tentative. ¹³⁷ Not all teams adopted the use of the grid system at first. For

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¹³⁶ Refik Duru, "Değirmentepe Höyük Excavation, 1973," *Keban Project 1973 Activities* (Ankara: Middle East Technical University, Keban Project Publications, Series I, No. 6, 1979), 19. After the Keban Dam was built, the team could not work another season: "We had intended to enlarge this trench towards the east in the second excavation season, but unfortunately we were able neither to discover the complete plan of the building nor to reach an understanding of its function." Ibid., 23.

¹³⁷ "One must, however, bear in mind the tentative nature of any phase scheme based on a single 2 x 2 m. trench." French et al., "Asvan Excavations, 1971," 49.

some team directors, the system was so innovative that they felt necessary to make its use explicit in the site report:

"The highest point of the mound (R) is taken as 0.00 m. The point (R) is considered to be the beginning of the theoretical coordinate system, and the ordinate axis point to the polar north. Also the east-west axis which passes through the same point has been theoretically accepted to be 500.00 m. and thus each 25 m. on the area has been calculated accordingly. The conventional system being adhered to in this project, trenches of 5 x 5 m. were dug without leaving any definite distance between them. Initially, a sufficiently large area was considered for excavation, and in those trenches falling within this area, cultural layer excavations were also carried out. Even then, the principle of the grid system was adhered to and the finds were labeled accordingly." 138

This passage is a rare example which details how the grid system was laid over a site. Usually, it is not explained in the final reports as most archaeologists take its use for granted. Hayri Ertem describes in detail the steps taken to establish the grid system at his site however. By explaining some of the conventions adopted at Han Ibrahim Şah, he takes the reader "behind the experimental scene" and reveals how one specific technique is used to produce knowledge. First, a central point is established. The mound now gravitates around this reference position. A beginning place has been located for the site. Then, the axis going from east to west is measured and the size of the trenches are calculated. Later, a large area is delineated where the excavations of cultural material will take place. In other words, the outer limits of the laboratory are drawn out. Finally, in the last sentence of Ertem's passage, the purpose of the grid --to label finds accordingly-- is disclosed. With the assistance of the grid system, archaeological sites are measured and delineated, a mound of earth is centered and oriented, trenches are drawn and labeled. In other words, space has become organized, numbered and measurable. The mound of earth has now been placed within a measurable system. The conventions adopted to arrange and fit nature into a human-made topology allow archaeologists to organize excavations more systematically. (Fig. 4 & 6)

The grid system was experimented with at other sites too. In fact, at first, conventions were far from being uniform across the Keban sites. If 5x5m squares were the most commonly adopted, other measurements such as 4x4 and 2x2m squares were also used. ¹³⁹ In order for finds to be labeled correctly, the grid system had to be established right from the beginning. Not well known at the time, some obstacles had to be surmounted. Ufuk Esin, for example, during the 1968 season at Tepecik, realized that her grid had not been measured correctly. Mistakes made at the beginning of the

¹³⁸ Hayri Ertem, "Han İbrahim Şah Excavations, 1970," *Keban Project 1970 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 3, 1972), 70.

¹³⁹ "HOW TO READ THE PLANS: Both in Ağın and Kalaycik Tepe mounds, the excavations were carried out by using a 4 m x 4 m trenches" Ümit Serdaroğlu, "Ağın and Kalaycik Excavations 1968, Preliminary Report," *1968 Summer Work* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 1, 1970), 42.

excavations needed to be fixed as quickly as possible so that her excavations could be successful. Corrections were made during the 1969 season to avoid more confusion. 140

The grid is a *technique* which helps to systematically organize the production of knowledge on an archaeological site. As a disciplining technique, it is central to the field projects of archaeology. With the assistance of the grid system, an area is defined where excavations will take place and provide the coordinates and axis of the scientific laboratory. The grid system delineates rectangular areas where excavations are likely to take place. Squares, 2x2m or 5x5m, can now be measured and dug within a grid so that excavations can "fit well with statistics and random sampling." ¹⁴¹ In the end, the grid system allows archaeologists to document finds and locate objects "definitely and without error." ¹⁴² In other words, the grid helps to collect artifacts more meticulously.

Only Hamit Koşay did not use the grid at first. Or, rather, he used it as an afterthought in his final reports. Koşay's workmen at Pulur did not excavate in straight rectangular trenches. His team "dug" following instinct seeing changes in the color of the earth or intuition feeling the softness of the soil. This "trenching" technique, already used at Alaca Höyük where his team had previously worked, would reveal, for instance, architectural elements in their entirety whether or not they belonged to evenly cut 5x5m squares. In his last report, Koşay publishes an intriguing plan where the vertical and horizontal lines of the grid are represented superimposed on the excavated areas. (Fig. 5) With the exposed elements of the site drawn identically as in previous reports, the only difference are the grid's squares drawn on top of the map. Perhaps seeing the influence of the grid on neighboring teams, Koşay felt that it was necessary to follow the trend by creating this hybrid plan. In the end, the grid system was experimented with, borrowed from one site to another and, finally, adopted by all in more or less conventional ways. Today, it is so widely accepted that archaeologists no longer question its use.

I am not advocating that archaeologists should excavate their sites using a different method. What I am interested in are the ways techniques, such as the grid system, assist archaeologists in organizing knowledge. In the end, the grid was adopted as a technique in order to establish order on the site and attempt to systematically organize knowledge. I am arguing that the grid system plays a central role in delineating the scientific laboratory of archaeology and transforming nature into a controlled and measured environment. Techniques, such as the grid system, allow archaeologists to delineate the scientific laboratory of archaeology. Once objectives have been determined, the on-site experiment can begin within a controlled and measurable environment. Establishing the laboratory involves placing axis and coordinates on the landscape. The technique delineates a space where the experiment will proceed and defines an area where squares and trenches can be precisely measured and labeled. Earth can now be removed from 5x5m squares. The grid also flattens a disparate piece of land into a two-

¹⁴⁰ "In 1968 some errors were discovered in the topographic plan of the mound and its environs. Until the mistakes were corrected the trenches were labeled not according to the grid system, but in alphabetical order." Esin, "Tepecik Excavations, 1969," 120 note 2.

¹⁴¹ "It is further hoped that a system of trenching involving a 4 x 4 m. and at least two other 2 x 2 m. trenches in other areas of the mound can be fitted into a statistically-valid random-sample scheme." French et al., "Aşvan Excavations, 1971," 48.

¹⁴² "a remain or a piece of pottery could be located definitely and without error (e.g. A, B II a 3, 25 x 37, - 3.45)." Serdaroğlu, "Ağın and Kalaycik Excavations 1968," 42.

dimensional representation. The grid transforms a three-dimensional landscape into a two-dimensional image. (Fig. 6) The mound is not only transformed into a laboratory but the geographical unevenness is erased to make place for the flattened grid. It flattens and straightens topographically variable and disparate sites in order to arrange the data produced from them in the most rational and logical way.

With the grid, the location of objects removed from the ground can now be carefully recorded. Archaeologists do not just discover and collect objects but record and analyze artifacts systematically. The grid system, by establishing the scientific laboratory, helps archaeologists lay claims to finds. It rationalizes all of the activities on site and, in the end, leaves very little to chance. The grid facilitates the recording of finds by giving them a context. It coordinates all objects unearthed during excavations and permits all of the activities to take place within a well-measured environment. The collection of objects now begins to follow a scientific logic and purpose. The objects collected are recorded according to their locations within the grid system. The numerous things collected are no longer just randomly found but become a "collection." The grid helped to define a common language at the outset of excavations with which archaeologists could use when describing their finds. This common language needed to be consistent in order to avoid confusion. The system provides an initial basis or reference points, a scientific context, in order to describe the place where finds are made and, consequently, helps archaeologists lay claim to their discoveries.

The grid system allows archaeologists to locate the natural and cultural elements they find during excavations. It organizes things in relation to one another. It helps to classify, sort, order and discipline. The grid system helps in producing data as well as directs the kind of data that will be produced. The archaeological site is now envisioned through the particular lens of the grid system. The grid, it seems, cannot favor some data and exclude other. It gives the impression that all information has a chance to be discovered in it by giving the illusion that chance finds will no longer take more importance over other finds. All finds are equal within the grid. The grid system is key in making the process of archaeology scientific. It is also influential in the way archaeologists visualize their site. The grid system dictates what constitutes or not data. It is only data if it has been found within the grid. With the grid system, excavating follows straight lines and is done within measurable and reproducible squares. Established early on, the grid represents a first step in creating the scientific laboratory. It gives archaeologists a system to locate and label, organize and order their excavations and finds. It allows archaeologists to record and document finds from excavations.

The first step of this scientific endeavor is the grid system, set up on the mound in order to facilitate the further analysis of material found. Scholars identified objects in a landscape, on their site, by using the grid system. They assigned a particular value to these objects using the grid system. The grid system allowed archaeologists to save some types of information and discard other. It would enable the scientific expeditions to document, but also to ignore certain types of information. How did the scholars participating in the KDRP (archaeologists, architects, ethnographers, etc.) identify objects in a particular site? This specific way to excavate, following a grid, allowed archaeologists to record, document, order and organize systematically all of their finds. The specific technique of the grid system enabled archaeologists to carry out their work

scientifically. They are excavated in an organized manner following rectangular trenches lined up coordinate points. The technique also allows archaeologists to locate finds systematically within a controlled environment. Collecting objects can now be done scientifically.

The grid system helps to define the scientific space as well as the scientific language of archaeology. Let us consider a specific passage which illustrates how the voice of archaeology in its site reports is influenced by the grid system. As the following quote from the report of Han Ibrahim Şah indicates, the site report reads more like a list of square names, measurements of depth, pottery and soil descriptions:

"Due to the small size of the trenches, it was not possible this year, to get detailed information on the various stages of the Early Bronze Age settlements, which were of considerable thickness (6 levels). It is hoped that future investigations in the trenches IJKLM-XVI, XVII, XVIII will furnish more fruitful information. At the end of the excavation season, Level X was reached, with a depth of 7.50 m. from the o.oo point of the mound (G-XIII east cross section). In these stratification trenches, there is still 4.50 m. of earth left above the rock platform, which has not yet been investigated. It will be one of next season's primary goals to finish the work there and to find out the exact number of layers in the mound. The impression obtained from the stratigraphical trenches leads one to believe that the mound has been deserted at certain periods with no obvious pressure. Both the lack of traces of fire and of finds in the upper trenches IJKLM-XVI, XVII, XVIII support this belief." 143

The coordinates of the grid system (IJKLM-XVI, XVII, XVIII and G-XIII) have taken prominence over the ancient past of the Early Bronze Age itself. The analysis of objects and data unearthed have disconnected the reader from the past. The site report creates a split between the past and the present. The landscape is delineated by a grid and its description uses the coordinates of the grid. Consequently, in the texts of the site report, the descriptions are no longer directly about the past but more about square trenches and cross-sections.

Ironically, the site report does not tell us much about the past. The *METU Keban Project Publications* are not the best place to learn about the history of the region. The scientific accounts of the Bronze Age sites excavated as part of the KDRP do not inform the reader about the Bronze Age. Instead, by making reference to this system in the texts, the teams at Keban showed the archaeological community that their sites were properly excavated. The language used indicates that work was done in a rational and logical way. Everything written thereafter refers to this initial set-up and system of coordinates. In these archaeological publications, Science seems to have taken over History. Site reports reconstruct a de-historicized past. There is no temporal connection between the historical narrative and the reader in the present. Prehistory is discussed in terms of levels, depth and stratification. In archaeological publications, references are made to the grid system,

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¹⁴³ Ertem, "Han İbrahim Şah Excavations, 1970," 73. Or, in this passage, where walls are attributed square names: "Owing to the natural slope of the ground the walls of courtyards DP and BK increase in height towards the west, while at the same time separating these courtyards from corridor CF." Hayri Ertem, "Han İbrahim Şah Excavations, 1974-5," *Keban Project 1974-5 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 7, 1982), 110.

pottery typology and percentage charts. As the report depicts pottery and soil typology in their scientific context, the reader becomes disconnected from the past. And, even if the passage promises the reader that further investigations of 4.50 m. of earth will bring more answers, one remains skeptical that later reports will teach us more about the Early Bronze Age. The only direct information one reads about the past, in fact, is that the mound was abandoned at certain periods.

The grid serves as both the technique which defines a space into an archaeological laboratory and which helps to represent the site in the report as a clearly delineated and organized space of research. The site map is a plan of the mound with vertical and horizontal lines superimposed on it. (Fig. 6) Knowledge is not just displayed in written form, but also in these images. The grid superimposed is displayed in the final accounts of archaeology serves to further the idea that the site has been transformed into a controlled environment suitable for scientific study. The site, thanks to the grid, is no longer simply part of the landscape. It is cut out, with straight lines, out of the landscape and displayed as a space of science. The grid helps to separate nature from the science studying ancient cultures.

Archaeology's Epistemic Divides

Besides the grid system, other *techniques* could have been chosen to show how archaeology obtains its scientific legitimacy. I have shown how teams at the KDRP set scientific objectives before the beginning of the archaeological experiment. I have also shown how the grid system is a particular technique which helps to transform parts of the natural landscape into scientific laboratories. Mounds are no longer "dug" randomly but excavations now follow a scientific logic. But, if my intention is to scrutinize the way these techniques facilitate the scientific process of archaeology at a micro-scale (i.e. what is it exactly that archaeologists do in the field?), I also want to analyze the effects these same techniques can have on a macro-scale (i.e. what consequences does the practice of archaeology have in the world?). We are no longer looking at what the techniques themselves do but the effects they can have. What do they include and exclude? How do archaeologists use them to save and ignore facts? What do techniques rescue and what do they destroy?

Techniques help to create several splits necessary for the scientific laboratory of archaeology to emerge from the ground. As the techniques of archaeology enable the scientific laboratory of archaeology to emerge from the ground, as discoveries are made, several epistemic breaks simultaneously occur. Techniques help to create several splits necessary for the scientific laboratory of archaeology to emerge from the ground. Establishing the scientific laboratory of archaeology entails at least three epistemic breaks. 1. Nature and culture: Within the boundaries of the grid are the ancient remains of human cultures. Anything outside of it must belong to nature. First, archaeologists define the boundaries of the archaeological laboratory and determine which remains are cultural (or human-made) and which ones are natural (untouched by humans). 2. Past and present: Excavations are interested in making discoveries about the past. A choice is made about how far back in time the split between present and past lies. 3. Local and universal: Any local stories about the mound itself, about the lives of present-day local people, about

more recent history of the local region needs to be separated from the "universal" global history of Archaeology, the grand narrative of Human history.

Archaeology thus defines its object of research as belonging to one side of these three divides, as the universal cultural past of humanity. The techniques of archaeology create a scientific space, de-contextualize things and re-contextualize them as finds in a pristine laboratory separated from the messiness of everyday life. Unlike Abu El-Haj who associates archaeology with scientific practices, for Yannis Hamilakis, the transformation of objects found in the ground into antiquities has more affinities with religious or medical systems of thought. Hamilakis explains how in 19th century Greece, the "polluted" Athenian Acropolis was cleansed and cured of its Byzantine, Muslim and Venetian remains. The practice and discourse of archaeology are concerned with the purification of antiquities. Hamilakis associates the supposed contamination of antiquity and the discipline's anxiety with the cleaning of polluted sites to religious systems of thought and practices found within medical institutions. 144 The purification ritual is a necessary condition for the outdoor scientific laboratory of archaeology to emerge. The site is seen as a pristine object that should be undisturbed from natural phenomena, disconnected from present-day activities and unrelated to more local stories. A site, in the end, is like a time capsule unaffected by the more recent past. Anything belonging to nature, a more recent and local past, has negative effects on the scientific study of the mound. Having defined its object of research, a process of exclusion, a sort of purification ritual, simultaneously occurs.

