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ASPECTS OF RELIGIOUS ADMINISTRATION IN THE HITTITE LATE NEW KINGDOM

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This work is dedicated to Sarah,
who watched the kids all those times I sat in a coffee shop writing.

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TABLE OF CONTENTS

LIST OF TABLES	ix
LIST OF FIGURES	xi
INTRODUCTION	1
1 PREVIOUS MODELS OF THE HITTITE STATE	4
1.1 Early Western Consensus (Culture-Historical)	6
1.2 Goetze: the Ethnogenesis of the Hittite State	7
1.3 Soviet Marxist Criticism (Historic-Materialist)	13
1.4 Struve: The Paradox of “Oriental Stagnation”	15
1.5 Diakonoff: the “Two-Sector” Model	18
1.6 Western Reaction	24
1.7 The Italian School	28
1.8 Liverani: a Strongly Dichotomous Two-Sector Model	29
1.9 Zaccagnini: the Neo-”Asiatic Mode of Production” Model	32
1.10 Neo-Marxism and the “New Humanities”	35
1.11 New Western Consensus	39
1.12 The End of Feudalism	39
1.13 Archi: the Palace Network Model	45
1.14 The Palace-Temple Synthesis	50
2 CURRENT MODELS OF THE HITTITE STATE	54
2.1 ENVIRONMENT: <i>Forschungsgeschichte</i>	55
2.2 ENVIRONMENT: Geography of the Anatolian Plateau	57
2.3 ENVIRONMENT: Subsistence on the Anatolian Plateau	60

2.4	ENVIRONMENT: Communal Self-Sufficiency	62
2.5	POLITICAL INTEGRATION: State Intervention	67
2.6	POLITICAL INTEGRATION: Anatolian Regionalism.....	73
2.7	POLITICAL INTEGRATION: Anatolian Resistance.....	80
2.8	REDISTRIBUTION: Wealth Finance, Staple Finance, and Mesopotamian Influence on the Hittite State	84
2.9	Conclusions and Future Research.....	91
3	PHILOLOGICAL INTRODUCTION TO THE KASKAL SERIES	98
3.1	Structure of the KASKAL Series.....	99
3.2	Defining the Corpus.....	104
3.3	The Main Text: Siegelová A-K.....	107
3.4	Variation in the Main Text: Systemic Differences	109
3.5	Variation in the Main Text: Particular Differences	118
3.6	Editorial Layers in the KASKAL Series.....	134
3.7	Conclusions on Structure	138
4	CONTENTS OF THE KASKAL MAIN TEXT.....	143
4.1	Reconstructing the Goods of the KASKAL Main Text.....	145
4.2	Tabulation of Durable Goods.....	146
4.3	Estimated Original Contents of Durable Goods Tablet	153
4.4	Tabulation of Textiles	158
4.5	Estimated Original Contents of Textiles Tablet.....	172
5	RELATIVE VALUE OF THE KASKAL MAIN TEXT	174
5.1	Gifts in the Egyptian-Hittite Correspondences	175

5.2	Tribute from Hittite Vassals.....	186
5.2.1	Ugarit	186
5.2.2	Amurru.....	198
5.3	Comparative Magnitude of the KASKAL Main Text	199
6	THE HITTITE VOW CORPUS	204
6.1	Dating Criteria of Vows in Detail.....	209
6.2	Using the Vows as Economic Documents	221
6.3	Vows Concerning Health and Wellness	224
6.4	Vows Concerning Military Matters	236
6.5	Vows Concerning Dreams and Omens	245
6.6	Vows against Calamity	248
6.7	Vows for Good Tidings	250
6.8	Vows for Political Matters	252
6.9	Unconditional Vows	254
6.10	Vows with Damaged or Lost Conditions.....	255
6.11	Vows of Tudhaliya.....	259
6.12	Vow Fulfillment in Practice.....	262
6.13	Average Value and Significance of the Vow Objects	268
6.14	Reconstructing a Schedule of Vows in the Reign of Hattusili and Puduhepa	273
6.15	Source and Destination of the Votive Objects.....	275
6.16	Conclusions on the Votive Corpus	278
6.17	The Votive Texts and the KASKAL Series.....	280
7	CONCLUSION.....	282

A	THE ETERNAL TREATY DOSSIER: The 21 st year of Ramses II.....	285
B	HITTITE-EGYPTIAN ROYAL MARRIAGE: The 34 th year of Ramses II	290
C	CONCORDANCE OF REFERENCED TEXTS.....	296
	BIBLIOGRAPHY.....	297

LIST OF TABLES

1	Durable Goods in KUB 42.11 (Siegelová 10.A)	146
2	Durable Goods in KUB 42.14 (Siegelová 10.D)	153
3	Durable Goods and Textiles in KUB 42.16(+)IBoT 3.110 (Siegelová 10.E and 10.Ea).160	
4	Durable Goods and Textiles in KBo 18.175(+) (Siegelová F(+)G(+)H).....	166
5	Textiles in KUB 42.17 (Siegelová 10.G).....	170
6	Textiles in KUB 42.15 (Siegelová 10.H).....	171
7	The Eternal Treaty Dossier (Letters from the 21 st year of Ramses II).....	176
8	The First Hittite-Egyptian Royal Marriage (Letters from the 34 th year of Ramses II)	182
9	Edict of Suppiluliuma I concerning Tribute of Ugarit (CTH 47)	191
10	(Revised) Inventory of Ugaritic Tribute (CTH 48).....	193
11	Minor Gifts (Puduhepa for Hattusili).....	225
12	Major Gifts (Precious Metals)	229
13	Major Gifts (Festivals and Rituals).....	231
14	Major Gifts (People and Settlements).....	232
15	Other Illness Vows by Puduhepa.....	233
16	Puduhepa for Others	234
17	Hattusili for Puduhepa	235
18	Military Vows by Puduhepa (Arzawa)	238
19	Military Vows by Hattusili (Arzawa)	240
20	Military Vows by Puduhepa (Northern Campaign).....	241
21	Military Vows by Puduhepa (Northern Campaign).....	242
22	Military Vows Mentioning Tudhaliya (Puduhepa).....	243

23	Other Military Vows of Puduhepa.....	244
24	Vows Concerning Dreams and Omens (Puduhepa).....	246
25	Vows Concerning Dreams and Omens (Hattusili).....	247
26	Vows Concerning Calamity (Puduhepa)	248
27	Vows Concerning Calamity (Hattusili)	250
28	Vows for Good Tidings (Puduhepa).....	251
29	Vows for Good Tidings (Hattusili).....	251
30	Vows for Political Matters (Hattusili).....	254
31	Unconditional Vows	255
32	Vows with Damaged or Lost Conditions.....	256
33	Personal Vows of Tudhaliya.....	260
34	Assyrian Campaign of Tudhaliya	261
35	Object Weights in Minor Vows	270

LIST OF FIGURES

1	Relationship of KASKAL Main Text Witnesses (from Siegelová, <i>Hethitische Verwaltungspraxis</i> , 394).....	135
2	Relationship of Tablets E and F(+)G(+)H	160
3	Join Schematic for Tablet F(+)G(+)H	164
4	Handcopy of 105/c, A + 105/c, E+F	165
5	Comparison of Gold in KASKAL Main Text, Gifts, and Tribute	200
6	Comparison of Textiles in KASKAL Main Text, Gifts, and Tribute	201

INTRODUCTION

The title of this dissertation is “Aspects of Religious Administration in the Hittite Late New Kingdom.” I wish it could simply be “Hittite Administration,” but that book is not ready to be written, thus the compromised title of the present work. The time period of the philological portion of this dissertation is the Late New Kingdom, that is the reigns of Hattusili III and Tudhaliya IV (ca. 1269-1209 B.C.), because this is the span to which most, if not all, of the administrative records preserved in the Hittite corpus are confined. It is generally assumed that the narrow chronological distribution resulted from the regular attrition of short-term records, which is probably correct, though one may wonder if the Late New Kingdom was more bureaucratic than previous eras. The “Religious” adjective in the dissertation’s title is because, as will be seen, expenditures within the religious domain constituted the vast majority of recorded Hittite administrative activity. Finally, the titular “Aspects” are a concession that I was able to only analyze only part of the administrative corpus in the present work. The remaining corpora, discussed at the end of Chapter 2, await further study.

Since the beginning of studies in the post-war period, scholars of Hittite administration have been confronted by a basic problem: that Hittite bureaucracy looks very different from its Ancient Near Eastern contemporaries. Previous solutions offered that the Hittite administrative corpus is incompletely preserved, and/or that the Hittite government only partially adopted Mesopotamian administrative practices (being held back by, i.a.: cultural feudalism, non-integrated elites, the environment, or unnatural urbanism on the Anatolian Plateau). The incomplete corpus hypothesis argues that a considerable portion of Hittite administration was written on the perishable medium of wooden tablets, but so far the philological situation of the wooden records is inconclusive (see Section 2.9 below). It is one of the major *raison d’être* of

my dissertation to address the question of the wooden tablets, by offering evidence that the preserved cuneiform administration was sufficient to maintain a state the size of the Hittite Empire, so that no “shadow administration on wood” need be presumed. The arguments for the second solution to the problem of Hittite administration, the partial adoption of Mesopotamian administrative practices, have varied with historiographic trends: explanations have included the “Indo-Europeanness” of Hittite society, the origins of the state in a period of rapid conquest, the logistical difficulties of exploitation in a harsh environment, and the difficulties of maintaining an urban culture on the Anatolian Plateau. Factually, these arguments are not even necessarily untrue (the Hittite ruling class was indeed initially Indo-European, the state did arise from rapid conquest, etc.). But I hope to show through archaeological data, anthropological parallels, and philological case studies that Hittite administration was not an incomplete or malformed aping of bureaucracies to the south, but instead well-adapted to the geographical and human conditions of the Anatolian Plateau. And while the resulting bureaucracy is not as familiar to our modern eyes as those of Mesopotamia and Egypt, it is nonetheless an intelligible system when viewed through the correct historical and theoretical lens.

The structure of the dissertation is as follows. Chapters 1 and 2 review previous and current models of the Hittite State. In Chapter 1 I periodize the literature into the Early Western Consensus (Culture-Historical), Soviet Marxist Criticism, the Western Reaction, and the New Western Consensus (Palace-Temple Synthesis). Chapter 2 begins with the Modern Period (Environmental/Anthropological) of literature on the Hittite state, then at the end of the chapter I present what I consider to be the most pressing research questions for proving or disproving the current models (in brief, the questions concern religious festivals as evidence for staple redistribution in a largely wealth-financed state). Chapters 3, 4, and 5 examine the Main Text of

KASKAL series, an administrative document previously interpreted as lists of incoming tribute, but which I show in Chapter 3 to instead be a record of a single outgoing shipment. In Chapter 4 the contents of the KASKAL Main Text are calculated, and in Chapter 5 the text is shown to be the largest collection of wealth in Hittite administrative corpus. While the destination of KASKAL Main Text cannot be conclusively determined, it is argued based on the contents that a temple or religious destination is likely. Chapter 6 looks at the Hittite Votive Corpus, which consists of royal vows almost exclusively from the reign of Queen Puduhepa. After tabulating the vows, it is estimated that during her reign between half and three-quarters of royal gold income was devoted to vow activities. However, it is also concluded that the votive corpus was geared towards regular expenditure, not a single event like the KASKAL series, making a votive offering unlikely for the destination of the KASKAL Main Text. Chapter 7 is a brief conclusion recapitulating the questions and accomplishments of the dissertation, and a program of further research is offered.

I will consider this dissertation to be a success if it stimulates a productive conversation on the scale and disposition of bureaucracy in the Hittite state. While it would be delightful if a Hittitologist found definitive proof that Hittite administration was more similar to Mesopotamian administration than it currently appears, I do not see a true resolution of the problem happening until fresh evidence is discovered, perhaps in the archives of provincial capitals; and even so, the positive evidence of the enormous importance of religious administration in Hattusa would not be negated by such a discovery, only contextualized. Thus the next seven chapters should be taken as the beginnings of a new project to understand Hittite administration, not the final results.

CHAPTER 1

PREVIOUS MODELS OF THE HITTITE STATE

When I began working on my dissertation with an analysis of the KASKAL series (see Chapter 3), it was out of a feeling that Hittitology had neglected the administrative texts, a difficult genre with massive potential, in favor of the more accessible and discursive genres of narrative, myth, and religion. Returning now to write this introductory chapter on previous models of the Hittite state, I realized I had been wrong, or at least not fully correct. Hittitology has in fact been interested in texts of government and administration since its very beginning, with many good results. The literature on the Hittite state contains mature and sophisticated work: after a philologically scrupulous but under-theorized start (adjectives which, to be fair, characterize the beginnings of most disciplines of the Ancient World), the study of Hittite government has generally kept pace with the intellectual currents of the 20th and 21st centuries.

If I have found a shortcoming with Hittite socio-economic historiography, it is that it has not had time to consolidate. Perhaps because the field is relatively small, with no more than a handful of scholars working on questions of administration at a time, and perhaps because the philological situation was and is still evolving (the bulk of the palace administrative corpus was not published until the mid-1980's), the kind of longitudinal historiographical studies taken for granted in other fields have not been produced. The contributions of different authors and traditions, separated by years, have not been brought into conversation, and this is something I hope to correct. While yes, the most obdurate administrative texts—the real “bones” of Hittite government—have yet to be cracked and digested, the raw material for a comprehensive model of the Hittite state is present, fashioned by previous and contemporary scholars. It is thus with great pleasure that I consider the task of the following two chapters to be synoptic; building on

the work of others, occasionally trimming away old data and outdated assumptions, but otherwise letting the scholars speak for themselves.

The remainder of this chapter will review the previous literature on the Hittite state, presented in roughly chronological order from earliest to latest. As far I can see, the literature should be divided into four major periods, which I have labeled the Early Western Consensus, Soviet Marxist Criticism, the Western Reaction, the New Western Consensus. These periods cover the literature from the 1950's to approximately the end of the 1990's. Scholarship from 2000 onward is saved for Chapter 2, "Current Models of the Hittite State." As a principle the ideas discussed below can be considered additive, so that an interpretation stands if it is not contradicted by a later proposal. Additionally, I have tried to be as comprehensive as possible with overtly theoretical articles, but many studies of Hittite government, especially those which are primarily word-studies of titles or text editions of political documents, have been left out. Such references are better served by the bibliographic apparatus of Horst Klengel's *Geschichte des hethitischen Reiches*.¹

I am inclined to say that future studies of Hittite administration should be motivated not by how far is left to go, but how close we are to a new level of understanding. If a few habits of mind—chiefly the over-expectation of bureaucracy crept in from modernity—are discarded, and complex questions reduced to testable hypothesis; and if the results are oriented in larger theories, the pieces of a new model will fall into place. I will return to the details of future scholarship on Hittite administration at the end of Chapter 2, and offer the remainder of the dissertation as case studies. First though I want to review the previous scholarship and share what I found so impressive.

¹ Horst Klengel, *Geschichte des hethitischen Reiches* (Leiden: Brill, 1998).

1.1 Early Western Consensus (Culture-Historical)

Hittitology first emerged as an academic discipline in the period between World War I and World War II. With the Hittite language deciphered by Bedřich Hrozný in 1915, scholars began the work of analyzing the over 10,000 tablet fragments discovered during the first excavations at the Hittite capital of Hattusa-Boğazköy. The discovery of a hitherto unknown Indo-European language at the edge of the mostly Semitic Ancient Near East led to a flurry of scholarship. Initial efforts focused on the accessible texts of state and society: political, literary, and historical documents, many of which were also written in the well-understood language of Akkadian. By 1933, Albrecht Goetze's volume on Asia Minor in the *Handbuch der Altertumswissenschaft* had synthesized a pioneering generation of Hittite scholarship into a remarkably complete outline of the Hittite state.²

The second generation of Hittite scholarship in the 1950's and 60's advanced into legal and administrative documents with numerous publications, seeing the appearance of Einar von Schuler on the instructions to royal officials (1957),³ Kaspar Riemschneider's edition of the land-grant documents (1958),⁴ Heinrich Otten on the Hittite Funerary Ritual (1958),⁵ Johannes

² Albrecht Goetze, "Kleinasien," in *Kulturgeschichte des alten Orients, Abs. III, Lfg. 1*, edd. A. Alt, A. Christensen, A. Goetze, A. Grohmann, H. Kees, and B. Landsberger. Series: Handbuch der Altertumswissenschaft, 3.1.3. (München: C.H. Beck, 1933). Revised edition: Goetze, "Kleinasien," (2. neubearbeitete Auflage), in *Kulturgeschichte des alten Orients, Abs. III, Lfg. 1*, edd. A. Alt, A. Christensen, A. Goetze, A. Grohmann, H. Kees, and B. Landsberger. Series: Handbuch der Altertumswissenschaft, 3.1.3. (München: C.H. Beck, 1957).

³ Einar von Schuler, *Hethitische Dienstanweisungen für höhere Hof- und Staatsbeamte* (Graz: Archiv für Orientforschung, 1957).

⁴ Kaspar Riemschneider, "Die hethitischen Landschenkungsurkunden," *Mitteilungen des Instituts für Orientforschung*, 6 (1957): 321-81.

⁵ Johannes Friedrich, *Die hethitischen Gesetze* (Leiden: Brill, 1959).

Friedrich's new edition of the Hittite Laws (1959),⁶ and Vladimir Souček's work on cadastral lists (1959).⁷ The first taxonomy of the Hittite corpus was also published at this time by Emmanuel Laroche between 1956 and 1958.⁸ There was throughout these new studies a question of whether the emerging Hittite state was better compared or contrasted to the Mesopotamian societies known from Assyriology. One strain of Hittitology emphasized the importance of Mesopotamian influences in "sophisticating" Hittite culture—the adoption of cuneiform writing and Sumero-Akkadian literary traditions being the most visible example. The Code of Hammurabi and the Hittite Laws, being separated by only two to three centuries, were especially popular comparanda for these authors, not least because of the extensive use of Akkadian terminology in Hittite Laws. At the same time, the importance of Hittite as an Indo-European language compelled many Hittitologists to search for differences between the Hittites and their non-Indo-European neighbors. The tension between the "Indo-European" and "Oriental" aspects of the Hittites can be seen in nearly every research program of the first generations of Hittitologists.