Several kinds of techniques are employed by archaeologists in order to produce knowledge about sites and landscapes. The grid, as we have seen, offers archaeologists a way to excavate square trenches and locate finds systematically. Thus, it participates in archaeology's scientific quest to systematically organize knowledge about the past. By defining a potential area for research, the grid system also establishes the space of archaeology's scientific laboratory. It creates the imaginary walls of the site. Superimposed on the landscape, it draws a border between nature and culture. Within the boundaries of the grid are the ancient remains of human cultures. Anything outside of it belongs to nature. Most of the excavations before the construction of the Keban Dam occurred on tepes. To an unaccustomed eye, these small circular hills blur naturally in their surroundings. They can be easily overlooked as part of the natural environment and even thought to be geological oddities. For local people, however, the mounds stand out in the landscape of northern Mesopotamia and are usually known to have been human built. Accumulating cultural deposits over the millennia, these mounds of earth became the central object of scrutiny of the rescue project. The archaeologists came to the Keban region in order to study these layers of information deposited over the years. If, on the one hand, they make up part of the natural landscape, on the other hand, they are also sites with the potential to teach us about ancient cultures.

Before the KDRP began, archaeologists made several trips to the region to consider or examine these mounds and determine which ones would be worth excavating. Through preliminary observations and approximate measurements, they were able to

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¹⁴⁴ Yannis Hamilakis, "Lives in Ruins: Antiquities and National Imagination in Modern Greece," in *The Politics of Archaeology and Identity in a Global Context*, ed. Susan Kane (Boston: Archaeological Institute of America, 2003), 51-78.

distinguish the mounds' natural and cultural components. The first surveys in the region also detected the whereabouts of these accumulations of cultural remains. After differentiating between human and non-human deposits, sites could then be defined and labeled as such. Superimposed with a grid, the separation between nature and culture became official. The archaeologists were now in possession of their source of data to study ancient cultures. Archaeologisal science can only operate once this division has occurred. For instance, archaeologists create an artificial border between cultural and natural elements of a mound. By superimposing the grid system over the landscape of the Keban region, as a consequence, culture was separated from nature. It was perhaps not the intended aim of the archaeologists, one that would have been acknowledged or endorsed, but rather, the consequence of their actions and an integral part of their approach.

In the *METU Keban Project Publications*, archaeologists sometimes express their frustration differentiating between the two. The line between nature and culture is not always easily detectable. In certain instances, it is impossible. Because the two are entangled on an archaeological site, science permanently struggles against natural forces and disturbances. At the site of Kalecikler, the archaeologist describes how work could not be continued below depth -3.17 because earth and stone had fallen at the northern extremity of the trench. ¹⁴⁵ Ufuk Esin at Tepecik also explains how natural elements interfered with the grid system and the recovery of cultural remains: "At present 13 cultural levels have been identified. In grids 8-H_{I-VI/h}, because of sliding due to the inclination of the terrace, it was not possible to recover the first and second cultural layers and their various stages "*in situ*"." At Aşvan, the British team explains the decision process behind the opening of trenches.

"Four trenches were opened, ca. 64 square meters in all, on the northern edge of the mound. The position of these trenches was planned both to take advantage of the steep slope of the mound and at the same time to shield three profiles at least and part of the trench from the worst effects of a southerly exposure which would cause excessive desiccation of the soil, an effect which inhibits accurate observation and excavation of soil stratification." ¹⁴⁷

In this passage, "accurate observation and excavation" might be affected negatively by natural phenomena. The natural setting and physical characteristics of the mound need to be used to their advantage. The position of trenches follows the rules established by the grid but also adapts itself to the constraints of the slope, erosion, soil, etc. be specific... Where to excavate is negotiated in the field. It involves finding appropriate cultural layers and an awareness of natural disturbances. Archaeologists seem to acknowledge that their sites are both a cultural and natural phenomenon. Yet, nature is always described as interfering. It needs to be excluded from the scientific experiment. Nature has negative

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¹⁴⁵ "-3.17 Heap of small rubble. The northern extremity of the trench coincides with the slope. Fallen earth and stones. As work could not be carried out here it was abandoned." Ümit Serdaroğlu, "Ağın and Kalaycik Excavations, 1970," *Keban Project 1970 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 3, 1972), 34.

¹⁴⁶ Esin, "Tepecik Excavations, 1969," 120-1. The reports on Tepecik also display maps (Ibid., plates 80-1) which show the placement of a grid onto a landscape, transforming the mound and its surroundings into a scientific space.

¹⁴⁷ French, "1968 Asvan Excavations," 58.

effects on the scientific study of culture. Hayri Ertem, working at Han Ibrahim Şah, differentiates between rock or natural layers and settlement or cultural layers:

"The rock layer in the west, on the -12.00 grade line, is the layer on which the first settlement of the mound stood. The rock fragments found in the north-east, between the -16.00 and -17.00 grade lines and in the north on the -20.00 grade line, are those which broke up and collapsed in the course of time thus shifting the culture layers on them." ¹⁴⁸

Here, the natural levels, rock layers untouched by humans, are distinguished from the cultural levels, the site's first settlement. The grade line -12.00 marks this difference. The distinction, however, always seems to be shifting, broken and even collapsing. Again, natural elements (rocks) are seen as destructive and hindering on the study of culture. Whether surveying or excavating, archaeologists spend much time trying to differentiate between the natural and cultural elements which make up a site. The Keban reports reveal how the different teams managed to determine this boundary. A difficult task on these mounds where its complete removal is impossible and where the objective recovery of data is always impeded by natural phenomena. With the grid, archaeologists delineate the boundaries of a site. Yet, creating the laboratory was not as easy and straightforward because of the intervention of natural elements.

The mound of Değirmentepe constitutes another example of a site entangled between nature and culture. Refik Duru, in the following passage from the *METU Keban Project Publications*, explains how it was not possible to distinguish its borders:

"Having been cultivated for a long time, the mound had sunk, and it was impossible to determine the boundaries of the settlement. The mound, approximately 120x110m in area and more or less circular in shape, was approximately 11 m. higher than the surrounding plain." ¹⁴⁹

For the archaeologists, the mound --a cultural phenomenon-- is seen as separate from nature. It is "higher than the surrounding plain" but also, as the passage reveals, belongs within its natural surrounding.

The passage also discloses how mounds are never unspoiled elements in nature waiting for archaeologists to study them. In this case, Değirmentepe had been cultivated by local farmers. From the archaeologists' point of view, having been exploited as agricultural land, the mound is seen as damaged; it has sunk. Isn't this an instance of "present" time impinging on the past? If this was ancient agriculture, it would be fine. Before scientists came to study it, recent agricultural activities have disturbed the mound's potential to become a pristine scientific laboratory. These more recent disturbances have made it difficult to delineate the site's borders. Çayboyu constitutes another similar example. Steven Diamant, the head archaeologist, describes the location of the site among trees and next to a stream. He thus defines the borders of the site and differentiates it with the nearby natural elements. Diamant also explains how a stream and irrigation ditch have substantially decreased the surface area of the settlement:

"The small mound of Çayboyu sits among trees beside a wadi, about one kilometer East of Aşvan village. Erosion by the wadi and a small irrigation ditch along its Northern and Eastern flanks has reduced considerably its former surface

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¹⁴⁸ Hayri Ertem, "Han İbrahim Şah, 1970," 70.

¹⁴⁹ Duru, "Değirmentepe Höyük Excavation, 1973," 20.

area. Tip lines and occupation surfaces are visible in this eroded flank which stands nearly three metres above the present ground surface." ¹⁵⁰

Again, nature (the stream) is described as a destructive force. In addition, a more recent human construction (the irrigation ditch) has also limited the work of archaeology.

It is therefore not only nature which interferes with the experiment of archaeology. At Keban, more recent human activities, often times associated with agriculture, make the tasks of archaeologists more difficult. Modern-day cultural elements hinder archaeology's scientific quest. Archaeology is interested in the origins of agriculture but not in the activity of present-day agriculture. The local agricultural activities seem to go against the scientific work of archaeologists. When farming is more important than finding ancient objects, the archaeologists seem not to acknowledge this and even seem surprised that local farmers would find better use of a mound of earth in farming than in treasure hunting. These examples are telling because they illustrate not only the divide between culture and nature but also between present and past. As the scientific laboratories of archaeology are established, as the borders between nature and culture are defined, archaeologists also decide when their object of study begins. As the imaginary walls between nature and culture are built, a limit is also set between the past and the present, a distinction appears between ancient and recent remains. The former are worth studying while the latter are considered disturbances which hinder the scientific endeavor. As a consequence, a boundary between the past (i.e. what is worth studying by the scientific team of archaeologists) and the present (i.e. what can be left behind) appears in the final reports of the KDRP. For the teams of archaeologists, if, for instance, the origin of agriculture was studied, more recent agricultural activities were considered a nuisance. If there was an interest for early city-states, modern irrigation ditches were destructive. At Aşvan Kale, some modern graves are only mentioned in passing but not discussed in-depth. 151 The cultural layers representing too recent of a past did not interest the teams enough.

The grid system was used as a technique to systematically organize archaeological excavations. It helped a team of archaeologists use a common language to describe finds. This system of coordinates and measurements refers to a system developed by the archaeologists when excavating and can only be understood in the present. In fact, when reading the *METU Keban Project Publications*, one can be confused if one expects to read about the past. The language which comes from the grid system does not make reference to the past. The scientific process itself further reinforces this separation between past and present in the language used itself to describe finds:

"As the steepness of the slope had caused falls and landslides, it was impossible to follow the continuity of the stratification in the lower sections along this strip. Mixed layers were also encountered, as in J-IX. The most striking characteristic of this sector was the unearthing of Bronze Age pottery immediately beneath the Byzantine building level. The traces of fire under the Islamic layer encountered in the terrace trenches below, continue here." ¹⁵²

¹⁵⁰ French et al., "Aşvan Excavations, 1971," 48.

¹⁵¹ French et al., "Asvan Excavations, 1970," 57.

¹⁵² Ibid.

The description of the mound's stratification or the use of the grid's letters and numbers to describe a square seem to be completely disconnected from the activities which might have taken place in this building during the Byzantine period or from the life of the maker of this pottery in the Bronze Age. The focus in this passage is more on the physical characteristics of the mound, the stratified and mixed layers, traces of fire in trenches. Ironically, the use of scientific language --necessary, as we will see in the next chapter, to lay claims to finds and report on the discoveries of archaeologists-disconnects the site and the objects found within it from the past. Science in archaeology further alienates the present from the past. The new scientific context which has been created by archaeologists is far removed from any of the realities of the ancient past, the original context which archaeologists seek to study.

It is not that archaeologists completely dismiss anything related to the present. Some of the research teams at Keban were genuinely interested in learning about the lives of local people. Furthermore, the researchers came into contact with local people and interacted with them on a daily basis near their sites. During a few months in the summer, the teams exchanged with the villagers and became a part of their lives. Archaeologists seemed to have been genuinely concerned for the fate of local villagers before the construction of the dam. ¹⁵³ At Keban, in parallel to the archaeological excavations, initiatives were taken to study the region's more recent past. This might perhaps appear at first as an anomaly but real incentives to study local people's history and an interest in the region's contemporary culture were nevertheless a part of the rescue project. This was an exception indeed as previous archaeological projects did not integrate in their team ethnographers and economists. I will come back to some of these anomalies in a later chapter, however.

Archaeologists do acknowledge the continuity in occupation between the ancient cultures they study and the houses and cemeteries of people located on top of the mounds. But, as I have stated earlier, when carrying out scientific research, archaeologists need to separate between the past and present of the region. The focus of the archaeological research at Keban was the region's most ancient history. The scientists who participated in the KDRP were interested in the larger narrative of human history. They were not interested in learning about the more recent history (19th and 20th century) of the villages they were living in while excavating the nearby mounds. Is In their work, the "universal" past of humankind was separated from the more recent and local stories of the region. The rescue project was a turning point for our understanding of ancient history with research aimed at understanding, for example, the Neolithic and Urban Revolutions. By focusing on origin narratives, these specific moments in the history of humanity overshadowed other more discreet local stories. The objects collected for museum and publications overshadowed the material culture of present-day local population.

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¹⁵³ In chapter 6, I will describe the image of local people as workmen, informants, ethnographic comparisons, destructive agents and looters in the Keban site reports.

¹⁵⁴ These stories never play a central role but make unexpected appearances in the reports. In subsequent chapters, I will discuss some of these local, marginalized stories of the region as well as the negative implications of the dam itself.

If archaeologists were interested in it, the final reports do not reveal that at first. A break occurred at Keban between the higher quest of scientific archaeology and the more banal lives of present-day people. The activities and techniques of the archaeological laboratory were set up for the study of a more ancient past. Recent histories of the local villages did not fit into the scientific goals of the Keban expedition. A divide between the events which have defined human civilizations studied by an "objective" science and the more "subjective" and anecdotal stories which do not seem appropriate for scientific enquiry occurred. For instance, names given by archaeologists to local places also exemplifies this. The name Isuwa found by Koşay in ancient texts, a name unknown to the local villager, is used for the site of Pulur. Archaeologists reinforce the split between past and present, between the universal history of mankind and local histories, by giving a name to a site different from the one used by locals. Distance is created between archaeologists and locals. Naming can further alienate local people from the scientific research of archaeologists.

Conclusion

By establishing laboratories with the help of the grid, all teams at Keban agreed that archaeological excavations needed to be carried out scientifically. Archaeologists used specific techniques in order to carry out their excavations methodically and rigorously. Techniques such as the grid system helped them systematically organize knowledge produced at a site. This chapter has defined some of the techniques of archaeology which transform mounds of earth into scientific laboratories. Rational steps and calculated practices give the process of "digging" its scientific legitimacy. But, as scientific laboratories emerge from the ground, different forms of inclusion and exclusion simultaneously occur. Performing the scientific experiment of archaeology entails at least three epistemic breaks. First, archaeologists define the boundaries of the archaeological laboratory and determine which remains are cultural (or human-made) and which ones are natural (untouched by humans). Second, excavations are interested in making discoveries about the past. A choice is made about how far back in time the split between present and past lies. Third, any local stories about the mound itself, about the lives of present-day local people, about more recent history of the local region need to be separated from the "universal" global history of archaeology, the grand narrative of Human history. As these splits occur, archaeology's object of study --the universal cultural past of humanity-- is simultaneously defined. But, producing archaeological knowledge involves marginalizing other potential research topics. As certain choices are made about what to study, what to document, what to preserve, other things remain, if not completely ignored, sidelined. It is now time to consider the site reports of the Keban project more in details in order to scrutinize this process of exclusion in archaeological science.

CHAPTER IV The Language and Vision of Archaeological Reports

"In disrupting many conventional accounts of scientific objectivity, Latour and others have masterfully unveiled the self-invisible modest man." 155

Introduction

In the previous chapters, I explained how the Keban Dam Rescue Project (KDRP) brought a group of scientists together to study the past of an area soon to be inundated. Despite differences in nationality, interests and philosophy, the teams of archaeologists all produced a particular kind of scientific knowledge about the past of the Keban region. Specific techniques were used to assist them in establishing the scientific laboratory of archaeology. As the scientific experiments of archaeology were performed on-site, different splits between culture and nature, the past and the present, the universal and the local simultaneously occurred. Archaeologists thus defined their object of study as belonging to the cultural past of universal humanity and excluded other potential topics of research. After completing the excavations, the Keban teams published their results in the METU Keban Project Publications. At the end of each season, teams that participated in the KDRP provided a preliminary report describing their work carried out over the summer. These accounts were then collected in Ankara and published as seven individual volumes by the Middle East Technical University (METU). Most of what we know about rescue excavations relating to the Keban Dam construction can thus be found in these seven volumes. Covering the seasons from 1968 to 1974-5 and published between the years 1970 and 1982, the volumes are mainly composed of individual site reports.