1.2 Goetze: the Ethnogenesis of the Hittite State

It was clear from the first historical studies that the Hittite state and society had undergone a radical shift between its "Old" and "New Kingdom" periods. The reason for this change is still one of the outstanding questions of Hittite history, and the differing answers to it will often reveal a Hittitologist's school of thought. Western scholars came to a consensus by the post-war period that explained Hittite social and political changes in terms of the Indo-

⁶ Heinrich Otten, *Hethitische Totenrituale* (Berlin: Akademie-Verlag, 1958).

⁷ Vladimír Souček, *Die hethitischen Feldertexte*, *Archiv Orientalni* 27 (1959): 5-43.

⁸ Emmanuel Laroche, "Catalogue des Textes Hittites," *Revue hittite et asianique* 14 (1956): 33-38, 68-116; 15 (1957): 30-89; 16 (1958): 18-64.

European/Oriental debate. For Goetze, in his revised edition of the Asia Minor volume in *Handbuch der Altertumswissenschaft*, the change in the Hittite state was an Orientalizing process. He hypothesized that Hittite government was the product of diverse ethnic influences, writing that the Hittites were

“to an extraordinary degree... exposed to multifarious streams of influence during their whole existence. It goes without saying, that this shifting history must have left its imprint on the people. State and society of the Hittites are likely to reflect these changes even more than the other facets of Hittite civilization.”⁹

Goetze divided Hittite history into four phases based on ethnicity: in the pre-Hittite phase, the Anatolian Plateau consisted of mostly Hattian city-states, with a sedentary lifestyle of palaces with possibly matriarchal elements. The Old Hittite Kingdom phase begins with the conquest and unification of the Plateau by the Indo-European Hittites under their first king, Labarna, and the intermixture of Hittite (or “Neshite”, named after the dynasty’s home city of Kanesh) and Hattian elements. To Goetze, the implantation of the kingdom’s capital at the Hattic city of Hattusa suggests the intermixture was deliberate. After a poorly known “Middle Hittite Kingdom” showing influence of the Luwians, a related Indo-European people of Anatolia, the New Hittite Kingdom (Empire) period reappears with a Hurro-Mesopotamian influenced ruling class.¹⁰

In Goetze’s model, which can be called culture-historical since it emphasizes change and (cultural) ethnicity as the driver of change,¹¹ the Hittites began with an inherited non-divine, *primus inter pares* style of kingship from their Indo-European roots. Elements of the

⁹ This quote (p. 25) and the following are taken from an updated English summary of the “Kleinasien” volume of the *HdA*, published as Goetze, “State and Society of the Hittites,” in *Neuere Hethiterforschung*, ed. G. Walser (Wiesbaden: Franz Steiner, 1964), 22-33.

¹⁰ Goetze, “State and Society,” 23-4.

¹¹ The term “culture-historical” here is borrowed from a roughly contemporaneous movement in archaeology. For more, see Chapter 6 “Culture-Historical Archaeology” in Bruce Trigger, *A History of Archaeological Thought*, 2. ed. (Cambridge: Cambridge University Press, 1996).

arrangement were still preserved in the Old Kingdom, in which government was essentially a power-sharing agreement between the king and the Neshite aristocracy, but were already being changed by the Hattian substratum of the region. Political documents of the Old Kingdom period readily attest to the importance of the Neshite aristocrats to the functioning of the state. The Testament of Hattusili, perhaps the most debated political document of the Old Kingdom, shows the Hittite king appealing to an assembly of nobles called the *panku* to witness his choice of successor (side-stepping part of the debate, Goetze notes that regardless of whether Hattusili actually needed to consult the *panku* on matters of succession, it is significant that he acted and wrote as if he did). A section in the Edict of Telipinu, the other pillar of documentary evidence for Old Kingdom politics, even suggests that the king could be tried by the *panku* for “crimes of blood,” further distancing the status of Hittite monarchy from the Mesopotamian god-kings.¹²

Hittite society was originally organized by clans, led by the “great clan” of the king’s family. Most of the highest officials in the Hittite kingdom were drawn from the king’s or lesser Neshite clans, imparting an ethnic stratification to the Hittite state that probably lasted until its end. Oliver Gurney, Goetze’s contemporary and author of one of the first rigorous popular histories of the Hittites in English, described the situation as

“an exclusive caste superimposed on the indigenous population of the country... [in] which a group of Indo-European immigrants became dominant over an aboriginal race of ‘Hattians’.”¹³

The Neshite officials held large estates as fiefs stemming from the initial conquest, and would later provide chariot service to the state.¹⁴ The ethnic separateness of the Neshite ruling class and

¹² Goetze, “State and Society,” 25-6.

¹³ Gurney, *The Hittites*, 68-9.

¹⁴ Gurney, *The Hittites*, 69-70.

the experience of conquest of the Hattic Plateau combined to give the Old Kingdom a military vigor, an Indo-European *esprit de corps*, that propelled its armies to the gates of Babylon.

Non-Neshite populations in the Old Kingdom lived in the countryside and outlying towns where they were left to their own style of government, usually consisting of no more than a council of Elders. As Horst Klengel noted in his article about “Die Rolle der ‘Ältesten’,” the lack of documentary evidence produced by the Elders precludes determining whether they represented a sort of “primitive democracy” in Anatolia, or if they were a remnant of a tribal structure such as is attested in Syro-Mesopotamia.¹⁵ From the documents of the Hittite central government it can be seen that power of the Elders grew with distance from the capital. In the heartland they were reduced to a religious and juridical function, while on the periphery they had administrative authority and even a political-military function (though always in conjunction with a Hittite supervisor). In the most peripheral areas of Anatolia, like among the Kaskaens and in Kalasma, there were no kings, only Elders.

Despite the separateness of the Neshite and Hattian populations, Hattian influence on Hittite government was not limited to the periphery or local levels. Most Hittite military and state officials had titles that originated in courtly life, and many with Hattian origins. Gurney takes this as evidence that the Hittites participated in a settled courtly life in the system of Anatolian palaces in the pre-expansion period.¹⁶ Furthermore, Goetze saw the political power of the Hittite *tawananna*, a lifetime position held by the wife, mother, or even grandmother of the Hittite king, as evidence of a Hattian influenced matriarchy in Hittite government.¹⁷

¹⁵ Horst Klengel, “Die Rolle der ‘Ältesten’ (LÚ.MEŠ ŠU.GI) im Kleinasien der Hethiterzeit,” *Zeitschrift für Assyriologie*, 57 (1965): 225-6.

¹⁶ Gurney, *The Hittites*, 67-8.

¹⁷ Goetze, “State and Society,” 27.

The Old Kingdom ended in a period of strife that may have continued into the poorly documented “Middle Kingdom.” By the time of the New Kingdom a new Hurrian influenced ruling dynasty had recast the Hittite government according to Mesopotamian political ideals. The most prominent change was a growing feudal arrangement between the king and elites centered around chariot-service. By Goetze’s account, the tribal relationships were replaced, as “[t]he state came more and more to depend on retainers of the king or the crown (palace)—not yet conceived of as distinct—to whom parcels of land were distributed in exchange for the obligation to serve the king as soldiers or in working the royal domains.”¹⁸ At the top of society were the “knights” (*maryannu*) drawn from the same Neshite upper class as the original *panku*, but now directly dependent on the king and supported through endowments of state-owned land. Below them were the LÚ^{GIŠ}TUKUL (‘men of the tool’), state craftsmen who manufactured goods in return for land tenure: according to Goetze, the LÚ^{GIŠ}TUKUL furnished the Hittite state with a limited autarky, as “[t]heir production satisfied the needs of the country, both military and civilian; a surplus may have been handed over to “Merchants”... for export and the import of necessary materials not available in the country itself.”¹⁹ Unlike in the Old Kingdom, the land tenure arrangements of both the knights and craftsmen depended on their continued service to the king. This arrangement also gave more opportunities to subaltern ethnicities, because as Goetze argued,

“[t]he parcels of land fiefed out remained, at least originally, the property of the king and he saw to it that the fiefs, when falling vacant, were assigned to new men. They seem to have come from the so-called NAM.RA people... who were *glebae adscripti* and thus not allowed to move freely from town to town but who were shifted around by the authorities presumably as the needs of the state required.”²⁰

¹⁸ Goetze, “State and Society,” 28.

¹⁹ Goetze, “State and Society,” 28.

²⁰ Goetze, “State and Society,” 28.

The Hittite Laws show that the status of these semi-slaves was fluid, and their economic importance increased as the feudal state matured.

The *panku* had disappeared as an organ of government by the start of the New Kingdom. The bodies of Elders, where they still existed, were reduced to juridical and religious responsibilities, except on the extreme periphery where they retained some administrative authority. Towns were now integrated through appointment of royal governors answering directly to king, with larger territorial units becoming appanage kingdoms for members of the royal house. The federation of territories of the Old Kingdom was thus replaced by a “rigid structure,” where high functionaries of state were given “instructions” and required to swear oaths to the king like the soldiers.²¹ The use of direct personal oaths in the Hittite New Kingdom, an arrangement which only accelerated in reigns of the last kings, were reminiscent of the vassal treaties conducted between the Hittites and their client states, so that it appeared “that within the ‘Hittite Land’ the same principles were practiced that, outside, in the overall area subject to Hittite power, held the Empire together: in other words, that feudalistic ideas were all-pervasive and ruled internally as well as externally.”²²

The central appeal of the culture-historic approach to the scholars of the Early Western Consensus was that it offered an easy equation between ethnicity and political structure. This was, and still is, especially seductive for philologists (that is to say almost every Hittitologist, given the many years of language training required for the field) because ethnicity is closely linked with language. The culture-historic approach tempts the researcher with the possibility that onomastics and etymologies reveal the deepest structures of politics and society; that if one

²¹ Gurney, *The Hittites*, 72-3.