In this chapter, I will focus on the function of the archaeological report. In these written accounts, archaeologists "lay claims to finds and discoveries" and allow the larger archaeological community to "witness" the experiment. But, as knowledge about a site is placed to the foreground, the conditions of its production are placed on the sidelines. A sharp contrast exists between the messy and dirty on-site excavations full of the activities and practices of human agents and their purified and orderly version in the reports. Excavation reports present only a purified, sanitized version of the work which takes place on archaeological sites. The term used to refer to these publications itself --a report-contributes to the purification process by which the human agents disappear behind "facts." To report means to give a spoken or written account of something that one has observed, heard, done or investigated. In other words, as archaeologists make visible their discoveries, they make themselves invisible. In this chapter, I will use the *METU*

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¹⁵⁵ Donna Haraway, *Modest_Witness@Second_Millenium*. *FemaleMan©_Meets_OncoMouse™ Feminism* and *Technoscience* (New York: Routledge, 1997), 33.

¹⁵⁶ The origin of the word comes from the Latin *reportare* which simply means to bring or carry back. Current usage associates the word with the notion of bringing back factual information. In this formulation, the reporter is *merely* a messenger, contributing nothing of his or her own.

Keban Project Publications as my main informants to scrutinize this double process of visibility-invisibility.

The Role of Site Reports in the Discipline of Archaeology

Television documentaries, archaeological museums, conference lectures, school textbooks... archaeologists have multiple ways to display their discoveries. The site report remains, however, the most authoritative tool used to present their research. A lot of attention is placed on writing archaeology's final accounts of a site. They are as important as the excavations themselves. At the end of the field season, the team directors of the KDRP returned home to publish the results of their fieldwork. They deposited their finds in a safe location, packed their excavation tools and left their sites to begin writing the results of their labor. Bruno Latour and Steven Woolgar have already noticed the great contrast between the cost and size of the material in a scientific laboratory and the final published report full of paper with graphs. 157 The final reports of archaeology also seem to be somewhat disparate from the excavations they are intended to describe. The METU Keban Project Publications, for instance, are composed of a well-ordered, methodical, almost immaculate series of reports quite distinct from the untidy, dirty and sometimes chaotic process of archaeological excavations. Much time and concentration are put into transcribing the outside, messy experiments of archaeology on clean, white sheets of paper. Much organizing and tidying up are required to achieve these final written results.

I have often heard archaeologists express the opinion that it takes one year to write up one month spent in the field. Writing excavation reports always takes more time than the actual on-site experiments. The publications are filled with minute descriptions, detailed plans, precise drawings and up-close photographs. They describe the physical appearance of soil layers, the relation between architectural elements, the context of unearthed objects and so on. If it requires a long time for archaeologists to produce these results, it is because they are full of the minute details relating the findings of the season. I once told an archaeologist I was interviewing that I was using the KDRP site reports as my primary evidence in order to write the history of the rescue project. Surprised, he told me: "Really? They read a little bit like a phone book, no?" Made up of dry and monotonous descriptions, site reports are rarely enjoyed leisurely from beginning to end. Instead, archaeologists attentively search in them details on the location of a specific object, the shape of a building or the date of an archaeological layer. Once published, the esoteric accounts of archaeology represent a wealth of data that will only be read by a handful of people seeking specific pieces of information.

One reason site reports are never widely read is because the language used in them is convoluted and full of technical jargon. The papers of scientific research, in Thomas Kuhn's words, are unintelligible to a generally educated audience and addressed

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¹⁵⁷ Bruno Latour and Steve Woolgar, *Laboratory Life: The Construction of Scientific Techniques* (Princeton: Princeton University Press, 1979).

¹⁵⁸ Mehmet Özdoğan, pers. comm., February 2008.

only to professional colleagues who share the same scientific paradigm. ¹⁵⁹ Sometimes referred to as "gray literature," site reports never become best sellers. And yet, archaeologists continue to write them and know how important they are for the discipline. The final report is what often makes the reputation of a field archaeologist. They are scrutinized and criticized by academic colleagues. Archaeologists can already hear their voices: "Why weren't correct scientific standards followed in these excavations?" "Why wasn't this site excavated properly?" "Why have all the finds not been published yet?" A scholar's name depends on publishing site reports on time. One of the greatest disciplinary sins would be not to publish one at all. Overwhelmed by the amount of data uncovered, occupied with other responsibilities or uncertain about the final results, the conclusions sometimes do not reach the publishing press. In this case, the entire archaeological community will reprimand the archaeologist and blame him or her for a lack of responsibility and professionalism. It will be said that these archaeologists have no ethics.

It is true that without the site report, archaeology would, in many ways, not "exist." The data unearthed would never be transmitted as knowledge and be lost forever. The report shows that the experiment has been carried out following the proper scientific procedures. In that sense, it serves as a cultural marker for the scientific discipline of archaeology. Paraphrasing Sharon Traweek's words, the (archaeological) report has become iconic for (archaeological) science. 160 It is the object which stands for the successful completion of the experiment. It unifies the discipline of archaeology across its different sub-disciplines and local tradition as much as the excavations themselves. ¹⁶¹ But, in the culture of archaeology, the final written product of excavations does not only act as the authoritative account of what happened on site. Site reports are more than just a symbol standing for the discipline's field activities. They distinguish the good and meticulous archaeologists and reinforce academic solidarity within a group. They also define a set of rules and conventions that archaeologists need to follow in order to be accepted as part of the larger archaeological community. The very practice of writing reports binds its members together into a shared pursuit. It is foundational to the identity of the discipline itself as a protocol that archaeologists must follow in order to be accepted by their peers.

In this dissertation, I am interested in revealing the things which have been left out of the Keban Dam Rescue Project. What topics fell outside the scope of research of the scientists? What did not make it into the final published reports? What has been marginalized from the texts of the *METU Keban Project Publications* or sidelined from the photographs of archaeological excavations? As I will demonstrate later, the presence

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^{159 &}quot;Instead they will usually appear as brief articles addressed only to professional colleagues, the men whose knowledge of a shared paradigm can be assumed and who prove to be the only ones able to read the papers addressed to them... Both in mathematics and astronomy, research reports had ceased already in antiquity to be intelligible to a generally educated audience. In dynamics, research became similarly esoteric in the later Middle Ages, and it recaptured general intelligibility only briefly during the early seventeenth century when a new paradigm replaced the one that had guided medieval research." Thomas Kuhn, *The Structure of Scientific Revolutions*, 3rd edn. (Chicago: University of Chicago Press, 1996), 20.

¹⁶⁰ Sharon Traweek, *Beamtimes and Lifetimes: The World of High Energy Physicists*, (Cambridge MA: Harvard University Press, 1988).

¹⁶¹ Abu El-Haj, Facts from the Ground, 15.

of the archaeologists themselves, their acts and practices, what they do on site, is actively obscured in the publications of results. In other words, the agency of archaeologists is minimized. Of course, I am aware that if all activities on an excavation site were recorded and retold, if every technique employed were explained thoroughly, the site report would be too long to publish. 162 In a site report, the complete process of archaeological excavations can never be fully disclosed. The written words in the reports represent only a fraction of what was actually done on a site. The text cannot retrace all of the acts of the archaeologists. For instance, much of what is known about excavated sites depends on unrecorded oral communication. If we were to observe archaeologists at work, we would see how information quickly travels from one person to another without waiting for the long process of publishing. Conversations between project directors and trench supervisors on where to excavate next, on whether a line in the earth corresponds to a wall, on whether a hard layer of earth should be labeled as a floor, etc. are not recorded in the final report. Knowledge makes its appearance in informal ways and in unexpected places, over a lunch conversation, during a dialogue over the phone, through written exchange in letters or emails. But, only a small fraction of these facts is published. Archaeologists cannot possibly record everything in a site report. When errors are made while excavating a site (removing a feature without recording it properly for instance), these are not brought forward in the final publication.

But, the purpose of the archaeological report is not to retell in their entirety the excavations in order to help someone else reproduce it. For the KDRP, the archaeological experiments took place in far-away sites that were doomed to be irretrievably inundated by the waters of the dam. After excavating the mounds once, the experiment – unlike other scientific disciplines – could not be reproduced. The purpose of the archaeological report is not to retell in their entirety the excavations in order to help someone else reproduce the excavations. This would not be possible since excavating a site is, by definition, destroying it. The purpose of the site report lies somewhere else. It is not necessary to write all of the steps taken to achieve this. The report cannot be a minute retelling of all activities. Sharon Traweek proposes that the purpose of scientific articles is to "announce findings and lay claim to a discovery." She adds that this must be done a certain way, however. Scientific reports follow specific forms that have not changed much over the years. A particularly concise and brief style is more than sufficient. In fact, scientific articles reveal so little of the experiment itself that it would be extremely

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¹⁶² Sharon Traweek, "Iconic Devices: Toward An Ethnography of Physics Images in Cyborg Anthropology," in *Cyborgs & Citadels: Anthropological Interventions in Emerging Sciences and Technologies*, ed. Gary Lee Downey and Joseph Dumit (Santa Fe: School of American Research Series, University of Washington Press, 1997), 143.

¹⁶³ "The forms used in scientific writing have converged and have not varied significantly over the last couple of centuries. For example, all references to the agency of the scientists involved in the research is minimized. The written presentation of findings have become quite stylized and terse; it would be almost impossible to reproduce an experiment based upon the information provided in scientific articles. I strongly doubt that an article that fully discloses the complete process of conducting an actual experiment or even a "thought experiment" would be published in any field. The purpose of publishing scientific articles is to announce findings and lay claim to a discovery, and for that purpose a succinct and formulaic literary economy suffices... In some fields the writing of scientific articles is often assigned to the person in the research group with the least status;... the power of the claim is not established by a distinctive or original way of writing. In fact, claims are made in a formulaic mode." Ibid.

difficult to reproduce it just by reading them. Traweek argues that in order "to announce findings and lay claim to a discovery... a succinct and formulaic literary economy suffices." The writing of science follows standardized rules and established conventions.

In archaeology, if the site report might seem, at first glance, a straightforward retelling of the discoveries made on an archaeological site, in reality, the text follows a certain type of protocol. In them, assertions are made using fixed phrases. There is nothing innovative or pioneering in the literary compositions of archaeological science. The METU Keban Project Publications do not seem to contradict Traweek's explanations. The archaeologists did not publish original pieces. Instead, they used a formulaic and succinct mode of writing. A common guideline --unwritten rules established over the years-- was followed for the Keban reports. Going against this protocol would have been stepping out of line. The use of this scientific language was necessary to have their work accepted by other members of the archaeological community. There is an accepted way to report how the scientific experiment of archaeology was successfully completed. But, what are some of these unwritten rules archaeologists follow? What constitutes the proper way of writing an archaeological site report? What conventions does the production of archaeological knowledge rest upon? In order to answer these questions, we need to return to the METU Keban Project Publications.

Archaeology's Scientific Voice: The Language of Site Reports

By considering specific passages from the Keban reports, if not strictly defined rules, some patterns that define the scientific language of archaeology can be noticed. The following quotes illustrate some of the unwritten rules archaeologists follow when presenting their excavations in a written form. Again, if its purpose is to lay claim to discoveries and confirm that the experiment has been done the way stipulated, the scientific report needs to follow a specific form. For instance, the Şimşat Kale expedition reports some of their findings in the project's final publications in the following way:

"Very important results were obtained from the first season of excavations carried out in the Şimşat Castle at Haraba. 1 – The unearthing of a very fine wall tower of the Hellenistic period together with quite a large amount of pottery, and also two fragments of a black glazed Attic vase of the 4th century B.C. 2 – The wall unearthed at the south-west extremity of the fortress, and the pottery resembling Malatya Late Hittite ceramics found in the lower level of trench A show that the fortress of Şimşat whether or not it was the old "Arsomata", was a very important centre of those times." ¹⁶⁴

In this passage, discoveries made in the fortress are put forward and announced with pride. The results obtained are very important. The team emphasizes the significance of the wall tower and the large amount of pottery. This passage illustrates the fact that archaeological reports are composed of texts where finds are assertively placed to the foreground. At another site, the mound of Aşvan representing a 4500 years span is again spoken of with confidence: "Such a sequence, if complete and continuous, would be the

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¹⁶⁴ Baki Öğün, "Haraba Excavations, 1969," *Keban Project 1969 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 2, 1971), 46.

most important to the interpretation of the whole Keban Project."¹⁶⁵ Nothing is taken back in the final publications of archaeology from the work accomplished. The results of the scientific experiments are presented with assurance. The excavations are placed forward and findings are described as (the most) important.

But, another characteristic also defines the language used in the *METU Keban Project Publications*. Ufuk Esin, director of the Tepecik project, is also laying claim to discoveries in the following passage, but in a different manner:

"This leads one to believe that a rich Early Bronze Age culture will be discovered. Hence, the finds of the trenches on the southern slopes and terraces of the mound tend to support the conclusions derived from the preliminary analysis of the survey." ¹⁶⁶

Conclusions here are reached more carefully. A culture will be discovered in the future. Finds only *tend* to support. The analysis is still *preliminary*. The claims here are not made too haphazardly. Results are announced with modesty, even tentatively as the next sentence illustrates: "One must, however, bear in mind the tentative nature of any phase scheme based on a single 2 x 2 m. trench." When the report lays a claim to a find, it can reveal it slowly with all of the supporting evidence carefully explained. In Leviathan and the Air-Pump, Shapin and Schaffer explain how the early scientific reports of the 17th century experimental philosophers in England were written both with confidence and modesty. For instance, experiments which did not yield conclusive results were still exposed in Thomas Boyle's accounts to reassure readers that no inconvenient evidence had been hidden. 168 Like these early scientific accounts, archaeologists do not wish to hide any inconvenient facts nor assert more than they can prove. On the one hand, announcing finds in an archaeological report too confidently would seem suspicious. On the other hand, making claims too modestly would not be deemed credible. A balance between modesty and confidence, showing the good faith of the archaeologists, constitutes an important trait of archaeology's scientific language. The report succeeds by not being too forward or too shy when announcing its finds.

The balance found between the two in the report is in complete opposition to the reality of the field. When excavating, archaeologists can get carried away in their interpretations. They can start believing that their finds are more important than they really are. The reverse feeling can also happen. Archaeologists' mood can be negatively affected in the field when they have the impression that nothing interesting is being unearthed. Perhaps, they feel stress when the season is ending and has not brought the results hoped for. The site report, in a way, ensures that these feelings are not passed on to the reader. In the written words of the scientific report, the excavations are never too rich in discoveries (i.e. modesty accompanies the finds) nor too dull to publish (i.e. any

¹⁶⁵ French, "1968 Aşvan Excavations," 58. Also see the description, which mixes both confidence and modesty, of a building which "appears to have been an important one." French et al., "Aşvan Excavations, 1973," 10.

¹⁶⁶ Esin, "Tepecik Excavation 1968 Campaign," 169.

¹⁶⁷ French et al., "Asvan Excavations, 1971," 49.

¹⁶⁸ Modesty in scientific reports had to be literally displayed in order for matters of fact to be credible and to show that scientists were the unclouded and undistorted mirrors of nature. Steven Shapin and Simon Schaffer. *Leviathan and the Air-Pump : Hobbes, Boyle, and the Experimental Life* (Princeton NJ: Princeton University Press, 1985), 64-65 and 69.

discovery is presented confidently). The scientific account rocks back and forth between these two opposed feelings without ever being trapped by one of them. The balance achieved between modesty and confidence, not a written rule but an accepted convention, guides the literary piece of site reports and produces the voice of archaeology; detached and unaffected, in other words, "objective" and "scientific".

In between modesty and confidence, the scientific experiments of archaeology are also presented in between continuation and completion. In the field, archaeologists continuously debate whether to excavate an area further or not. Decisions to excavate more or not can be somewhat partial and biased. In the scientific accounts of archaeology, however, it is always reported as the most reasonable choice. In site reports, the work is presented as either aiming to "reach virgin soil" (completing the experiment) or "carrying on further work" (continuing the experiment). In the *METU Keban Project Publications*, a variation of the expression "further work in the future is needed" is repeatedly used. Next season will give more fruitful information. Goals not met this year will be fulfilled in the next. More work will bring more answers. Stated in a formulaic manner, the belief that more excavations will bring more results appears repetitively in the Keban reports. ¹⁶⁹ Rather than stating that conclusions cannot be reached or that they simply do not know, archaeologists use a fixed phrase referring to future excavations. Thus, in an ironic paradox, to answer today's questions about the past, hope is placed in the future — a utopian future upon which faith is placed at the expense of the past.

The METU Keban Project Publications also refer in a formulaic manner to "reaching virgin soil." ¹⁷⁰ In the last chapter, I explained how the grid system defines a space for excavations and delineates the cultural elements in the landscape, the ones archaeologists are interested in, from its natural elements. If the grid marks the first step of the archaeological experiment, the expression "reaching virgin soil," used again and again in the reports, announces the end of the experiment. Virgin soil corresponds to the natural layers upon which the site's cultural levels are superimposed. The origin of human occupation at the site has been found. Reaching virgin soil signifies that the border between culture and nature has been reached. In a way, the excavations have reached outside of the boundaries of the laboratory, outside of archaeology's object of research. The experiment having been completed, there is no need to excavate deeper. But, more than ending the scientific experiment, "reaching virgin soil" makes the entire process seem to be organized with a clear start and finish. Both formulas, in fact, "reaching virgin soil" and "further work is needed" used by archaeologists, reaffirm that proper scientific excavations have been carried out. Making references to future work at

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¹⁷⁰ See for example Duru, "Değirmentepe Höyük Excavation, 1973," 24.

¹⁶⁹ I will only cite two examples here: "To the authors's knowledge, this complex has not been reported on any other site in the Keban Region. However, the bevel rim jar, the beaded rim bowl, the spout and the painted motifs, suggest a date somewhere in the fourth millennium B.C. Detailed study of a larger sample of ceramics will be needed to verify this suggestion." Robert Whallon Jr. and Henry T. Wright, "1968 Fatmalı-Kalecik Excavations Preliminary Report," *1968 Summer Work* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 1, 1970), 70 and "As seen today Tepecik seems to have been the meeting place of Southern, Eastern and to some extent Central Anatolian cultures in most periods and an important center of Early Bronze Age painted pottery. However, the answers to many of the questions raised about the historical and chronological development of Tepecik mound will have to wait until the results of future excavations are compiled." Esin, "Tepecik Excavation 1968 Campaign," 170.

the site and to the end of excavations when "virgin soil is reached" places the excavations in a seemingly controlled state where archaeologists know when to continue work and when to finish.

These two formulaic phrases help to transform even more the disordered, untidy, sometimes chaotic, live excavations, into a more organized, linear and logical process on paper. If doubts continuously arise in the field about where and when to excavate, when to finish, what to do now or later, etc. it is never presented in the report. The accounts of archaeological excavations present a clean, purified version of the work on a site where either "virgin soil" has been reached or "future excavations" need to be carried out. It makes it seem that the transformation of a mound of earth is done following scientific standards and that the archaeological experiment is running smoothly. The excavations themselves, a continuous and endless process of decisions and choices, seem more rational and logical. The two formulaic phrases make archaeological excavations seem more straightforward than they are in reality. In the reports, with the use of these two expressions, archaeology seems to have ended succesfully; i.e. virgin soil has been reached, or, if no end is near, it is only because "further work needs to be done."

Shapin and Schaffer do not just describe Boyle's modest and confident literary style in their *Leviathan and the Air-Pump*. The two historians of science analyze, in broader terms, the many other rules established by the experimental philosophers in 17th century England. The legitimacy of these early experiments, they argue, not only rested upon their performance in a public laboratory but also on the way they were written down in the report. They explain how "Boyle's collaborator Hooke codified the Royal Society's procedures for the standard recording of experiments." As new conventions were adopted, a new language was defined to produce scientific knowledge, a new literary style to generate scientific facts. In other words, Shapin and Schaffer track down the emergence of proper scientific prose in early 17th century England. For example, providing circumstantial details in elaborate sentences, for the early modern scientists, was thought to best convey the reality of their findings.

The writing of archaeological site reports also follows specific codes and practices. Like Boyle's accounts, archaeologists write reports using an impersonal style. The absence of first person pronoun, for instance, makes archaeological writing seem anonymous and neutral. It is the pottery or the wall that show... It is the new discoveries that will come to light... All personal references to the archaeologists are removed. The human agents responsible for the excavations detach themselves from the text describing the objects discovered. Furthermore, the use of the passive voice also dominates the scientific accounts of archaeology. It is expected by the archaeological community that reports be written this way. Results were obtained... A tower was unearthed... A culture will be discovered... In the *METU Keban Project Publications*, one will never read how archaeologists removed 20cm of earth or unearthed an object. Instead, archaeological layers are exposed, objects are found, sites are excavated, etc. (by the archaeologists). The use of the passive voice conceals the subject of the sentence and allows the writer to hide behind the text. The archaeologists do not reveal their identity. These linguistic

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¹⁷¹ Shapin and Schaffer, *Leviathan and the Air-Pump*, 58. "Boyle devoted himself to laying down the rules for the literary technology of the experimental programme. Stipulations about how to write proper scientific prose were dispersed throughout his experimental reports" Ibid., 63. Also see 60 and 70.

practices --the absence of the first person and the use of the passive voice-- conceal the agency of the scientist while displaying the objects they have unearthed. The facts archaeologists have produced become, in a way, truth on their own without the assistance of humans. The agency of the scientists, if not completely eliminated, is hidden or displaced onto the objects themselves. The evidence itself is placed to the foreground as "references to the agency of the scientists involved in the research is minimized." The subject doing the research takes a back seat while the data produced steps on center stage in the final reports of archaeological science.

Archaeology's Scientific Vision: Photography in Site Reports

in her book Modest Witness@Second Millenium. Donna Haraway, FemaleMan© Meets OncoMouseTM Feminism and Technoscience explains how vision in science has been used to distance the knowing subject from the object of study. In other words, what we think we know of reality – the object of study – depends largely on instruments of visualization. The innovations in visual technology, she argues, have shaped our western modern sense of reality. Science requires instruments of visualization but more importantly, as Haraway suggests, requires a politics of positioning. Visualizing techniques simply mediate standpoints. Archaeologists, as other scientists would, also position themselves as agentless witnesses. They produce knowledge, using visualizing techniques, about the past for others to envision. In the meanwhile, they hide the conditions (historical, social, political, economic, etc.) which make this production possible in the first place. The instruments of vision create both scientific objectivity and the positioning of an archaeologist as invisible. In the archaeological reports, archaeologists disappear also from both the written and visual spheres. The agency behind the experiment, the subject doing the research, becomes hidden. The positioning of archaeologists as invisible witnesses plays a critical role in the production of scientific knowledge about the past. Haraway explains how science's vision has become "seeing everything from nowhere." ¹⁷⁴ In her essay Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspectives, Haraway offers a definition of technology which emphasizes vision. She argues that:

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¹⁷² Traweek, "Iconic Devices," 143.

¹⁷³ Haraway, Modest Witness@Second Millenium.

^{174 &}quot;The visualizing technologies are without apparent limit; the eye of any ordinary primate like us can be endlessly enhanced by sonography systems, magnetic resonance imaging, artificial intelligence-linked graphic manipulation systems, scanning electron microscopes, computer-aided tomography scanners, colour enhancement techniques, satellite surveillance systems, home and office VDTs, cameras for every purpose from filming the mucous membrane lining the gut cavity of a marine worm living in the vent gases on a fault between continental plates to mapping a planetary hemisphere elsewhere in the solar system. Vision in this technological feast becomes unregulated gluttony; all perspective gives way to infinitely mobile vision, which no longer seems just mythically about the god-trick of seeing everything from nowhere." Donna J. Haraway, *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991), 188-9. For Haraway, the 17th century modest witness of experimental science has become the 21st century mutated witness who will challenge today's scientific practices and reclaim vision in the interest of situated knowledges. In the chapter "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," (Ibid., 183-202), science needs to become positioned rationality which promises a more adequate, transformed and objective accounting of the world.

"Histories of science may be powerfully told as histories of the technologies. These technologies are ways of life, social orders, practices of visualization. Technologies are skilled practices. How to see? Where to see from? What limits to vision? What to see for? Whom to see with? Who gets to have more than one point of view? Who gets blinkered? Who wears blinkers? Who interprets the visual field? What other sensory powers do we wish to cultivate besides vision?" 175

The history of the Keban Dam Rescue Project may also be told as a history of visualizing techniques. The techniques of archaeology allow the larger archaeological community to "see" the experiments. The role of the site report is to make the archaeological community visualize the excavations and envision what the past looked like. Even if archaeologists claim the primacy of text --usually dry descriptive narratives-archaeological site reports are actually full of visuals; illustrations such as site maps, ground plans, charts and graphs, drawings and photographic images. It is these colorful, carefully conceived or drawn, strategically located illustrations which make up the essence of site reports. Images capture the reader's attention. Lorraine Daston and Peter Galison in *The Image of Objectivity* use scientific atlases, defined as "profusely illustrated volumes of carefully chosen observables --bodily organs, constellations, flowering plants, instrument readings-- depicted from a carefully chosen point of view,"176 to chart the emergence of scientific objectivity from the sixteenth century on. Like scientific atlases, archaeological site reports are "illustrated volumes" where "carefully chosen observables" are depicted from the archaeologist's point of view. They argue that the role of science is to represent nature's diverse, accidental and contingent experiences. It transforms nature's too plentiful and unrefined objects into "working images," ideal types which may or may not be found as such. 177

Not everything unearthed during an archaeological excavation can be documented. From the multitude of things dug out of the ground, only certain objects, considered worthy of interest by the researcher, are selected. From these selections, another limited number of objects will be published in the final reports. These choices engage archaeologists in making ontological and aesthetic judgments to transform the raw experience of a mound of earth into a digested experience. At the Keban Dam excavations, not all finds and discoveries could be claimed in the final report. From the many objects unearthed, only a few --the ones judged to be the most interesting, noteworthy or beautiful-- were selected for the *METU Keban Project Publications*. The others --judged obsolete or redundant-- were simply rejected. Like Daston and Galison's atlas makers, archaeologists select and display the past's "unrefined objects" as

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¹⁷⁵ Ibid., 194.

¹⁷⁶ Lorraine Daston and Peter Galison, "The Image of Objectivity," in "Seeing Science," special issue, *Representations* 40 (1992): 84.

¹⁷⁷ The atlases are one of the means through which science epitomizes and depicts nature. Selected objects from nature become science's standard phenomena or ideal types. Science can operate only after this selection is made. These early scientific atlases are thus visualizing *techniques* used by scientists to represent nature. The raw experience of nature is transformed into a digested experience; "nature is full of diversity, but science cannot be." Ibid., 90.

archaeology's "working images." They choose representations of "what truly was" to publish in the final reports and privilege certain standard phenomena over others. In the final report, the reader sees the site's unrefined objects transformed into manageable, communal representatives of the past.

Archaeology --a science which studies the diverse, accidental and contingent experiences of a site in order to represent the past-- transforms the raw experience of the field into a digested experience represented in the archaeological site report. When reading the site report, one can see this selection of objects. The reports put in light some aspects of the site and train the eyes of the reader to see a certain way. This selection process takes chaotic and unclean things from the ground and displays them as spotless and orderly in the site report. (Fig. 7) The final accounts of an archaeological site enable the archaeological community to shift their gaze from the disordered, untidy mounds of earth to the uncontaminated and untainted discoveries made during the rescue project. They help to visualize scientific objects, purified and sanitized by the archaeological process of selection. The site report allows the readers to envision the end of this purifying ritual.

Archaeological excavations differ from other scientific experiments in, at least, one important aspect. Excavation is a destructive process which can never be replicated. Once performed, the on-site experiment cannot --unlike other scientific disciplines-- be repeated and data retrieved from it can never be reproduced. 179 This was even more true for the KDRP's excavations. After the construction of the Keban Dam, all of the region's ancient sites disappeared underwater. All access to them was thus made impossible. The rescue project offered a last chance for archaeologists to retrieve information from them. If the METU Keban Project Publications help us to witness these specific excavations, they are not going to help anyone else reproduce them. Even if an observer were to be present on-site during the excavations, he or she would not have been able to directly witness all of the activities taking place on the site. In Leviathan and the Air-Pump. Shapin and Schaffer explain how "witnessing" emerges as the central tenet of scientific experimentation in 17th century England. In order to be credible, Thomas Boyle's experiments were collectively performed in the public space of the laboratory (as opposed to the alchemist's closet). Furthermore, if they could be directly witnessed by the eyes of society, the experiments could also be virtually witnessed through the writing

¹⁷⁸ "The atlas aims to make nature safe for science; to replace raw experience – the accidental, contingent experience of specific individual objects – with digested experience. All sciences must deal with this problem of selecting and constituting "working objects," as opposed to the too plentiful and too various natural objects." And "Working images [are] any manageable, communal representatives of the sector of nature under investigation. No science can do without such standardized working objects, for unrefined natural objects are too quirkily particular to cooperate in generalizations and comparisons." Ibid., 85.

¹⁷⁹ "Another important way of multiplying witnesses to experimentally produced phenomena was to facilitate their *replication*. Experimental protocols could be reported in such a way as to enable readers of the reports to perform the experiments for themselves, thus ensuring distant but direct witnesses... The purpose of this form of communication was explicitly to proselytize. The *New Experiments* was published so "that the person I addressed them to might, without mistake, and with as little trouble as possible, be able to repeat such unusual experiments... Boyle wished to encourage young gentlemen to "addict" themselves to experimental pursuits and thereby to multiply both experimental philosophers and experimental facts." Shapin and Schaffer, *Leviathan and the Air-Pump*, 59.

of reports. The meticulous descriptions of Boyle mimicked the experiment itself to announce its successful completion.