²² Goetze, “State and Society,” 32.

could just trace the linguistic origins of government one could grasp its operation. Worse, such an approach is not completely wrong. There must certainly have been dimensions of the Hittite government in the Old Kingdom that changed with the influx of cosmopolitan ideas and people in the Empire period. But the danger is stopping at this, and being too reliant on linguistic thinking when political science and sociological theory are needed. The Soviet Marxist critique would serve as a corrective to the culture-historical approach (though possibly going too far in the other direction of over-relying on theory), but even the Marxist scholars did not entirely escape the Indo-European/Oriental tension in Hittite history. Today the question of whether the Hittites were Indo-European invaders, and to what extent this affected their society and government, remains unresolved. Most scholars, the present author included, choose to side-step the question in the absence of conclusive evidence. But the poverty of results does not mean the questions are wrong, and thus the positive contributions of Goetze's theory of ethnic driven change should not be discarded. His ideas on the periodization of the Hittite state, and the correlation of these changes with an increasingly multi-ethnic and connected state, are still useful today, and reappear decades later in some of the most recent models of Hittite history.

*1.3 Soviet Marxist Criticism (Historic-Materialist)*²³

Soviet scholarship of the Hittites and the Ancient Near East remained largely unknown in the West until the post-Stalin period of the 1960's. In the pre- and post-war periods Marxist theoretical commitments had lead most Soviet scholars to emphatically reject the feudal assessment of the Hittite New Kingdom, and indeed any society in the Ancient Near East. For

²³ The discussion and basic conclusions on the Marxist scholarship of the Ancient Near East found in this chapter are indebted to the analysis of David Schloen, *House of the Father as Fact and Symbol* (Winona Lake: Eisenbrauns, 2001), see especially pp. 187-94.

them feudalism was a technical term, the name of a “mode of production,” or stage of human development. Modes of production are based on the social relationships arising from the evolving ways of manufacturing the means of life. In orthodox Soviet theory, history is divided into five modes of production, namely primitive-communal, ancient, feudal, capitalist, and socialist modes of production. In each stage there are economic contradictions that impel society to develop to the next, and ultimately towards the final mode of communism.²⁴

Given that the Ancient Near East was too early to be capitalist and too complex to be primitive-communalist, the question for early 20th century Marxist scholars was whether to describe the region as participating in the ancient (based on slavery) or feudal (based on serfdom) mode of production. The crucial distinction between the two is that, despite similar levels of non-market, extra-economic coercion, slaves do not own the means of production whereas serfs do (see Diakonoff’s description in the footnote).²⁵ In the Ancient Near East, and

²⁴ See the Soviet formulation in Joseph Stalin, “Dialectical and Historical Materialism,” in *The Essential Stalin: Major Theoretical Writings, 1905-52*, ed. B. Franklin (Garden City, N.Y.: Anchor Books, 1972), 323.

²⁵ Cf. Igor Diakonoff, “Editor’s Preface,” in *Ancient Mesopotamia*, ed. I.M. Diakonoff (Moscow: Nauka Publishing House, 1969), 15-16:

“A *slave* is a person being property of another person or body of persons, and thus forcibly subjected to exploitation. A slave does not own means of production, but can, in certain conditions, be in the possession of means of production not his property.... A *slave society* is a society where the antagonism between the class owning means of production (eventually including the producers themselves), and a socio-economic class devoid of means of production and forced to labour by non-economic means is the dominating force. The term does not necessarily imply that production in such society is exclusively the result of exploiting slave labour proper, or that there does not exist a mass of free or semi-dependent producers.”

In contrast,

“A *serf* is a person owning means of production but personally dependent on another person (who usually belongs legally to another estate of society) or on a body, and subjected to exploitation, being coerced by non-economic means.... A *feudal society* is

indeed almost every economy prior to industrialization, the means of production was arable land. Though occasionally owning movable property, workers in general did not own the land, and were thus incapable of full economic independence in their agrarian societies: in other words, by Marxist logic they were slaves. Thus, despite superficial hierarchies of political power recalling the feudal societies of Medieval Europe, the socio-economic reality of the Ancient Near East was in no way describable as feudal for Marxist scholars.

1.4 Struve: The Paradox of “Oriental Stagnation”

If the Ancient Near East was a slave economic formation, then the next major task becomes reconciling the societies of the region, relatively alien to historians raised on Greece and Rome, with the better-known slave economies of the Classical world. In the highly influential view of Vasilii Struve, presented in his seminal article “The Problem of the Genesis, Development and Disintegration of the Slave Societies in the Ancient Orient,” the Near Eastern world was substantially similar to the Classical; both exhibited a similar life-cycle of rise and fall, namely

1. A concentration of power in hands of elites, especially in the “hydraulic societies” of Egypt and Lower Mesopotamia, leads to despotism

one based on the extra-economic coercion of an exploited class of producers owning means of production but personally dependent on individual members of the governing class, or on a body representing it; typical of such a society is a division into estates (the members of each estate having a different degree of legal capacity), and ownership of the producers in at least some of the means production. The term does not necessarily imply a hierarchic structure of society based on vassalage, a phenomenon which occurs also in other socio-economic formations.”

What made the choice between the categories slave and serf in the Ancient Near East mandatory, besides the period of world history, is that the dependant workers of the region were “owned” in part (through labor obligation) or in full (as chattel) by others. In contrast, the proletariat in the capitalist system, while also not owning the means of production, are nominally free to sell their work to whoever they want. A serf or a slave cannot say “I quit.”

2. Despotic militarism leads to the growth of a slave class through conquest
3. Simultaneously, free communities are eroded through usury and debt slavery
4. Societal decay, especially the decline of the freeholders forming the backbone of military power, leaves state vulnerable to barbarian conquest
5. The foreign conquerors, often less developed than the conquered slave state, depend on slave holding elite for collaboration
6. Captives and dissidents further enlarge the slave population, until the cruelty of the foreign rulers and slave holders inflames slave revolts to the point of societal collapse²⁶

The divergent results of the Near East, which did not seem to embrace feudalism as fully as the West, were explained by the arrest of the disintegrative cycle, as slaves were granted a more permanent attachment to the means of production.²⁷ In many parts of the Near East, both Ancient and Medieval, compromise situations were reached where slaves were granted limited rights (e.g. the ownership of movable property), so that the gap between the poor freeman and the slave was narrowed.²⁸ The resulting arrangement may have resembled an incipient feudalism, but paradoxically the better conditions lead to stagnation and slowed the growth of true feudalism.

According to Struve, the later periods of the Near East saw the continuation of slavery as

“a powerful economic substructure within a society based on the feudal mode of production even when this society had consolidated; and it still permeated the entire social and state system.... The existence of slavery as a substructure within the feudal economic system was the cause of Oriental feudalism assuming a somewhat more stagnant form than Western feudalism, which [conversely] arose on the ruins of a thoroughly disintegrated slave socio-economic formation.”²⁹

²⁶ Vasilii V. Struve, “The Problem of the Genesis, Development and Disintegration of the Slave Societies in the Ancient Orient,” in *Ancient Mesopotamia*, ed. I.M. Diakonoff (Moscow: Nauka Publishing House, 1969), 17-69. This is a translation and digest (removing discussion of Egypt) of an earlier article: Vasilii V. Struve, «Проблема зарождения, развития и разложения рабовладельческих обществ древнего Востока», *Известия Государственной Академии истории материальной культуры*, 77 (Ленинград: ИГАИМК, 1934). Citations for points 1-5 are: 22-3, 28-9, 53-4, 60, and 65-6.

²⁷ Struve, “Slave Societies,” 62.

²⁸ Struve, “Slave Societies,” 63-5.

²⁹ Struve, “Slave Societies,” 66-7.

With allowances for the mechanism of “Oriental stagnation,” Struve was able to claim that the Ancient Near Eastern and Classical worlds were substantially similar in their socio-economic foundations, and any differences explainable by time, culture, and the equilibrium of the East.

Struve’s work dominated a generation of Soviet scholarship on the Ancient Near East, but some scholars questioned his model as research progressed in the mid-20th century. At the time of Struve’s death in 1965, coinciding with a renewed openness in the post-Stalin era, Igor Diakonoff was well-positioned to lead Soviet historiography in a new direction. For Diakonoff, despite the impressive Soviet achievement, which he found to have surpassed that of the West “due, to a great extent, to its theoretical base”,³⁰ scholarship had fallen into a rut, where

“studies in economic history in our country have been restricted mostly to attempts of discovering slaves in the various economic units or, at best, to establish the static class structure of society. No research has actually been carried out into the functioning of the social-economic mechanism; in particular, consumption and, especially circulation, have not been studied at all....”³¹

With Struve’s passing, Diakonoff could advocate for more studies like the earlier works of Nikolai Nikolsky, those of contemporary scholars like Ninel Jankowska, and his own on Assyria³² and Southern Mesopotamia³³ focusing on communities outside the governing class. Diakonoff considered these studies, establishing “the extreme importance of the rural and the

³⁰ Diakonoff, “Editor’s Preface,” *Ancient Mesopotamia*, 10.

³¹ Igor Diakonoff, «Проблемы экономики: о структуре общества Ближнего Востока до середины 2 тыс. до н. э.» *Вестник Древней Истории*, 1968/3: 3-27, 1968/4: 3-40 [English translation: Diakonoff, “The Structure of Near Eastern Society Before the Middle of the 2nd Millennium,” *Oikumene* 3 (1982): 7-100]: 77.

³² Igor Diakonoff, *Развитие земельных отношений в Ассирии* (Ленинград: Издательство Ленинградского Государственного Ордена Ленина Университета им. А. А. Жданова, 1949) [English translation: Diakonoff, “Agrarian Conditions in Middle Assyria,” trans. G.M. Sergheyev, in *Ancient Mesopotamia*, ed. I.M. Diakonoff (Moscow: Nauka Publishing House, 1969), 204-34].

³³ Igor Diakonoff, “The Rise of the Despotism in Ancient Mesopotamia,” trans. G.M. Sergheyev, in *Ancient Mesopotamia*, ed. I.M. Diakonoff (Moscow: Nauka Publishing House, 1969), 173-203.

family community in the third and second millennia B.C., as distinct from temple (or royal) land,”³⁴ to be the most important achievements of the post-war era. Diakonoff and like-minded scholars now had the opportunity to promulgate their views, many of which had been opposed by Struve.

1.5 Diakonoff: the “Two-Sector” Model

Diakonoff’s model, published in a ground-breaking article in 1968,³⁵ postulated an irreducible tension between a state-sponsored slave mode of production in the cities and a communalist mode of production in the countryside of the Ancient Near East. Every Bronze Age state was a composite, distinguished by two features, namely

- 1.) “co-existence of state property in land and other means of production, and of private property; that is, not unlimited private property but as allowed for the members of certain communal bodies...”
- 2.) “employment of the free labour of the citizens-proprietors—alongside of the exploitation of persons devoid of property in means of production and made to work by direct extra-economic coercion.”³⁶

The “state sector” in Diakonoff’s model shared its etiology with the first two points of Struve’s slave model, i.e. concentration of power in the hands of elites and enslavement through foreign conquest. It is in proposing the continued existence of a “private/communalist” sector, evolved from the remnants of the primitive-communalist mode of production from Near Eastern prehistory, that Diakonoff diverged from Struve. For Diakonoff, the king, instead of being a supremely powerful “Oriental despot” who might occasionally extend limited property rights to his slaves, was circumscribed in his power, and there were places in his country that the state did not reach. The majority of the population in most periods of the Ancient Near East may have

³⁴ Diakonoff, “Editor’s Preface,” *Ancient Mesopotamia*, 12.

³⁵ Diakonoff, “Structure of Near Eastern Society.”

³⁶ Diakonoff, “Structure of Near Eastern Society,” 90.

belonged to the communal sector. But, according to Diakonoff, in times of strong central authority “this class was constantly eroded by either upwards mobility or enslavement/dependency.”³⁷ The state sector expanded at the expense of the private/communal as wealthy villagers were absorbed into royal service as “king’s men” and the poorer villagers fell victim to debt-slavery or offering to serve as royal helots. The “king’s men” entered the state sector on better terms, enticed by land grants that allowed property and status in addition to their government allotment, while the royal helot received only the inducement of security while laboring under the king’s protection.

Throughout his work on the two-sector model Diakonoff was careful not to suggest that the socio-economic formation of the Ancient Near East was unique. This would be too like the “Asiatic” mode of production (abbrev. AMP), a term mentioned by Marx in his personal notebooks (only recently published at the time of Diakonoff’s writing) but deemed ideologically unacceptable in Soviet academia.³⁸ Rather, Diakonoff borrowed the intellectual maneuver of Struve’s “stagnation” theory, though with the change that the region was stuck between the primitive-communal and slave instead of the slave and feudal modes of production. In Diakonoff’s model all slave-holding societies had gone through this period of incomplete transition, including the Classical world, with most societies eventually differentiating along an axis of private/communal versus state sector dominance depending on the locus of slave exploitation. Earlier societies were less differentiated and clustered in the middle of the axis, so that:

³⁷ Diakonoff, “Structure of Near Eastern Society,” 96.

³⁸ Karl Marx, *Grundrisse der Kritik der politischen Ökonomie (Rohentwurf). 1857-1858, Anhang 1850-1859*, ed. Marx-Engels-Lenin-Institut, Moskau (Moskau: Verlag für fremdsprachige Literatur, 1939-41).

“[t]he Asiatic states of the 3rd and 2nd millennia B.C., especially the city-states, just because of their ‘two-sector economy’, belong[ed] to an early stage of a society type which, as it were, was intermediary between Sparta and Doric Crete on the one hand [i.e. state-sector dominant], and Athens, Corinth, Republican Rome, etc., on the other [i.e. communal/private sector dominant].”³⁹

In most of the Ancient Near East, especially by the Iron Age, the growth of enslavement through conquest or domestic impoverishment had benefited the state. In the Classical world, which arose after the collapse of the statist societies of the Mediterranean Bronze Age, the private/communal sector, especially the wealthy citizens of the *poleis*, became the primary exploiter of slaves.

The Hittites, even among the state-sector dominant Ancient Near East, were one of the most state-oriented and hierarchical societies of their era, and were cited by Diakonoff as an outlier many times in his discussion of the “two-sector” model. The reason for the strong state-sector orientation of the Hittite economy was a result of the history of the Hittites as a conquering people—a story familiar from the Western consensus—whose state grew rapidly from the single city of Kanesh to controlling the entire Anatolian Plateau. Because the Neshite speakers who controlled the Hittite state were an ethnic minority within the Plateau, Diakonoff considered that “the conquering community constituted nearly in its entirety the governing group of the serving aristocracy of the Hittite kingdom—[...] the so-called ‘lord[s] of (the community of) Hatti’.”⁴⁰ In Diakonovian terms, this means that the entirety of the original private/communal sector of Kanesh was recruited into the state sector as “king’s men,” who, due to ethnic difference and economic incentive readily undermined the communal ownership of property in

³⁹ Diakonoff, “The Structure of Near Eastern Society,” 93-94. Diakonoff considers the *polis* of the Classical world to be another form of communalism, albeit with an increased scope for individualism as a result of “the decline of the hierarchic agnatic structures which were so typical of all early societies...” and a strong Mediterranean world-market which encouraged export production (*ibid.* 93).

⁴⁰ Diakonoff, “Structure of Near Eastern Society,” 95. Typos emended.

the conquered villages. Thus a state-dependent governing class, whose property rights were defended solely by the king and not by family or community ties, emerged among the Hittites with artificial rapidity when compared to the strong civic societies of Mesopotamia and Syria.⁴¹

The great tracts of conquered land gave the Hittite king a large land fund with which to reward his kith and kin. The abundance of land and relative poverty of labor led to two distinguishing features of the Hittite system. First, because of the need for physically occupying and pacifying the land outweighed the need for taxation, the land grants were often given without service obligations and thus became unconditional property of the grantee (something that was strongly resisted by kings to the south).⁴² Second, the relative shortage of labor led to the furnishing of both royal and “private” estates with royal laborers captured in battle. From these two features a category of “*muškēnūtu* (helot) of a private person” emerged unique to the Hittite cultural sphere, so that by Diakonoff’s account,

“[i]f we add that in the Hittite kingdom many noblemen were local royal deputies of different ranks, or even vassal kinglets, it will be clear that the land was covered, alongside the royal domains, by manifold estates which also constituted, as it were, royal economies on a small scale.”⁴³

⁴¹ Diakonoff, “Structure of Near Eastern Society,” 95:

“The base of riches of the Hittite aristocracy were either lands allotted from the royal fund on condition of service, or royal grants which had become private property of the grantees (or of their family communes). In the synchronous Assyria and Arrapha one can observe a process developing in the opposite direction, viz., the separation of an aristocracy from among that part of the citizens of the territorial community which had grown affluent through trade and especially through usurious operations, and then got hold also of the state offices.”

In other words, Hittite officials became wealthy because they were connected to the government, while Syro-Mesopotamian became government officials if and when they were already wealthy.

⁴² Diakonoff, “Structure of Near Eastern Society,” 87-88.

⁴³ Diakonoff, “Structure of Near Eastern Society,” 88.

From this description it is easy to forgive a non-Marxist scholar for having mistook Hittite society as feudal.

Despite the enormity of the Hittite state sector and the power of the state land fund, Diakonoff argued in a separate article against the claim that the Hittite king was the *de jure* proprietor of all the land within his kingdom.⁴⁴ His principle objection was that the monarch lacked the power to enforce such a claim. Even in the New Kingdom, when royal power seemed strongest, the king was limited by the religious strictures of cult and ritual and dependence on the servant-aristocracy and priesthood.⁴⁵ The economic situation was also tilted against centralization, as the king often received only indirect economic benefits from the land grants. He could grant income from the royal estates to servants, artisans, and priests, in return for service and gifts from his royal officials. But, in contrast to the *latifundia* of the Classical world worked by chattel slaves, Diakonoff argued that in the Hittite state economy,

“gab es kein System der Bearbeitung des Landes durch Sklaventrupps, ja auch das Einkommen floß dem König, so muß man annehmen, nicht so sehr durch das Einsammeln der Ernte von den unmittelbar königlichen Domänen als vielmehr infolge der Einnahme der verschiedenen Steuern und Abgaben zu.”⁴⁶

And so, despite the greater state-sector orientation of the Hittites, the state collected its revenue in much the same way as its Ancient Near Eastern contemporaries through a distributed and diversified system of service and taxation.