But, these accounts did not just narrate with words the experimental process. They also included many carefully composed illustrations which gave the reader a vivid impression of the experimental scene. ¹⁸⁰ Some pictures represented the machines themselves, for instance the air-pump, used during the experiments. An image in these reports was:

"not a schematized line drawing but an attempt at detailed naturalistic representation complete with the conventions of shadowing and cut-away sections of the parts. This is not a picture of the 'idea' of an air pump, but of a particular existing air-pump. Their role was to be a supplement to the imaginative witness provided by the words in the text." ¹⁸¹

Thus, as early as the 17th century, Boyle's accounts were composed of meticulously written description and illustrations which served to narrate the experimental process. They were both a literary and visual technology. For the discipline of archaeology, the site report helps to view the excavations. Vision also plays a fundamental role in archaeology. Images in archaeological reports also facilitate virtual witnessing by announcing that the experiment was really done. With images, the report gives the readers a vivid impression and helps them envision the experimental scene, the site at the times of excavations. Images in archaeological reports further help to visually and virtually witness the scientific experiments. ¹⁸³

In the final publication reports of the rescue excavations carried out before the construction of the Keban Dam in 1974, photography occupies an important place. Pictures taken in the field allow the reader to visualize the excavations and virtually witness the archaeological experiment. Writing about photographs, Haraway argues that these can never be unmediated or passive; each picture is a visual possibility and a partial way of seeing and organizing the world. Before a picture is taken on an archaeological

¹⁸⁰ "We usually think of an experimental report as a narration of some prior visual experience: it points to sensory experiences that lie behind the text. This is correct. However, we should also appreciate that the text itself constitutes a visual source. It is our task here to see how Boyle's texts were constructed so as to provide a source of virtual witness that was agreed to be reliable." Ibid., 61.

¹⁸² "The images served to announce, as it were, that "this was really done" and that "it was done in the way stipulated" They allayed distrust and facilitated virtual witnessing. Therefore, understanding the role of pictorial representations offers a way of appreciating what Boyle was trying to achieve with his literary technology." Ibid., 62 and "The technology of virtual witnessing involves the production in a *reader's* mind of such an image of an experimental scene as obviates the necessity for either direct witness or replication." Ibid., 60.

¹⁸³ These images recall Latour and Woolgar's *figures* obtained from the experiments of a 20th century neuroendocrinology laboratory in California. The two authors explain how these *figures* make results have an existence of their own independent of the scientist's subjectivity. Latour and Woolgar, *Laboratory Life*, 85. To make a reference to a *figure* in a scientific text validates conclusions which previously seemed not to rest on anything. Accumulating references is what, in the end, creates the effect of objectivity and makes the experiment worthy of belief.

¹⁸⁴ "There is no unmediated photograph or passive camera obscura in scientific accounts of bodies and machines; there are only highly specific visual possibilities, each with a wonderfully detailed, active, partial way of organizing worlds. All these pictures of the world should not be allegories of infinite mobility and interchangeability, but of elaborate specificity and difference and the loving care people might take to learn

site, a sort of purification ritual takes place. Archaeologists sweep and scrape clean the area under excavation that is about to be captured on film. Pickaxes, brushes and trowels, all of the equipment necessary for excavating, are placed to the side for a moment. The photographer, after having asked the workers to step outside of the frame, then takes the picture. The human agency is made invisible. The photographer is both removed from the photographic frame and also literally hidden behind the camera, which is *de facto* outside the photographic frame. The results are stylized shots of excavation squares with absolutely no people in them (Fig. 8 but see Fig. 4). Photography captures the last moment of this ritual, only the end result and not the messy process itself.

Within the photo, a measuring stick, an arrow and a blackboard are systematically placed on the ground or on the walls of the newly excavated area. The measuring stick provides scale; the arrow indicates the direction and orientates the photography to the north; and the small blackboard displays numbers and letters associated to the area just excavated. This information --scale, orientation, location-- provided by these three tools is placed within the frame of the photography and transforms a simple picture into a scientific record which can then be catalogued, compared and analyzed. (Fig. 8) The introduction on-site of a system of measurement (the stick), of orientation (the arrow) and of cataloguing (the board), participates in converting a mundane place into an archaeological site where science is performed. This information is privileged over other. In the site reports, it is these three items archaeologists think are worth reporting. Publishing this information in the reports -- the scale, orientation and location of the squares excavated-- contributes further to the delineation of a mound into a scientific laboratory. The picture not only captures field research but also facilitates virtual witnessing. It helps the archaeological community see the excavations having been documented systematically. The three instruments used on the photography make the picture a part of the larger organized system of scientific excavations.

Not just photography, but also ground-penetrating radars, magnetic gradient surveys, gridded maps and plans, serve as *techniques* of visualization to produce the "working images" of archaeology. These illustrations stand to represent the region's ancient history. Capturing the last moments of excavations, once the site has been cleaned, photographs in archaeology hide the messy process of excavations and shift discussions from the spoiled, "social" time of archaeological fieldwork to the sanitized "monumental" time of the ancient past. Archaeological pictures reduce fieldwork to a collection of cleaned squares and aesthetically pleasing objects while omitting any of the people or labor behind it. The life behind archaeological work is hidden or removed as objects and the site are displayed as purified scientific finds. Once again, in these images, the agency of humans is made invisible as facts about the past are produced and made visible.

how to see faithfully from another's point of view, even when the other is our own machine. That's not alienating distance; that's a *possible* allegory for feminist versions of objectivity. Understanding how these visual systems work, technically, socially, and psychically ought to be a way of embodying feminist objectivity." Haraway, *Simians, Cyborgs and Women*, 190.

¹⁸⁵ Michael Herzfeld, *A Place in Time: Social and Monumental Time in a Cretan Town* (Princeton: Princeton University Press, 1991).

Conclusion

As the scientific laboratory of archaeology emerges from the ground, as the mound of earth is transformed into an ancient site, as the "working images" of the site are carefully constituted and as the photographic camera captures all of this "science in action," what kinds of things are left behind? Nick Shepherd has already provided us with an answer to this question:

"[W]hat we find in site reports are stylised shots of individual artefacts (strategically lit and arranged against neutral backgrounds), and carefully composed shots of archaeological deposits (brushed, tidied, squared-away and labeled). These form a class of imagery from which coworkers and assistants are edited out, along with extraneous items of equipment, signs of camp life, collapsed sections and misplaced artefacts, in fact, any signs of production of failure."

Shepherd uses a set of photographs found in the publications and archives of John Goodwin's archaeological expeditions throughout sub-Saharan Africa, in order to discuss the issue of "native" labor in archaeology. The work of "native" coworkers and assistants hired by Goodwin has so far remained unacknowledged in the official history of (African) archaeology. However, they are not entirely invisible as they make unexpected appearances, for example, captured in the margins of photographs or on the side of the frame. In this insightful article where the issue of "native" labor in archaeology is discussed, Shepherd succeeds in taking on the difficult --but even more crucial in former colonial contexts-- task of restoring the dignity of a name to "native" workers in order to "rethink" through the official accounts of archaeology.

The language (written reports) and vision (photographs) of archaeology consistently focus away from anything associated with the discipline's conditions of production. The texts and images produce the purified "working objects" of archaeology, bolster the report's objectivity and, in a way, "take the dirt out" of the final reports. Techniques of visualization confer on the discipline its "mechanical objectivity". and, if not removing it entirely, only allow, for instance, nature, the present and the local to make rare and unexpected appearances. In the accounts of archaeology, linguistic and visual techniques help to produce scientific knowledge about the past. Written descriptions allow the reader to "witness" the experiment while the agency of the archaeologists is made invisible. Pictures taken in the field allow the reader to visualize the excavations while the agency of workmen is placed to the sidelines. Site reports are full of visuals and illustrations, minute descriptions, precise drawings and detailed plans, references and up-close photographs. As these photographs are taken, as site reports are written, as the reader is taken away from the polluted "social time" of excavations to the purified "monumental time" of scientific archaeological accounts, what other things become marginalized? The next chapter will consider the image of the "local" in site reports. This will serve as a representative of some of the things sidelined from the

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¹⁸⁶ Nick Shepherd, "'When the Hand that Holds the Trowel is Black...' Disciplinary Practices of Self-Representation and the Issue of 'Native' Labour in Archaeology," *Journal of Social Archaeology* 3, no. 3 (2003): 350

¹⁸⁷ Lorraine Daston and Peter Galison, *Objectivity*. (New York: Zone Books 2007)

archaeological process. Not having been completely erased, I will use specific examples from the *METU Keban Project Publications* to locate instances where the "local" makes unexpected appearances.

CHAPTER V "The Projects of Others" on the Margins of Archaeology

"Our project unfolded not in the generalised region of populations, human or ecological, with its sparse living relics of a prehistoric past, but side by side with the projects of others" 188

Introduction

Techniques such as the grid system help archaeologists establish the scientific laboratory of archaeology. It allows them to locate systematically their finds while, at the same time, to define their object of research. As archaeological experiments are performed, different epistemic divides simultaneously occur. These breaks permit the scientific discipline of archaeology to focus on the study of the universal cultural past of humanity. But, in the site reports of the KDRP, as claims to discoveries about this ancient past were made, the agency of archaeologists was suppressed. In other words, in archaeology, subjects are rendered invisible, as objects are made visible. Archaeologists at Keban carried out research on Eastern Anatolia's more ancient prehistory. Many of the expeditions concentrated on the Neolithic or Bronze Age rather than the region's more recent present. The rescue project could not take place completely isolated from the latter, however. Michael Fotiadis, describing the Messenia project in the Kozani region of Greece, writes how:

"we the archaeologists rarely managed to work in a region where we should be the only human agents. Our project unfolded not in the generalised region of populations, human or ecological, with its sparse living relics of a prehistoric past, but side by side with the projects of others, the inhabitants of Kozani and its hinterland. That is a region saturated with the practicality of everyday life. It is replete with human agents, producers of meaning, whom at times we wished away, other times we begged to speak. All of the time we depended on them for services and favours. Over the years some companionships developed between us and them, as did some dislikes." ¹⁸⁹

The Keban region also, during the salvage excavations, was not just made up of the past's ancient relics and of the archaeologists studying them. The KDRP unfolded side by side with the "projects of others," the lives of local people.

Archaeologists were not completely uninterested in the local at Keban. But, constituting a potential research topic of its own, the present-day people, lives and culture of the region never became archaeology's principal object of study. Only in rare instances does the local manifest itself in the *METU Keban Project Publications*. Never depicted intentionally by archaeologists, it nonetheless surfaced accidentally. The local others,

¹⁸⁸ Michael Fotiadis, "Regions of the Imagination: Archaeologists, Local People and the Archaeological Record in Fieldwork, Greece," *Journal of European Archaeology* 1 (1993): 159.

189 Ibid.

people, villagers, workmen, looters, neighbors, friends, landowners make unexpected appearances on the margins of a photograph (Fig. 4) or on the sidelines of an academic text. The goal of this chapter is to bring to the foreground some of these instances where the local emerges. First, as local labor excluded from the hierarchy of archaeological excavations. Second, as local destructive forces needing to be removed from the pristine, sanitized laboratory of archaeology. Third, as local informants who are not fully acknowledged as part of the scientific process of archaeology. And finally, as local stories, hidden in the report, reminding the reader, for example, of the dramatic consequences the Keban Dam has had on the region. By spotlighting specific passages from the Keban publications, I bring to the foreground some particular examples of archaeology's process of erasure and inclusion.

Local Labor

In the final reports of the Keban excavations, thanks are given to people who have made the project a success. In one account, gratitude is expressed to several professors, the director of the Keban project, the director-general of Museums and Ancient Monuments and the governor of Elazığ. "[F]or their help and for the interest they took in the excavations," thanks are also given to the administrative authorities of the province of Elazığ, the regional director of the State Waterworks for the Keban Dam and the Turkish military. ¹⁹⁰ Usually found at the publications' beginning, these passages reveal the hierarchy of archaeological excavations. If the important financial, administrative, academic, political and military figures are given credit, the local workers responsible for the "digging" itself are usually not mentioned. Excavations at Keban hired men from the nearby villages as manual labor. They were paid an amount equivalent to the salary of an agricultural laborer. In agreement with the local mayor or landlord, the teams of the KDRP depended on this form of cheap manual labor for the realization of their operation.

Generally, the names of workmen are not spelled out in the final report. Hamit Koşay does acknowledge the work of "the driver Mahmut Ulu and the head keeper Sabri Bilgin" in the 1969 Pulur report. But, this is rare enough to be singled out as the only exception. More often, workers are mentioned as a group: "5 - It was necessary to prevent the falling of the dismantled stones and to provide for the security of workers." In the final publications of Pağnık Öreni, the process of engaging local labor is also alluded to: "Workmen were hard to find at first but we were eventually able to employ fifteen men. A grid was laid on the site and a contoured plan prepared." Local people are never singled out as individuals. Instead, they are presented, alongside the grid and plan, as a constitutive piece of the archaeological laboratory. At Taşkun Kale, "[t]he work

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¹⁹⁰ Esin, "Tepecik Excavations, 1973," 97-8. Similar instances occur in Duru, "Değirmentepe Höyük Excavation, 1973," 19 and David French et al., "Aşvan Excavations 1970," 56.

¹⁹¹ Koşay, "Pulur (Sakyol) Excavations, 1969," 103. The following season, the names of archaeologists, a painter, a designer, a technician, a draughtsman and a treasurer are mentioned. Again, the "head foreman Sabri Bilgin from Alaca Höyük" as well as students are also mentioned. Koşay, "Pulur (Sakyol) Excavations 1970," 133.

¹⁹² İlter, "Dismantling of Karamağara Bridge," 206.

¹⁹³ Richard P. Harper, "1968 Pağnık Öreni, Kaşpınar Excavations Preliminary Report," *1968 Summer Work* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. I, 1970), 135.

force generally numbered twenty. Sieves were not used."¹⁹⁴ Here, the work force and the sieves, mentioned one after the other, appear to be analogous in the process of knowledge production. They both constitute things in need of preparation for the experiments.

In these few examples, workers make up an abstract and anonymous group. Their numbers are given but not their names. Mentioned in the same breath as the tools used by archaeologists, they fulfill the same purpose as material used for excavating. Workmen at Keban thus made up a necessary and yet silenced part of the excavation process. The local (in this case local manual labor) is excluded from the final reports. As I have described earlier, before a photograph is taken on an excavation site, workmen and excavation tools are placed outside the camera's angle. In the texts of archaeological reports, local workers are also positioned next to excavation equipment. What happens to them is not unlike what archaeologists do to themselves in the site reports. The foreign archaeologists absolved themselves of the responsibility for the production of knowledge. The objective discoveries of the past's material culture are revealed through a disembodied practice of archaeology. Finds are placed to the foreground, as excavations are made agentless. If the exclusion of agency is demanded by the scientific enterprise of archaeology, presenting the final results of the experiment also asks for the removal of local labor involved in the digging and cleaning of objects. After finds are removed from the ground, the labor spent to achieve this is, in its turn, removed from the reports.

Local Landlords and Farmers

The local is excluded, as the workers described above were, but not entirely invisible. Besides constituting the manual labor of archaeological excavations, locals, in site reports, are depicted in direct contrast to the scientific mission of archaeology. Many of the *tepes* studied in the Upper Euphrates region were adjacent to villages. Sometimes, houses or graves were located on top of the mound itself. These local elements were nevertheless seen as separate from the antiquity archaeologists were interested in researching. For the scientists, a boundary between the ancient site and the modern village was established. Recently built constructions were perceived as intrusions into their scientific laboratories. For local people, on the contrary, the distinction between the mound and their village was not as clear-cut. At the site of Tepecik, Ufuk Esin explains how:

"There is no modern settlement on the mound. It is used as grazing land for Tepecik Village. The mound has been damaged by villagers who have removed its fertile soil, leaving large and small pits on its slopes. Cotton and sugar-beets cover the lower terraces of the mound." ¹⁹⁵

The archaeologist observed that villagers bring their animals on top of the mound to graze. Local villagers, here, are depicted as harming the archaeological site. Agriculture, the region's principal economic activity, is discussed for its negative effects. In this passage, the undesirable activities of present-day local people are pointed out. In other words, the local population is decried as harming a supposedly pristine archaeological site.

¹⁹⁵ Esin, "Tepecik Excavation 1968 Campaign," 159.

¹⁹⁴ French et al., "Aşvan Excavations, 1973," 7.

As archaeologists transform mounds of earth into scientific laboratories, they demarcate cultural elements from the natural landscape in order to define their object of research. But, the boundary between nature and culture is not always straightforward in archaeological expeditions. In the reports of Han İbrahim Şah, Hayri Ertem describes local villagers alongside natural forces:

"The rock platform on which the mound stands was, many centuries ago, certainly connected to the rock strata observed in the stream beds today. In the course of time, these rocks sank due to natural erosion, and the river beds were thus formed. The author believes, however, that the sinking of the rocks to the south of the mound was caused by the upper inhabitants of the mound who dug trenches for defence. Later sinking probably increased by time and by natural forces. These are fragments of schist strata and they are so soft that the villagers can dig into these rocks as easily as they can dig into earth. Fragments of the broken and sunken rock layer are observed even today on the skirts of the mound, the measurements of which are given above, or the other layers covered a much larger area than it does today." 196

In this passage, the site director relates the natural forces behind the formation of the site. The mound, he explains, stands on a rock platform. But, it has also been affected by human activities. Local inhabitants digging trenches in the south have caused the sinking of the mound. Not unlike natural erosion, local people constitute a force that has shaped the mound. Ertem perceives them as another element which can alter and potentially destroy the space of the scientific laboratory. Level I, for instance, has been partly destroyed by villagers, not just natural forces. ¹⁹⁷ Their presence is damaging and in stark opposition to the sanitizing process of archaeology. Locals, likened to a natural destructive force, need to be controlled. To run the scientific experiment properly, they need to be excluded.

In the Keban reports, local people were not explicitly equated to looters. Rather, they were metaphorically likened to them because of their supposed "disregard" for the mounds archaeologists were studying. Archaeologists envision *tepes* as potential places to be preserved or investigated. In contrast, local farmers found other uses for them. Because of this, locals are sometimes described as disturbing the sites. They do not seem to care about the millennia-old mounds archaeologists are excavating. The site of Yeniköy was covered with fields belonging to Kâzım Bey, a landowner from the village of Bedrettin. These were being cultivated by twenty families who had settled on the banks of the Tahar Çayı. ¹⁹⁸ To make the best use of available land, some walls had to be destroyed and the site was used for agriculture up to the summit.

"The mound rises to a height of about 15-20 metres above the level of the fields and has a rather flattish top. The walls belonging to Roman and Early Byzantine buildings that had once stood here have been destroyed by the villagers and the debris piled up on one side." ¹⁹⁹

¹⁹⁶ Ertem, "Han İbrahim Şah Excavations 1970," 69.

¹⁹⁷ Ibid., 73

¹⁹⁸ Hâmit Zübeyr Koşay, "Yeniköy Mound Excavations, 1972," *Keban Project 1972 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 5, 1976), 185.
¹⁹⁹ Ibid.. 186.

More often than not, in the Keban region, powerful local landlords owned the mounds foreign archaeologists came to study. The interests of these landowners, not limited to their agricultural activities, would often clash with the scientific program of archaeologists. In the site reports, a stark contrast exists between the scientists' wish to protect and study the sites and local people's "destructive" use of them. For archaeologists, locals demolish what they are trying to preserve and study. Ironically, if archaeologists perceive their work as protecting sites, they must destroy them in order to study them. This paradox never surfaces in the Keban publications, however. Instead, it seems to come as a surprise to the archaeologists that farming --a damaging practice—would be considered more vital than finding antiquity.

Undesirable and adverse local elements were also removed at the site of Pulur. Before excavations began, Hamit Koşay explains how the houses on the mound's top needed to be eradicated. In order for his investigations to resume, the owners of the houses and surrounding fields were expropriated. 200 In his project, Koşay clearly prioritizes the scientific contribution of archaeology to national history over the livelihood of local people. In this case, locals were physically placed at a distance from the excavations. They are seen as interfering with archaeology's higher scientific quest. For Koşay, nothing should stand in the way of archaeology, even if that means expropriating present-day homes. In other words, the space for excavations was cleansed and purified from undesirable elements. Archaeologists at Keban envisioned their sites as pristine and unspoiled laboratories, fixed in time, unaffected by more recent human activities. Again, in an ironic twist, the existence of the sites themselves depends on local people "spoiling" them, piling up layers of debris upon them and building houses on top of one another. Archaeologists seem to forget that it is this continuous process of human activities, over thousands of years, which has made the existence of the mound possible in the first place. It is this incessant construction and destruction, which continues and archaeologists decry today, that are responsible for building the mounds in the first place. It is the reason scientists studied the *tepes* in the Keban region. But, for archaeologists, if the ancient debris and houses are archaeological, the more recent ones are considered intrusive and contaminated.

Local Informants

To give a more comprehensive view of the KDRP, it should be noted that local people were not just excluded as labor and equated with looters in the final publications. The "local" (workmen, villagers, farmers, neighbors, landlords, etc.) was omnipresent surrounding the excavations. From this proximity arose a genuine interest in archaeologists for the region's contemporary culture. This concern was not part of the original project's goals and never became central to the scientific expedition. The curiosity originated after archaeologists arrived to Keban and developed once they

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²⁰⁰ "The Early Bronze Age cemetery of Pulur may have been located in neighbouring fields and threshing floors, and beneath houses and barns. As the work of expropriation had not yet been completed no investigations could be carried out... the investigation of the cemetery once the work of expropriation has been completed. The final report is in preparation and will be printed in the near future." Koşay, "Pulur (Sakyol) Excavations, 1970," 134.

realized the losses the region would endure. In some instances, this interest turned into initiatives to study it. The KDRP Executive Committee approved three teams to document the lives and cultures of some of these threatened villages. Alpaslan Koyunlu wrote a short ethnography on the village of Munzuroğlu. Oya Köymen carried out a socio-economic study on the impact the dam will have on local people forced to migrate. Yusuf Durul published a monograph on the tradition of carpet weaving in the Keban region. The committee felt it was necessary to document the dramatic socio-economic changes taking place in the 1960s. It sponsored these projects hoping to record some of the vanishing traditions of local village life in Eastern Turkey. In addition to this, because it would soon be inundated, a small report about a building known to local people as Arnavut Han was written. All four of these studies express the urgency to record the lives of those most disturbed by the construction of the dam. In the end, despite archaeology's intention to overlook the local, in the final Keban publications, it nevertheless appears repeatedly.

Information collected from local people assisted the archaeologists in their research. Clues were gathered from local villagers in order, for instance, to locate sites and interpret finds. During surveys, the foreigners were able to find many sites thanks to "information gleaned from the peasants." At Ağın, local informants told archaeologists about some wall remains and a rock-cut tomb. Potsherds found by villagers also helped

²⁰¹ I describe the ethno-history of this particular village in the conclusion.

²⁰² Silier, *Keban Köylerinde, Sosyo Ekonomik.* Keban was considered, at the time, the Turkish Republic's largest resettlement of internal migrants. Between the years 1968 and 1971, Silier from METU's Department of Economics and Statistics gathered data and provided answers to some questions related to resettlement problems and the adjustment of people to new environments. To collect this information, her team relied upon village inventories provided by the Ministry of Village Affairs and also selected more than 1000 heads of households to interview.

²⁰³ Yusuf Durul, "Baraj Gölü Çevresi Dokuma Sanatları," (Ankara: Orta Doğu Teknik Üniversitesi, Keban Projesi Yayınları, Seri II, Yay. 1, 1969). By carrying out an ethnography, Durul was hoping to answer some of the many questions related to carpet-weaving and handmade textiles, a tradition long established but not so well studied in Anatolia. He describes the techniques used for weaving, the rugs' motifs and offers some interpretations about their symbolism. He also suggests some ideas about the identification of different ethnic and social groups, their cultural interactions, based on carpet motifs and techniques.

²⁰⁴ Other studies of household and contemporary rural architecture were also undertaken as part of the

Cother studies of household and contemporary rural architecture were also undertaken as part of the KDRP by Peters W. Eckhart, Doğan Kuban, Ayla Alpöge Ödekan, Alpaslan Koyunlu and Ümit Serdaroğlu. Other ethnographic projects were carried out by Duygu Arisan Günay and Hamit Z. Koşay at Pulur. Erder, "Lessons Keban Experience."

²⁰⁵ Archaeologists "discovered the existence of a building on the Kemaliye-Ağın road on the west bank of the Firat, difficult to locate and known amongst the local people as Arnavut Han. The building had not attracted attention until the present time, and had not been investigated. Although it was not our field, in view of the fact that it would remain under water, and with the object of assisting future researchers we thought it useful to provide a description, together with a plan, cross-section and photographs." Ümit Serdaroğlu, "The Inn on the Ağın-Kemaliye Road, Arnavut Han," *Keban Project 1969 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 2, 1971), 145.

²⁰⁶ "These cemeteries were expected to be found in the vicinity of the mound. With this aim in mind, and in the light of personal conjectures and information gleaned from the peasants, various soundings were made in the fields and valleys about 150-200 metres from the mound towards the west, north-west, south and south-west." Hayri Ertem, "Han İbrahim Şah Excavations, 1971," *Keban Project 1971 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 4, 1974), 69.

²⁰⁷ "additional survey was conducted by us together with Mr. Richard Harper from British Institute of Archaeology in Ankara, in May 1968, in Ağın and its vicinity especially to find out a classical site. This

to find the exact location of a settlement. Alpöge writes how some "general information concerning the historical development and social formation of the villages was gleaned from conversations with the villagers."²⁰⁸ Furthermore, parallels were drawn between archaeological objects discovered and those used in nearby villages. A comb found in a site's deep levels was equated to a similar type used in the villages today. ²⁰⁹ Based on the use of a similar white soil to make pots and pans in the village today, the Bronze Age pottery from Pulur, Kosay concludes, must have been made locally 210 Ufuk Esin associates a hearth found at Tepecik with a local one she has seen people use.²¹¹ Some local inhabitants also told the archaeologists about the more recent history of their town Ağın.²¹² In this particular instance, however, where information is gathered orally and locally about the town, the researcher felt the need to verify the data with official written documents. The information provided by local people is doubted and only deemed credible after official verification. Local knowledge is trusted only to a certain point and did not always, for the archaeologists, constitute proper scientific knowledge.

Ufuk Esin, in the final site reports of Tepecik, describes a plant found during excavations called "gil-gil" by the locals:

"In grids 9-H, and 9-I, a rather, at this point, incompletely understood floor was discovered paved with stones. The stone floor was divided into four sections by canals cutting across this circular-shaped structure in the form of a cross. On the top of this stone floor was found remains of a plant referred to by the present-day villagers of Tepecik as "gil-gil". It is possible that this may be the base of a silo "213

The "gil-gil" plant is only mentioned as a curious side-note in the report, however. Placed in the site report among the description of architecture, the claim to discovery of the plant does not dominate the narrative. Rather, the reader learns about the squares (9-H, 9-I), the stone floor and the silo in which it was found. The plant constitutes another find the report needs to describe. It has become another piece of scientific data. The "gil-gil" plant constitutes a kind of local knowledge produced within the accepted system established by the archaeologists working at Keban. The plant, at the same time, also inadvertently

survey has indicated the existence of a considerably large valley settlement. The information given by the people from Ağın as to the existence of fragments of pottery in the fields, wall remains and a rock cut tomb has been a hint in the discovery of this settlement and in addition to what was told, a mound in the Kalecikler region and a necropolis where the valley meets, Karasu was found out." Serdaroğlu, "Ağın and Kalaycik Excavations, 1968," 43.

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²⁰⁸ Ayla Alpöge, "Anonymous Architecture in the Keban Region, 1969," Keban Project 1969 Activities (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 2, 1971), 136. ²⁰⁹ Ertem, "Han İbrahim Şah Excavations, 1971," 67.

²¹⁰ Kosay, "Pulur 1968 Report," 146.

²¹¹ "The northeastern part of residence C is in the shape of a kitchen (pl. 97). There is also a hearth here between the ovens. The hearth has two sections. Today in Cemisgezek and the surrounding villages this type of hearth is still in use. The two side sections of these hearths are used for boiling "bulgur"." Esin, "Tepecik Excavations, 1969," 125.

²¹² "The fact that modern Ağın was developed from a few housed settlement. Mezra 150 years ago as told by the people from Ağın, can be verified by official documents. As there is not any other settlement in the vicinity it can be concluded that after XI century AD Ağın did not have a large settlement." Serdaroğlu, "Ağın and Kalaycık Excavations, 1970," 49.

²¹³ Esin, "Tepecik Excavations, 1969," 124.

reveals the close collaboration between archaeologists and local people. Ufuk Esin uses a name to label the plant she probably heard from her workers. But, in the report, these exchanges and types of collaboration are not expanded upon. Who knows what else archaeologists learned from their local hosts? What other local knowledge has remained unpublished and thus excluded? The interaction between scientists and villagers only makes sporadic appearances in the report. When it does, it is made to fit into the scientific account of the excavations as another piece of data collected. The local lives and cultures of the Keban region are integrated into the scientific project but rarely considered as a subject on its own.

At Keban, the idea that modern observations could help the interpretation of ancient data was popular. But, it was the British team at Aşvan that applied this theory the most systematically. For the director David French, modern subjects furnished a model for tracing human activity in the past. Ancient practices could be extrapolated from modern ones through the archaeological record. Within this mindset, other scientists accompanied the archaeologists to not only, for instance, "rescue environmental data which will be lost when the Keban dam is completed" but also to study modern agriculture in order to create "a background from which an understanding of ancient practices can perhaps be extracted." Within this new archaeology programme, the local served as ethnographic comparison. Observations made in villages would be used to trace human activity in the past.

David Williams, for example, travelled to towns and visited regional markets in an effort to collect different agricultural implements. Almost 200 tools used for farming were measured and sketched; their names and prices recorded. First of all, Williams' work was a testament to these craft-made tools before their disappearance and replacement with factory-made products. Second of all, perhaps more importantly, he built a reference collection in order to compare modern technology with tools found in the archaeological record. In other words, his research would help to trace agricultural implements back in time. In the new archaeology programme, present-day information is only valued as potentially useful for studying the past. Local informants are not considered as subjects in their own rights. Local modern humans are made analogous to other present-day evidence such as plants, tools and architecture. They are seen as

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²¹⁴ "Simultaneously, a programme was initiated for the collection of modern reference data from the village itself; in particular much attention was given to village-houses, their construction and layout. The implements associated with these houses and the use by the villagers of various tools for agricultural purposes were also studied. This programme was initiated by the Aşvan team and will be continued by Mr. D. Williams... In all these aspects of our work, there is a deliberate attempt at extrapolation from modern to ancient practices." French et al., "Aşvan Excavations, 1970," 55.

²¹⁵ Ibid.. 55.

²¹⁶ "The study of agricultural technology in the Aşvan region should be seen both as an end in itself, recording craft-made tools before these are replaced by factory-made products, and as an integral part of the modern village economy and land use which serves as a model for tracing such human activity in the past through the archaeological record. Before making a systematic record of the tool types in use in Aşvan I built up a collection of comparative material. I traveled to market towns from Elazığ to Mersin, then East to Mardin and taking in Diyarbakır on the return journey, recording about one hundred and ninety tools by measured sketches noting the name and price of each. I made only a few drawings in Aşvan, but more will be made, with a complementary series of photographs, in 1972. The work was supported by a travel grant from the British Institute of Archaeology at Ankara." French et al., "Aşvan Excavations, 1971," 54.

making up part of the environment and nature to be studied. These subjects are understood as present-day "informants" used to learn about past environments. At Aşvan, the local was not studied for its own sake but only in an effort to build a model tracing activities and material culture back in the past.