⁴⁴ Igor Diakonoff, “Die hethitische Gesellschaft,” *Mitteilungen des Instituts für Orientforschung* 13/3 (1967): 313-366. This article was nominally a book review of Eduard Menabde, *Хеттское общество: экономика собственность, семья и наследование* (Тбилиси: Издат. Мецниереба, 1965).

⁴⁵ Diakonoff, “Hethitische Gesellschaft,” 316. Moreover, as Diakonoff noted in “Structure of Near Eastern Society,” 15-6, if the king were the ultimate and perpetual proprietor of the land, he would not be able to grant land to his servants, an act which is well attested in the Hittite corpus.

⁴⁶ Diakonoff, “Hethitische Gesellschaft,” 339.

While Diakonoff stuck to his Marxist credentials by rejecting the feudal description of the Ancient Near East, he did offer a conciliatory note in labeling the disagreement as a miscommunication rather than a misinterpretation of the evidence. He was willing to accept that although “one can often encounter the statement that while the Soviet scholars see in the Eastern antiquity a slave-holding society, the Western scholars see in it feudalism...[t]his, however, is not quite correct.” Rather,

“the Soviet scholars usually find in the Ancient Orient an economic structure of the *society* based on slavery, and Western scholars find that the Ancient Oriental society was in certain periods of its history characterized by a feudal structure of the *state*. Western historiography mostly puts the main stress on the problem of state power, ignoring its being conditioned by socio-economic relations. But it is well known that entirely different forms of state structure can evolve on the basis of one and the same socio-economic formation.”

The distinction between socio-economic formation and state structure served Diakonoff’s own ends as well. While acknowledging that some states could look more “feudal” than others, the hierarchy of status observed among the slaves of the Ancient Near East does not vitiate a description of these societies as “slave-holding.” Just as quasi-capitalist merchant republics could exist in the feudal world of the Middle Ages, so too quasi-feudal federations could exist in the slave world of the Bronze Age. Indeed, according to Diakonoff:

“[C]hattel slavery...[is] just another sub-type of the exploitation of the ancient type, to which a very numerous class of persons was subject. Characteristic of this class as a whole was the absence of property in means of production and exploitation by extra-economic (non-market) coercion. To this class belonged the ‘dependant labourers of the helot type’, the ‘dependant labourers of the patriarchal slave’ and of the ‘chattel slave type’ and, generally, all kinds of ancient ‘slave-type’ dependant labourers.”⁴⁷

Ancient Near East society was thus still describable as a “slave society” if, and only if, the term is broadened to include all dependent labor, and if in analogy to “feudal society,” where not

⁴⁷ Diakonoff, “Structure of Near Eastern Society,” 99.

everyone is a lord or serf, the term slavery is only evocative and not definitive of every member of society.⁴⁸

Diakonoff's work had a profound impact on the development of Ancient Near Eastern studies in the following decades. A formulation of his model, though based mostly on research from the 1980's, even appeared as late as 1991 in Gregor Giorgadze's article on "The Hittite Kingdom" in *Early Antiquity*, an English language volume of Soviet scholarship edited by Diakonoff.⁴⁹ Perhaps because of the global intellectual currents of the mid to late 20th century, a period of intense decolonization in Europe, the focus on "sub-altern" classes and ethnicities found a very receptive audience in the West. The ready-made program of research implied by Diakonoff's model also helped the uptake, as the relationship and relative strengths of the two sectors in a given society was an attractive target for typologization.

1.6 Western Reaction

The initial response in the West to Soviet criticism of the feudal designation for the Hittites was mixed. Some Western scholars celebrated confirmation of their pre-existing suspicions of Hittite feudalism. Richard Haase, a Hittitologist and lawyer by trade, had critiqued Hittite feudalism from a socio-legal standpoint already around the same the time of publication of Diakonoff's "Die hethitische Gesellschaft". Haase, who was the *Amtsgerichtsdirektor* for the city of Leonberg in Baden-Württemberg, made his scholarly career publishing a number of

⁴⁸ Diakonoff, "Structure of Near Eastern Society," 100.

⁴⁹ Gregor Giorgadze, "The Hittite Kingdom," in *Early Antiquity*, ed. I.M. Diakonoff (Chicago: University of Chicago Press, 1991), 266-285. Giorgadze is mostly summarizing, providing a brief narrative and social history of Hittites, with comments about social structure. Interestingly, Diakonoff intervened with extensive commentary in editorial notes (chalking up fourteen out of the twenty-two total footnotes.) The editor's preface to *Early Antiquity*, pp. 6-13, provides a good history of the discussion of the Asiatic Mode of Production in the 20th century.

articles on the Hittite Law Code. His work was very much part of the proliferation of philological studies on the Code undertaken by the Western scholars in the post-war period. But in 1968 he incorporated Soviet and Western theory in an analysis of “Herrscher und Beherrschte im Hatti-reich.”⁵⁰ The results, which he read against François-Louis Ganshof’s work on feudalism in Medieval Europe,⁵¹ ultimately led him to argue against a feudal designation of the Hittite state.

In “Herrscher und Beherrschte,” Haase blended a Western and Soviet bibliography and often sided with the analysis of the latter. The first half of his article consisted of a schematization of Hittite society by social class. He accepted the existence of state slavery at the bottom of society in the form of the ^{LÚ}*hippara*, but argued, contra Gurney, that slaves owning a small amount of property were not semi-free “*muškênu*” serfs, as their master still held the power of life and death over them.⁵² The true “*muškênu*” were rather drawn from the middle ranks of society, in the form of the ^{LÚ}NAM.RA captives and possibly the ^{LÚ} ^{GIŠ}TUKUL craftsmen, and these were the groups living most nearly to the *glebae adscripti* serfs of the Western sense. At the top of society were the members of the *panku*, whom Haase described in

⁵⁰ Richard Haase, “Herrscher und Beherrschte im Hatti-Reich,” *Recueils de la Société Jean Bodin* 23 (1968): 87-100. Given the frequent citation of Eduard Menabde on Hittite slavery (but no later than 1963), the article seems to have been composed prior to Diakonoff’s work.

⁵¹ François-Louis Ganshof, *Qu’est-ce que féodalité?*, 3^e ed. rev. et augm. (Bruxelles: Office de publicité, 1957). Haase cites the corresponding German edition, Ganshof, *Was ist das Lehnwesen?* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1961).

⁵² Haase, “Herrscher und Beherrschte,” 90; contra Gurney, *The Hittites*, 72. Haase sidesteps the philological question of the *MUŠKÊNU* in the Hittite context, noting only that they are connected with the palace and mostly restricted to cadastral lists (Haase, “Herrscher und Beherrschte,” 87). He defers to Vladimír Souček, (“Randnotizen zu den hethitischen Feldertexte.” *Mitteilungen des Instituts für Orientforschung*, 8 (1963): 368-382) who considered the Hittite Laws as lacking the three-fold terminological distinction between *awīlu*, *muškênu*, *wardum* (free, dependent, slave) found in Hammurabi’s code. Rather, in Hittite texts, the term *muškênu* generally means “poor” (although certain examples, such as *muškênu* “of the Palace”, and *m.*’s as providers of last resort for festivals, are enigmatic in this definition).

the Soviet tradition as the remnants of a family-originated assembly, and not the “cream of society” as Goetze calls them. While not explicitly claiming an Indo-European origin for the group, Haase draws parallels between the balance of power between the *panku* and the Hittite king and the Germanic practice of elective kingship. The *tawananna* is accepted as a vestige of Hattian matriarchy.⁵³

The most enduring contribution of Haase’s article was to remove *sahhan*, a service obligation translatable by the archaic English term ‘socage’, and which applied almost universally to members of Hittite society, from the discussion of feudalism in the Hittite state. His principle objection was that *sahhan* lacked military connotations, unlike for example the similar service arrangements of Medieval Europe and Hammurabi’s Babylon. *Sahhan* was instead a “service-tax for land tenure,” or a form of rent in a non-market economy based on agriculture. If *sahhan* was not linked to military service, then the largest piece of evidence for Hittite feudal society was removed, and with it would leave the attendant sociological and juridical structures of feudalism, such as a specialized warrior-caste, extreme fragmentation of authority, and a hierarchy of titles.⁵⁴ Haase did accept, while advocating for further research, that

⁵³ Haase, “Herrscher und Beherrschte,” 98-99.

⁵⁴ Haase, “Herrscher und Beherrschte,” 94-95, citing François-Louis Ganshof, *Was ist das Lehnwesen?* (Darmstadt: Wissenschaftliche Buchgesellschaft), 13-4. The exact citation is as follows:

“‘Lehen’ bedeutet im Mittelalter: (a) soziologisch ‘stark ausgeprägte Abhängigkeitsverhältnisse zwischen den einzelnen, eine *spezialisierte Kriegerkaste*, äußerste Zerstückelung der Eigentumsrechte, eine aus dieser Zerstückelung hervorgegangene Hierarchie der Grundbesitzrechte, die der eben genannten Hierarchie der persönlichen Abhängigkeitsverhältnisse entspricht; dann eine Aufspaltung der öffentlichen Gewalt, aus der in jedem Lande eine Hierarchie autonomer Instanzen hervorgeht, die in eigenem Interesse jene Gewalten ausübt, die normalerweise dem Staat zugeordnet sind und oft aus dem Machtbereich des Staates einer vorangegangenen Zeit stammen’, (b) juristisch ‘eine Gesamtheit von Institutionen..., die zwischen einem Freien, genannt ‘Vasall’

feudalism could be found at the apex of the Hittite state, between the Hittite king and government “dignitaries” (LÚDUGUD) and foreign vassals, but these relations were in no way the organizing principle of Hittite society.⁵⁵

Haase was vindicated by the ensuing scholarship, but other Western scholars reacted to Diakonoff’s work by doubling down on the feudalism label. Friedrich Cornelius in 1972 wrote a short article entitled “Das Hethiterreich als Feudalstaat,” probably aimed as a rebuttal to Haase (though without citing him or any other anti-feudal authors!), which argued that the parallels between the Hittite state and Medieval Europe were too numerous to warrant any other designation (“das Hethiterreich gleicht in allen Zügen, die wir feststellen können, dem mittelalterlichen Feudalstaat.”).⁵⁶ Crucially, Cornelius considered feudalism to rest not on “economic matters”, but rather the institution of equestrian military service common to both periods of history. The lords of Hatti were defined as those who had the means to own and train a warhorse, and were lords because they were professional soldiers, and not vice versa. The reliance on skilled horsemen, and the resulting social status of “knights,” explained the similarities of the Hittites and Medieval European states. In fact, Cornelius considered that the only major difference was the absence, and even prohibition, of sub-infeudation (i.e. the unsupervised creation of lower-ranked vassals) in the Hittite state.⁵⁷ Unfortunately for him most

(*vassal*), und einem anderen Freien, genannt ‘Herr’ (*seigneur*), Verbindlichkeiten zweifacher Art schaffen und regeln: der ‘Vassal’ ist dem ‘Herrn’ gegenüber zu Gehorsam und Dienst—*vor allem zum Waffendienst*—verpflichtet und der ‘Herr’ dem ‘Vassal’ gegenüber zur Gewährung von Schutz und Unterhalt.”

⁵⁵ Haase, “Herrscher und Beherrschte,” 95.

⁵⁶ Friedrich Cornelius, “Das Hethiterreich als Feudalstaat,” in *Gesellschaftsklassen im Alten Zweistromland und in den angrenzenden Gebieten; XVIII. Rencontre assyriologique internationale, München, 29. Juni bis 3. Juli 1970*, ed. by D.O. Edzard (München: Verlag der Bayerischen Akademie der Wissenschaften, 1972), 33.

⁵⁷ Cornelius, “Das Hethiterreich als Feudalstaat,” 34.

later Western scholars, if they accepted feudalism at all, gravitated towards Haase's thesis of a "shallow feudalism" affecting only the highest reaches of Hittite society.

1.7 The Italian School

Diakonoff's challenge to the Western culture-historical model was taken up most fully in Italy, where in the 1970's and 80's a number of scholars undertook an immensely productive project of explaining Ancient Near East society in neo-Marxist terms. The Italian scholars, perhaps because they were free to work outside the Stalinist orthodoxy, took Diakonoff's work to its logical conclusion and embraced the Asiatic Mode of Production as a description for the societies of the Ancient Near East.

The Italian School began with the two sector premise of co-existing palatial and communal modes of production. Unconstrained by rigid historical materialism, the Italians mooted the question of slavery that wracked Soviet literature and simply accepted the gradations of dependency as a sociological fact of the region. They shifted the research questions instead to the interaction of the two sectors, how they were integrated, and the specialization of production between them, on which there was a spectrum of results. One side, led by Mario Liverani, a specialist on Syria and pioneering literary critic of Ancient Near Eastern sources, emphasized the strong political and productive divide between the palace and communal sectors. The other side, led by Nuzi specialist and historian Carlo Zaccagnini,⁵⁸ focused on the parasitic dependency of the palace sector on the communal sector. The work of Liverani, Zaccagnini, and their many

⁵⁸ Prior to his work on the Asiatic Mode of Production, Zaccagnini was probably best known for his study of gift exchange in the Ancient Near East: see Zaccagnini, *Lo scambio dei doni nel Vicino Oriente durante i secoli XV-XIII* (Oriens Antiqui Collectio 11) (Rome: Centro per le antichità e la storia dell'arte del Vicino Oriente, 1973).

collaborators framed the discussion of Ancient Near Eastern and Hittite history well into the 1990's and even today.

1.8 Liverani: a Strongly Dichotomous Two-Sector Model

Mario Liverani wrote for the first time on the “Two-Sector” model in 1975, using it to describe the relationship between village and palace in Late Bronze Age Syria.⁵⁹ His interest in Soviet historical materialism can be traced back to at least 1969, when he edited a volume on Syria with a contribution from Michael Heltzer (who received pride of place as the first citation in the background literature of his own article), and wrote a review of an edited volume of Diakonoff's on Mesopotamian history.⁶⁰ In his article Liverani used Diakonoff's model to explain the erosion of the communal sector in Syria, but with a refined description of the role of land grants in the process.

According to Liverani, it was the innovation of heritable land grants—and not just the skimming off of the talented or ambitious villagers and enslavement of the poor—that undermined village communalism by creating social stratification.⁶¹ In essence, the introduction of non-communal private property corrupted a system of inheritance ill-equipped to handle it. The transformation was for the most part unintentional: land grants were initially not heritable, but social pressure and human nature pushed the recipients to make them so, often against the

⁵⁹ Mario Liverani, “Communautés de village et palais royal dans la Syrie du II^e millénaire,” *Journal of the Economic and Social History of the Orient* 18 (1975): 146-64. For a succinct English summary of his model, see Liverani, “Economic and Socio-Political Developments,” in *History of Humanity, Volume II, From the Third Millennium to the Seventh Century B.C.*, ed. A.H. Dani and J.-P. Mohen (New York: Routledge, 1996), 130-36.

⁶⁰ Michael Heltzer, “Problems of Social History,” in *Syria nel tardo bronzo*, ed. M. Liverani (Roma: Ipocan, 1969), 31-46. Mario Liverani, “Review of Igor Diakonoff, *Ancient Mesopotamia: Socio-Economic History* (Moscow, 1969),” *Oriens Antiquus* 11 (1972): 226-229.

⁶¹ Liverani, “Communautés de village,” 157-9.

wishes of the palace. The traditional Syrian practice was for divided inheritance, where each child received more or less equitable shares and the property stayed within the village community. However, the conditions of land grants were often indivisible, linked to a specific service or profession required by the palace. Parents now had to pick and choose among their children who would inherit the grant, oftentimes based on ability. Sometimes the eldest son was not the best suited to his father's profession, and other times a son-in-law was adopted if the grantee only had daughters. In extreme cases, the grantee could attempt to sell his office through an adoption of convenience. Over time, the effect of undivided inheritance and notions of private property was to sort the communal sector into "winners" and "losers," transforming the village, as Liverani argued, "d'une communauté organique de travail à un endroit où chacun poursuit sa propre politique d'affirmation personnelle."⁶² The palace benefited from the changing social structure in that it sapped the independence of the villages and colonized the communities with loyal servants. The outcome of communal erosion was the same Struvian rebellion, leading to the final collapse of the two-sector structure into the single mode of production of generalized slavery.⁶³ Though Liverani does not say so explicitly, it can be deduced that the same process occurred, *mutatis mutandis*, in the other societies of the Ancient Near East.

In the same article Liverani also argued for a strongly dichotomous Two-Sector Model, when he parsed the division of production between the palace and communal sectors in terms of an urban revolution, writing that

"Au point de vue de la répartition du travail, il est bien connu que dans les villages la population 'libre' se consacre presque exclusivement à la production primaire de nourriture (agriculture et élevage); tandis que le travail de transformation (artisanat) et d'échange (commerce) est concentré dans le secteur palatin, avec les "services" de nature culturelle, militaire, d'administration et d'organisation de la

⁶² Liverani, "Communautés de village," 158.

⁶³ Liverani, "Communautés de village," 162-3

production. On peut dire—pour simplifier—que les communautés de village n’ont pas participé à la ‘révolution urbaine’ en ce qui concerne leur structure interne (réparation spécialiste du travail), mais qu’elles l’ont seulement subie, car le palais prélève le surplus des villages pour entretenir ses spécialistes.”⁶⁴

Liverani’s language is striking, though he does qualify the description as a simplification (“pour simplifier”), and acknowledges in a later article from 1978 that, despite the human and spatial continuities between Neolithic and Bronze Age villages, the socio-economic trajectory of a community is not always linear and village life not necessarily fossilized. Nevertheless, he argues in the same article that villages in the Bronze Age Near East were marked by undiversified economies, dependence, and technological stagnation, and completely subjected to the palatine cities, compelling him to use a biological metaphor to describe the villages as “cellule produttive subalterne del sistema socio-economico complesso centrato sul palazzo.”⁶⁵

⁶⁴ Liverani, “Communautés de village,” 148.

⁶⁵ Mario Liverani, “Sulle tracce delle comunità rurali. In margine ai lavori della Société J. Bodin,” *Oriens Antiquus* 17 (1978): 71.