If it never was the project's stated goal, a genuine interest and sense of urgency arose to study the local. Archaeologists show their concern for the fate of local people once the dam is built. But, this concern is only occasionally mentioned and could never be central to the scientific narrative. In the Keban region, the teams of scientists gleaned knowledge about sites and objects from local people. But, again, this kind of data collection remained marginal to the scientific expedition. In addition, if the location of a site known locally, for example, is given to archaeologists, in the end, the credit remains with the latter that will be said to have "discovered" it. Local people are never acknowledged in the publications for the information that leads archaeologists to make discoveries. The interest in local knowledge only went so far at Keban. Local informants provided data for the scientific project but did not constitute a research project of their own. Locals, in other words, are never described as collaborators. The local was recognized when it helped the larger scientific goals of the salvage excavations. The collaboration between locals and scientists, as the "gil-gil" plant illustrated, existed, but only to a certain extent. A closer interaction with local people would have informed archaeologists of the region's more recent past. Instead, as in the new archaeology programme at Asvan, the local was deemed useful only as a first step to reconstruct the region's most ancient past. The activities, lives, culture, stories, in the end, if not entirely excluded, always remained secondary, or marginal, compared to the higher quest of scientific archaeology.

The Keban Dam itself

Ironically, the one major local story systematically excluded from the *METU Keban Project Publications* is the dam itself. If the Keban Dam caused the destruction of many ancient sites, it also allowed archaeologists to study at least some of them. But, the dam is rarely acknowledged as such in the final reports. The dam itself --the reason why so many ancient sites were to be destroyed and why archaeologists were in the region excavating them in the first place-- is revealed only sporadically in the final report. The profound changes its construction brought to the region are only alluded to but never made explicit. Like the agency of archaeologists, the labor of local workmen or the lives of villagers, the dam, if not entirely excluded, is placed to the sidelines of the scientific accounts. Archaeologists mention in passing its existence only in a few instances. Hamit Koşay and Refik Duru do write how their respective sites will be completely inundated after the dam is built.²¹⁷ The Aşvan team only mentions the dam indirectly and in

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²¹⁷ "As Pulur mound, like several others, will be completely submerged once the Keban reservoir is opened, there can be no question of preserving the architectural remains as an ancient monument. It was therefore deemed best to remove the architectural levels one by one until the original soil was reached." Koşay, "Pulur (Sakyol) Excavations, 1969," 104. "Unfortunately, however, heavy precipitation in the winter months of 1974 caused the lake area to begin to fill in the summer months of 1974 so that Değirmentepe was the first excavated site in Altınova to be flooded." Duru, "Değirmentepe Höyük Excavation, 1973," 19.

parentheses: "(The maximum height of the backup lake will be 845 m. above sea level)." The scientific mission of archaeology, it might seem from reading the report, is not to be affected by this "elephant in the room." The Keban publications, perhaps not deliberately, detach the archaeology from this new and radical construction project. The site reports dissociate the scientific excavations from the dam. Unintentionally, the *METU Keban Project Publications* has the effect of severing the modern and destructive aspect of the dam from the process of producing knowledge.

The Keban Dam caused dramatic changes and had life-changing consequences for the region. The fate of the local after the waters were to submerge their villages appears again only on the sides of the final reports. The structure's negative effects are not, to say the least, elaborated upon in the Keban publications. The large reservoir and the dam's destructive power remains hidden, not completely forgotten, in archaeology's scientific accounts. For example, a few pages of the *METU Keban Project Publications* focus on a mill located at Ağmezra. This study was approved by the Executive Committee as part of its efforts to study the local culture of a region doomed to disappear. It describes the architecture of the mill and the way it functioned. It does not, however, expand upon the people who lived there. The fate of the building is of concern to the team of scientists studying it:

"Another factor that shortened the life of the building was undoubtedly the Keban Dam project. After it was learned that it was to be submerged by the waters of the Keban reservoir the building was partially abandoned. The roof began to leak, the plaster fell off, the windows broke and were never repaired." ²¹⁹

In this passage, the Keban Dam --a symbol of Turkey's modernization-- a large structure mastering the water of the Euphrates to provide electricity is replacing the traditional mill. Because people have had to leave the region before the creation of the Keban reservoir, the mill has now been abandoned with only the minimum work done to keep the structure on its feet.²²⁰ A new mill, Koyunlu explains, has even replaced the old one:

"This state of affairs continued until a new mill planned at the entrance to Alişam Köy was erected and put into operation. The new mill was equipped with machinery of French manufacture driven by diesel motors, and was laid out in accordance with the most up-to-date industrial practice... introduced electricity to the district... thus reducing interest in the mills of the old type."

The replacement of the old type of mills for new ones takes place within the larger history of Turkey's development politics.²²² It is a manifestation of the mechanization of agricultural lands, search for higher profits and modernization of the rural landscape. The old mill corresponds to a world that is disappearing. Economic changes are profoundly affecting the way people live their lives. The profound changes are alluded to in this short

²¹⁸ French, "1968 Aşvan Excavations Preliminary Report," 57.

²¹⁹ Alpaslan Koyunlu, "A Mill in the Village of Ağmezra in the Province of Elazığ, Its Construction and Structural Characteristics," *Keban Project 1973 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 6, 1979), 152.

²²⁰ "In recent years, in view of the likelihood of their having to leave the district, the owners contended themselves with merely propping it up." Ibid., 153.

²²¹ Ibid.

²²² "The examination of the socio-economic effects of there being no other mill in this part of the plain could form the subject of a completely separate study." Ibid., 151.

report of the mill but are never treated in-depth. The fact that these mills are disappearing makes up an interesting topic to explore. But, it will not be done in the Keban reports, or rather, only as a side-note. It does reveal, however, the types of changes local people were going through before the construction of the dam.

Another example which testifies to these deep social and economic transformations in the region can be found in the report on the Arnavut Han mentioned previously. What Koyunlu knows about this building that was used as a resting place is relatively little. The Han building lost its importance and was eventually abandoned after caravan travelers stopped spending the night there. It had been, in fact, the victim of larger economic changes affecting the region. The profound changes affecting the region are symbolized by motor vehicles taking over caravans:

"It is clear from the remains inside that the building has been used recently by shepherds as a sheepfold. After motor vehicles took the place of caravans both halting places in general and the kind of inn found here in particular lost their former importance, and the ones situated on the roads in the countryside especially, were abandoned." ²²³

The profound changes affecting the region is a subject alluded to but never discussed thoroughly as in the last passage. Another final example illustrates this point again. In the final reports of the Keban project, a short article recounts the story of a house built by Mustafa Usta of Kesirlik, a local man from the region. In this account, understated at most, there is an indication of the dramatic changes the inhabitants of the region had to go through:

"Money was saved in order to build a room and a "hayat" on top of the additional section, but with the advent of the dam this project was abandoned." ²²⁴

The text, again, exemplifies some of the points raised in this chapter. It shows the concern archaeologists had for the local, in this case the house and lives of a family. It also indicates some of the negative effects the construction of the Keban Dam had on local people. This passage reveals how one project had to be abandoned; one project among the many other "projects of others." The story of Mustafa's house was one selected among many other houses or lives in the region by the scientists. It is representative of the thousands of other stories of people who have also lost their home because of the dam. When the Keban dam was finally built, the lives of the local people were profoundly affected in ways. The scientific report, however, only mentions these in passing, on the margins of the scientific narrative about the past of the region.

Conclusion

When archaeologists came to Keban, they did not carry out their excavations and lives in a pristine environment where only the ancient relics of the past lay waiting to be discovered. Surrounding them were local people with their lives and occupations. On the one hand, the local, as I have shown, is sometimes depicted as directly opposed to archaeology's object of research. In addition, their contribution to the project as labor is almost completely left out. On the other hand, the scientists felt a genuine concern for the

²²³ Serdaroğlu, "The Inn Arnavut Han," 145.

²²⁴ Alpöge, "Anonymous Architecture 1969," 136-7.

fate of their local neighbors. The local was sometimes taken as an object of research. But, archaeologists seemed to have been interested in it primarily as ethnographic comparison to study the more ancient past. In the scientific reports, the local was never presented as a research topic on its own. It was always made to fit within the larger scientific goals of archaeology. Throughout this process of knowledge production, the local is excluded from archaeological science but never becomes completely invisible. The local was not part of the scientific project and thus the reports tend to marginalize or look past it. Nonetheless, the archaeologists engaged in work in this area were indeed affected by their encounters with the local. These effects make surprising appearances in odd places in the reports themselves. Though the scientific project does not permit the intrusion of the local, it is impossible to keep it out as it infiltrates the supposedly pristine laboratory that archaeology tries so hard to create.

CONCLUSION

Prelude

The Pertek Kalesi (Pertek Castle) was once perched high on a mountain peak overlooking the Euphrates river valley in Eastern Turkey. No longer towering over the landscape, it now drifts like a solitary raft in the middle of an ocean. (Fig. 9) The Keban Dam submerged the once thriving town of Pertek in 1974 leaving its citadel as the only remaining vestige of a more glorious past. Against the profit-driven logic of hydroelectric power plants and Turkey's rising energy needs, the ancient fortress did not stand a chance. As in similar cases around the world, the economic potential of ruins did not add up to the millions of watts produced by a dam. Today, the best view of the ancient site is enjoyed from the ferryboat that carries vehicles across the new lake from the bustling, modern city of Elazığ. Very few travelers, however, are aware of the history of Pertek Castle or of the numerous other ancient sites and sunken villages under their feet. Located at a lower altitude, these endured a different fate than the Pertek Kalesi. While old Pertek's houses, mosques and churches have all been destroyed, its castle is now the only part of the old city which remains visible in the landscape. Turkey's "east" is replete with immersed narratives such as this one which, for various political reasons, have not left their imprint in the customary historical record.

In this conclusion, I will not expand much on the history of the Pertek Kalesi itself. 225 Instead, I am interested in the ruin's cultural afterlife, in other words, what it stands for today. I will use the citadel as a metaphor for the scientific process of archaeology itself. The rescue project, as I have shown in my research, allowed certain kinds of evidence, objects, stories and topics to be selected and made visible while others were, if not completely invisible, placed to the sidelines, submerged. The Keban Dam has, by surrounding the Pertek Kalesi with water, made it stand out on its own in the middle of the lake. On the one hand, the reservoir has destroyed many archaeological sites in the upstream valleys. On the other hand, it has also demarcated the fortress by itself on an island. In other words, while some monuments have been rendered invisible by the dam's waters, the castle remains as the only visible element of the region's cultural heritage. The citadel only represents a small fraction of the quantity of submerged towns, sites and stories, however. Like the scientific process of archaeology where only a small percentage of the material culture of the past can be recorded and studied, the citadel also represents a minute portion of the region's entire cultural heritage. Today, it serves as a reminder of all of the things destroyed. In the scientific accounts of the KDRP, one of these submerged, almost completely forgotten, villages makes a final unexpected appearance. I conclude the dissertation by bringing back to the surface the story of Munzuroğlu. Found in the margins of the voluminous METU Keban Project Publications, it is indicative of the larger social and political implications of large dam construction in Eastern Turkey.

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²²⁵ Murat Erdim, "The Castle of Eski Pertek, Tunceli" (Master's thesis, Middle East Technical University, 1970).

Keban's Scientific Laboratories of Archaeology

Beginning in 1966, archaeologists and other scientists carried out surveys and excavations in an effort to protect and document the cultural heritage of the Keban region. The Keban Dam Rescue Project (KDRP) was set up in order to learn about Eastern Turkey's ancient past and record some of its monuments and sites. Despite skepticism from the archaeological community at the start of the project, the salvage excavations are considered today a success. In fact, they have taught archaeologists a great deal about the history and prehistory of a region now underwater. As part of the efforts, two Ottoman mosques and one Byzantine bridge were dismantled and transferred to safer locations. The KDRP also gave a young generation of scholars their first field experience and allowed them to experiment with new methods and techniques. The close collaboration between teams facilitated exchanges of ideas on ways to recover and document a landscape doomed by the dam. Geomagnetic surveys, computers, the grid system, water-sieving, radiocarbon dating, etc. such techniques were, for the first time in Turkey, being used in a systematic manner to produce and organize new kinds of data. The rescue project not only brought scientists from different countries together but researchers with different interests for more comprehensive investigations. Alongside excavations, projects in palaeobotany and archaeozoology, ethnographic fieldwork, studies of the region's socio-economics and architecture, were also carried out. Thus, during seven years, archaeologists and other scientists worked in collaboration to study Keban's rich but threatened cultural heritage. For these reasons, the international and multidisciplinary rescue project is perceived today as a turning point for Turkish archaeology.

I have not chosen, however, to retrace the history of the KDRP only to repeat the achievements accomplished by its archaeologists. Instead, what I am interested in are questions epistemological in nature. The rescue project brought scholars of several disciplines together to document a landscape and record a past soon to be destroyed in a relatively limited amount of time. How did these scientists (archaeologists, architects, ethnographers, etc.) identify their objects of research in the landscape? What were the criteria used to assign particular values to them? What type of data was emphasized and what type was ignored? What choices were made to save certain artifacts while forgetting others? At first, the salvage excavations seem to mark a rather unstable moment within the history of Turkish archaeology. If teams interacted in the field guite harmoniously to exchange ideas, different theoretical paradigms were, in fact, operating side-by-side. The salvage excavations epitomize some of the theoretical trends present in the discipline of archaeology in the late 1960s. But, an attempt to categorize the archaeological teams according to their theoretical inclinations has proven tricky, to say the least. Boundaries between schools of thought were more fluid than we would expect at first. Rather than espousing clearly delineated theoretical outlooks, the excavations, in the end, all held one thing in common. Despite superficial differences, archaeologists at Keban shared a similar vision of how to study the landscape, people, cultures and history of the Keban region. They all operated under the assumption that archaeological knowledge about history and prehistory should be produced in an organized and systematic manner. In other words, excavations were to be run in what archaeologists considered the most objective and scientific way. The archaeological teams of the KDRP all used specific techniques to collect and organize data and carry out their excavations methodically and rigorously -- in essence scientifically.

A wide array of practices, which go beyond the simple act of "digging," constitutes the techniques of archaeology. A diverse range of rational acts and calculated strategies --archaeology's technology-- organize the discipline's outdoor excavations. The grid, one specific technique among others, helps archaeologists to establish the scientific laboratory of archaeology. It allows them to locate objects and organize finds systematically. Techniques are employed to carry out the field experiment of archaeology and, in addition, help to define its object of research. But, as scientific laboratories emerge from the ground, different forms of inclusion and exclusion simultaneously occur. Performing the scientific experiment of archaeology entails at least three epistemic breaks. Archaeologists first need to define which remains in the surrounding nature are cultural or human-made. A decision is then taken in the field on what constitutes the present and the past. Objects that seem too recent are not worth studying. Finally, local stories, lives, people need to be separated from the universal grand narrative of human history that archaeologists investigate. By making these distinctions, archaeologists define their object of research as belonging to the universal cultural past of humanity. While this might include many things, the production of archaeological knowledge also involves the marginalization of other potential research topics. Other narratives, histories, pasts, facts, evidence, data are, as in any other process of knowledge production, excluded. As certain choices are made by archaeologists on what to study, document and preserve, other things, by necessity, become, if not completely ignored, placed to the sidelines.

Covering the seasons from 1968 to 1974-5, the seven-volume METU Keban Project Publications were published between the years 1970 and 1982. In them, the archaeological teams of Keban presented preliminary accounts of their season's activities and results. Most of what we know about Keban can be found in these archaeological site reports. The Keban volumes are made up of minute and detailed descriptions, dry and monotonous texts sometimes written in a convoluted language. Archaeologists use a specific scientific language to "lay claims to finds and discoveries." Normally, first person pronouns are absent from archaeological texts. The use of the passive voice (e.g. a wall was unearthed) also conceals the agency of the archaeologists and workmen behind the excavation process. Site reports are also full of visuals, illustrations, photographs, drawings and detailed plans. These images in the reports allow the larger archaeological community to visually "witness" the scientific field experiment. But, photography, for instance, captures the end result and not the messy process of excavations itself. In fact, a sharp contrast exists between the messy and dirty on-site excavations and their purified and orderly version in the reports. In them, knowledge about a site is placed to the foreground while the conditions of its production are placed to the sidelines. In other words, as archaeologists make their discoveries visible to the world, they simultaneously make themselves invisible. It is this double process of visibility-invisibility that I explore in this dissertation. The scientific accounts of excavations only present a sanitized version of the archaeological work. Texts and images, by displaying archaeology's purified "working objects," strengthen the text's objectivity and, in a way, "take the dirt out" of the final reports.

Ethno-History at Munzuroğlu (1972-1974)

In order to re-emphasize this last point, I will introduce one last example; one final story submerged on the sidelines of archaeological science. In the early 1970s, the local population slowly abandoned the villages of the valleys and plains upstream from the Keban Dam. Situated southeast of Keban, the houses and lands of Munzuroğlu were finally inundated by the waters of the dam in 1975. (Fig. 10) Once located in the fertile Altınova, 226 the village was composed of about 45 dwellings and its economy based primarily on agriculture. The Istanbul University team working at the archaeological site of Tepecik first came to Munzuroğlu in 1968. The archaeologists established their headquarters in the village itself and spent their summer months there until 1974. The team took part in the life of the village for seven years. Ufuk Esin, head of the expedition, explains that Munzuroğlu, in fact, had become "their" village. 227 In the METU Keban *Project Publications*, it is written that the members of the expedition became very much affected by the sight of Munzuroğlu slowly abandoned and destroyed. In addition, somewhat hidden in the 1972 METU report, a short report appeared on the more recent history of the village. 228 In Alpaslan Koyunlu's ethnography, the reader, in a way, "witnesses" the last days of Munzuroğlu about to be submerged. Even though it was known that their village would soon disappear, houses were still being repaired and new buildings continued to be built even as the waters began to rise. 229 After the gates of the Keban Dam were closed in April 1974, the flooding of the plain started, and the level of the water rapidly rose.

"In spring 1974 the waters of the reservoir began to rise much more rapidly than had been expected, and when the team arrived at the village in May to carry out archaeological researches they found a deserted village with only five families still in residence." ²³⁰

Approximately one year later, on May 15th, 1975, all of Munzuroğlu had been submerged.

Besides allowing the larger archaeological community to witness the last days of the village, Koyunlu also gives an account of its history. Munzuroğlu was inhabited by Armenians in the 19th century. Ömer Coşkun, a man over one hundred years old but possessing an extremely good memory, did not remember hearing his elders talking about

 ²²⁶ Before the construction of the Keban Dam, the golden color of its wheat fields gave the fertile Altınova (Golden Plain in English) its name.
 ²²⁷ Ufuk Esin, "Tepecik Excavations, 1974," *Keban Project 1974-1975 Activities* (Ankara: Middle East

²²⁷ Ufuk Esin, "Tepecik Excavations, 1974," *Keban Project 1974-1975 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 7, 1982), 95-118.
²²⁸ Koyunlu, "Village Settlement of Munzuroğlu," 249-265 and ""Agha Konak" in Munzuroğlu," 273-278.

²²⁹ "As Munzuroğlu is located on high ground this operation was carried out slowly over a quite considerable period, and was not confined merely to household effects. Parts of the building themselves, if light and solid enough to be portable, were dismantled and carried off, and even the mudbricks from the walls were sometimes removed and loaded on to carts." Ibid., 273. Also see Ibid., 250.

An account by Lukas Inciyan printed in Venice in 1804 testifies to this Armenian presence. Ibid.

Armenians living in the village, however.²³² At the time of the ethnography, no memories seemed to have remained of the period preceding the founding of the Turkish Republic. After Armenians left the village, Koyunlu explains, Sunni Muslim Turkish and Kurdishspeaking families settled there. Some villagers in their late 60s did remember the abandoned houses when they moved to the village in the early part of the 20th century. At that time, the village and its lands became the private property of an agha family called Cöteli Beyleri. These landlords also controlled the tenant farmers living in Munzuroğlu. In the 1940s, in order to settle debts, the family had to hand over their property to the State. After only one generation, the village was sold to another agha family. The Zaimoğlu, who purchased its lands, brought in Zaza-speaking families from the Maden area to work as agricultural laborers. In 1945, the 'Law for the Distribution of Farming Land' was passed in Ankara to prevent the high number of absentee landlords. Because of this new legislation, the new owners were forced to build their own house in the village. It is the Zaimoğlu family who owned the village when archaeological excavations at Tepecik began as part of the KDRP and when, in 1974, it dissappeared underwater.

The ethnographic account also provides the reader with invaluable information about the economic and social conditions of villages in the Keban region at the time of the KDRP. The architect turned ethnographer describes how out of the 3450 acres of land belonging to Munzuroğlu, 3000 acres were owned by one person, 375 acres were owned by five people and 75 acres were common land. 233 Only three houses, two belonging to the Zaimoğlu family and one to the worker's headman, were recorded in the national land register. When the Turkish government came to compensate the inhabitants of the region for their losses due to the dam, the landlord class was able to receive money for their inventoried houses and registered lands. Over 80% of the families living in the zones affected by the Keban Dam were landless peasants forced to relocate without any substantial financial assistance. The Keban Dam affected more than 30,000 people and destroyed at least 212 villages.²³⁴ Under its waters, villages like Munzuroğlu have now long disappeared. Villagers have moved to nearby Elazig, relocated further away to Istanbul or tried their luck abroad in countries such as Germany. Their children have only heard stories about their parents' village that are now underwater. And, had it not been for a short ethnography carried out by the Istanbul University team as part of the KDRP, Munzuroğlu would have left no other traces and been long forgotten.

Conclusion

The rescue project brought a community of scientists together in order to produce knowledge about the past of a region. This group of scholars possessed a specific scientific language and vision to help them rescue and document objects as well as record and study sites. Science, archaeological or not, facilitates the production of knowledge while favoring some narratives over others. At Keban, archaeologists privileged the topics of interest to the community they belonged to and marginalized, if not entirely

²³² Ibid., 251

²³³ Ibid., 263

²³⁴ Ibid., 250

excluded, other kinds of objects, evidence, sites and histories. Questions pertaining to the region's place within Mesopotamian and Anatolian prehistory, for instance, were emphasized over the more recent past. The local, for example, never constituted an appropriate object of study. Nevertheless, like the village of Munzuroğlu, local lives, stories, villages, people, workmen, make unforeseen entrances on stage. Archaeologists, despite their attempts at isolation, can never completely cut themselves off from the environment in which they work. Unwanted traces of local people and objects make unexpected appearances, for instance, in the final site reports. On rare occasions, unanticipated topics manifest themselves in the publications of archaeology. Koyunlu's account, which I have described above, constitutes one of these instances where modern history and contemporary social problems suddenly become objects of inquiry. By selecting Munzuroğlu, a story representative of many other villages in the Keban region, my research brings to the center of the stage some of the political issues behind dam construction and rescue archaeology in Eastern Turkey.

Almost forty years after the dam's construction, local people have almost no recollection of the Keban Dam Rescue Project. Whereas the Keban Dam itself has become a familiar presence to which the population has grown accustomed, the largest rescue program of its time in Turkey initiated there in the late 1960s has become completely overlooked. The older generation, present at the time, can remember the foreign engineers who lived at Keban during the building of the dam, but not the archaeologists who came to excavate the nearby threatened sites. Today, the Elazığ museum where the majority of the Keban project's finds has been stored is closed. In the process of being "reorganized," it does not seem as if it will reopen anytime soon. Furthermore, the METU Keban Project Publications, which I have accessed myself in libraries in Istanbul and Ankara, are not easily available in this region of Eastern Turkey. Local residents are not even aware of these publications. In other words, four decades after its implementation, the KDRP seems to have already been forgotten at the local level despite the prominence with which it is recognized in Turkish archaeology.

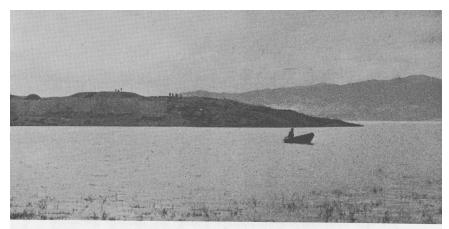
My dissertation brings back to the surface some of the stories behind these particular salvage excavations. It places in the foreground some of the narratives that, if not completely erased, have been left in the margins of science. By carefully sieving through the "gray literature" of the KDRP, I have tracked down the stories sidelined from the scientific process. I have drawn upon a set of unconventional data located in the footnotes of texts, margins of photographs, outer limits of scientific laboratories to make a region's inundated past emerge once again above the surface. Information supposedly excluded from the scientific process can be retrieved if viewed from a different perspective, perhaps from a "biased" or "situated" standpoint. But, this subjective positioning should not be frowned upon. Rather, it ought to be celebrated for the different vision it gives of science, and more specifically of archaeology.

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²³⁵ Murat Şimşek, pers. comm., June 2009

²³⁶ Elazığ Museum Director, pers. comm., July 2009.

Figures



Korucutepe ada haline geldiği sırada çalışılırken höyük ile kara arasındaki ulaşımı sağlayan motor

Motorboat used for travel between mound and mainland after mound had become an island

Fig. 1 Hayri Ertem's team travels to the site of Korucutepe using a motorboat on the Keban Dam reservoir (courtesy of METU, Ertem, "Korucutepe Excavations 1974-5," plate 5,1.)

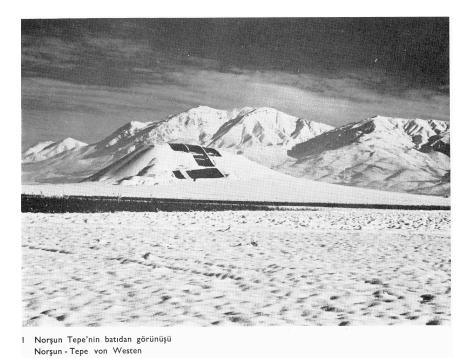


Fig. 2 Squares excavated from the grid by the German team at Norşuntepe under winter snow. (Courtesy of METU, Harald Hauptmann, "Die Grabungen auf Dem Norşun-Tepe, 1973," *Keban Project 1973 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 6, 1979), plate 16.)

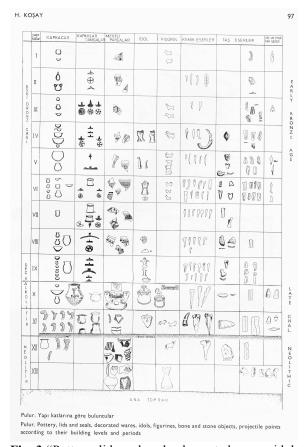


Fig. 3 "Pottery, lids and seals, decorated wares, idols, figurines, bone and stone objects, projectile points" in columns "according to their building levels and periods." (Courtesy of METU, Koşay, "Pulur (Sakyol) Excavations, 1970," plate 97.)

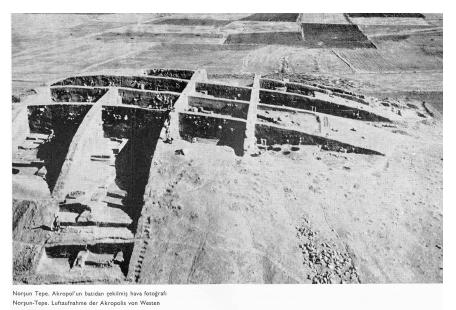


Fig. 4 A local workmen is captured by the camera in between two clearly delineated squares which make up part of the scientific laboratory of archaeology (Courtesy of METU, Harald Hauptmann, "Die

Grabungen auf Dem Norşun-Tepe, 1971," *Keban Project 1971 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 4, 1974), plate 68.)

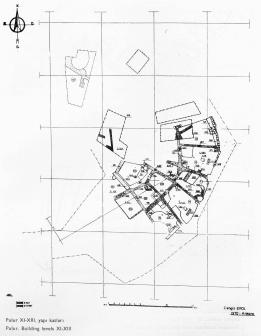


Fig. 5 Lines of a "grid" superimposed on plan of site excavated using "trenching" techniques. (Courtesy of METU, Koşay, "Pulur (Sakyol) Excavations, 1970," plate 95.)

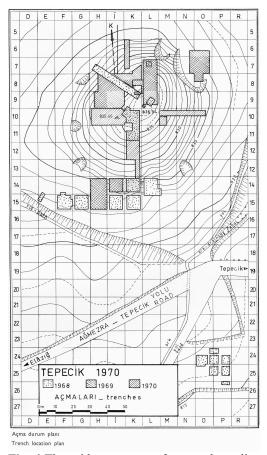
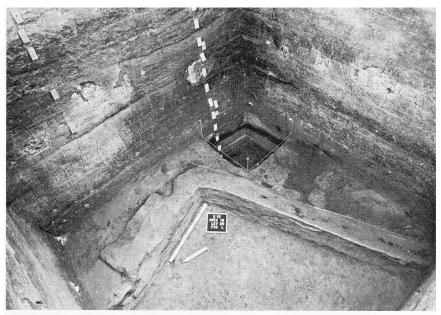


Fig. 6 The grid system transforms a three-dimensional landscape into a two-dimensional image. (Courtesy of METU, Esin, "Tepecik Excavations, 1970." plate 99.)



Fig. 7 The "hearths" were photographed and published in the Pulur reports. The results displayed are stylized shots of excavation squares with absolutely no people in them. Objects from the ground are

presented as spotless and orderly in the final scientific accounts. (Courtesy of METU, Koşay, "Pulur (Sakyol) Excavations, 1969," plate 76.)

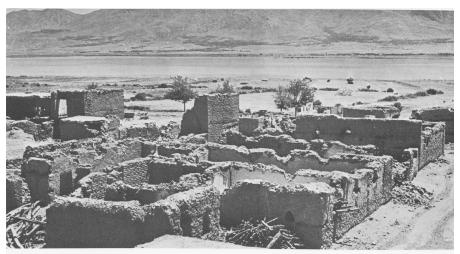


I Korucutepe. İlk Kalkolitik Çağ'a ait evin duvarları ve tabanı, aşağı yukarı M.Ö. 4500-4000 Walls and floor of Early Chalcolithic house at Korucutepe, about 4500-4000 B.C.

Fig. 8 Placed in the frame of the photograph, the ruler, compass and board transform a picture into a scientific record which can later be catalogued, compared and analyzed. (Courtesy of METU, Maurits van Loon, and Hans G. Güterbock, "Korucutepe Excavations, 1970," *Keban Project 1970 Activities* (Ankara: Middle East Technical University Keban Project Publications, Series I, No. 3, 1972), plate 54.)



Fig. 9 The Pertek Castle, surrounded by the waters of the Keban Dam reservoir, now drifts like a solitary raft. (Photograph taken by the author in July 2009)



3 Terkedilen ve yıkılan köy, arkada oluşan göl
The village, abandoned and in ruins, in backround, reservoir in formation

Fig. 10 Abandoned houses of Munzuroğlu in 1974 later inundated by the waters (which can be seen in the background) of the Keban Dam in 1975. (Courtesy of METU, Esin, "Tepecik Excavations, 1974," plate 140.)

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