“Ed essendo la città palatina dell'antico Oriente la sede del potere politico, il rapporto di contrapposizione è un rapporto di subordinazione della comunità rurale e di inserimento di essa quale cellula di un organismo più vasto, unificato dalla città palatina. Il primo tratto strutturale dell comunità rurale è dunque il suo carattere subalterno. Il secondo tratto strutturale è il persistere nelle comunità rurali di un modo di produzione non basato sulla differenziazione specialistica delle attività lavorative, che invece caratterizza le unità produttive proprie del palazzo anche quando si dedichino alla stessa produzione di cibo cui si dedicano le comunità rurali. Le comunità rurali sono cioè unità produttive internamente indifferenziate che si situano però quali unità costitutive di un processo produttivo differenziato, controllato dal palazzo. Al tratto dell’indifferenziazione produttiva se ne connettono strettamente altri: il ristagno tecnologico, l’ideale della sussistenza (e non dell’accumulo come a palazzo), l’autosufficienza (con un livello di scambi estremamente ridotto), e così via. Tutto può confluire nella definizione delle comunità rurali come cellule produttive subalterne del sistema socio-economico complesso centrato sul palazzo.”

1.9 Zaccagnini: the Neo-“Asiatic Mode of Production” Model

In 1981 Carlo Zaccagnini penned a large article which attempted to synthesize the Western Marxist discussion of the Asiatic Mode of Production.⁶⁶ The article was aimed at two different audiences: for non-theoretical orientalists, or those who might be less informed about Marxist and socio-economic methodologies in general, Zaccagnini offered an intellectual history of the Asiatic Mode of Production—an extremely useful discussion for anyone wishing to know more about the historiography of the period. Zaccagnini also provided analysis of land grant use in the major Bronze Age states for this audience in the second half of the article. For the Marxist historian, who reflexively rejected the Mode because of the after-effects of Stalinist orthodoxy, he recovered a new version consistent with the theoretical framework, if not the exact contents, of the canonical Marxist texts (for convenience, Zaccagnini’s model will be designated “neo-AMP” to distinguish it from Marx’s aborted “(paleo-)AMP”).⁶⁷

Zaccagnini was very respectful of Liverani’s work: after a thorough evaluation of recent Marxist literature, he chose Liverani’s interpretation of the Two-Sector Model as the basis for his own reformulation of the Asiatic Mode of Production (Zaccagnini’s choice to extensively study the land grants is direct evidence of his debt to the former). But unlike Liverani’s “strong” version, the key feature of the Model for Zaccagnini was the *relationship*, not the division, between the sectors. He argued that

“...the functional nexus that binds the village m.o.p. to the palatial m.o.p. in such a way that the ‘combination’ of the two m.o.p.s figures forth one mode of production, the asiatic mode.... [I]t is just this ‘dominance’ (in Liverani’s

⁶⁶ Carlo Zaccagnini, “Asiatic Mode of Production and Ancient Near East, Notes Towards a Discussion,” in *Production and Consumption in the Ancient Near East*, ed. C. Zaccagnini (Budapest: Chaire d’Egyptologie de l’Université Eötvös Loránd de Budapest, 1989), 1-126 (translation of Zaccagnini, “Modo di produzione asiatico e Vicino Oriente antico. Appunti per una discussione,” *Dialoghi di archeologia*, NS 3/3 (1981): 3-65).

⁶⁷ Zaccagnini, “Asiatic Mode of Production,” 6-14.

meaning) of the palatial m.o.p. – which represents an evolution of the village m.o.p. – and the functionality of the relation that binds it to the ‘subaltern’ m.o.p. (the village one), that brings out the structural features of an asiatic form.”⁶⁸

The “superordinate” relationship of a palace sector directly over a village sector (“village+palace” in Zaccagnini’s notation), with no intervening levels, was the *sine qua non* of the Asiatic economic formation. Formations not based on this dominance, the recognition of which Zaccagnini credits to Liverani, are not “Asiatic”; so too, economic formations lacking a communal/village element (thus “slave latifundia+palace” or “feudal estates+palace” would not qualify).⁶⁹ Turning to Marx’s original texts, Zaccagnini recovers the following features of the Asiatic Mode of Production:

1. “Common ownership of the land, based on the villages. The individual, as member of the community, is only a possessor (1st level of mediation).
2. In its turn, the presupposition for (communal) ownership of the land is the superior authority (the “despot”, the State), which claims to be the unique and higher owner of all the land (2nd level of mediation).
3. The superior unit demands and receives a surplus quota of the product and of the work of the community in the form of tribute and corvée.”⁷⁰

Thus far Liverani and Zaccagnini agree. But in the next two points, on the economic disposition of the villages, their models diverge to an extent that has not been sufficiently recognized:

4. “The individual productive units (= the village system)
This characteristic seems, for Marx, to apply not only to individual village communities...but to the Asiatic system as a whole, that is to say, to the combination: city + country:...[in which] ‘the unification of manufacture and agriculture, of city (village) and country’ is emphasized. This statement probably refers to a higher level of historiographic abstraction, [because] in reality it is only the second term in the equation that has the decisive role in the process of production and transformation (manufacturing) of the primary product, and the superior unit defines itself

⁶⁸ Zaccagnini, “Asiatic Mode of Production,” 22.

⁶⁹ Zaccagnini, “Asiatic Mode of Production,” 23.

⁷⁰ Zaccagnini, “Asiatic Mode of Production,” 26.

- apart from its ‘fiscal’ activity – by its responsibility for the celebratory and the ostentatious (pyramids, etc.) achievements.
5. Undifferentiated unity of the city and the country: the city does not exist (or exists as a superfetation),⁷¹ or it identifies itself with the villages.”⁷²

These last points minimize the economic impact of the urban/rural dichotomy by locating all productive power within the village. The fruits of the “urban revolution”—economic specialization, industry, social hierarchy—which Liverani ascribes to the palatine cities, are in Zaccagnini’s model diffused into the countryside, reducing the palatine city to a locus of expenditure in the form of royal monuments and propaganda.

The main implication of Zaccagnini’s “neo-AMP” model is to make the control of villages by the palatial sector even more important. Instead of being benighted, agricultural backwaters serving only to power the urban sector, they become the fundamental units of production for ancient states. Thus when Zaccagnini finishes his article with a thirty page excursus on land grants and the transfer of villages in the Ancient Near East, it is more than just homage to Liverani; it is the axis of his own research project aimed at showing how the palace sector managed economic units that were in many ways greater than themselves. The results of the project are ambiguous in the Hittite case. From the evidence (Zaccagnini discussed the *Landschenkungsurkunde* of Kuwatalla and the Šahurunuwa grant), it seemed the Hittite king could transfer full ownership of villages and households, even those not already belonging to the palace, to individuals or institutions. In comparative terms this is a remarkable level of power for any monarch to wield in the Ancient Near East. It also speaks to the relative weakness of the Hittite nobility, further undermining the feudal thesis of Hittite society (it is worth recalling

⁷¹ The term “superfetation” (*Superfötation*), meaning here a useless outgrowth or artifice, comes from a passage at the very end of Notebook IV of Marx’s *Grundrisse der Kritik der politischen Ökonomie (Rohentwurf)*, where Marx refers to the indifferent unity of town and country in Asiatic cities, which tend to have the function of “royal camps.”

⁷² Zaccagnini, “Asiatic Mode of Production,” 26-7.

Hattusili III's perhaps hyperbolic claim to have accepted being stripped of every title but his last, and recognize that this happened with an exceptionally strong vassal and a very weak king). But because the king would sometimes compensate the land-stripped third party with grants of palace land, Zaccagnini considers that the king's justification for transferring property was not "in some supposed 'eminent right' of the sovereign over all landed-property, but rather in a *de facto* power of widespread intervention even where the property is that of third parties...."⁷³ The king's power was naturally limited by the possibility of later kings overturning the arrangements of their predecessors (though, as seen in the Šahurunuwa donation, the king could explicitly try to prevent this by writing clauses prohibiting revocation by future kings).

1.10 Neo-Marxism and the "New Humanities"

The other implication of the Zaccagnini's neo-AMP Model is to cause the historian to take more seriously the monuments and propaganda, which far from being secondary products of government become the prime industry of the palatial sector. Zaccagnini does not explore the production of monuments in the scope of his article, perhaps out of a Marxist habit of mind to

⁷³ Zaccagnini, "Asiatic Mode of Production," 86. See further Gregor Giorgadze, "Zum Kauf und Verkauf von Grund und Boden in der hethitischen Gesellschaft," *Altorientalische Forschungen* 25 (1998): 57:

"In der hethitischen Gesellschaft bestand kein umfassendes und ausschließliches Eigentum des Staates am gesamten Land, weil in einem Staat, der seiner Bevölkerung als Gegenleistung für den Besitz von Land bestimmte Pflichten auferlegte, Bedingungen für die Entstehung eines nichtstaatlichen, privaten Eigentums geschaffen wurden. Die Quellen für die Entstehung von Privateigentum an Land waren folgende: königliche Landschenkungen, besonders solche mit Immunität; Aufteilung von Wirtschaften, wenn sich ein Teil des nicht mit Verpflichtungen verbundenen staatlichen Landes bei einer Privatperson mit Verfügungsrecht befand; Kauf und Verkauf des Landes unter der Bedingung, dass die Erfüllung der staatlichen Verpflichtungen auf den Käufer übergeht. In diesen Fällen gab der Staat sein Recht auf das Eigentum am Land auf, dass nach dem Verkauf in das Eigentum einer Privatperson übergehen mußte."

consider these “superfetations” of the city as less important than the material products of the village. However, the intellectual trends of the period were against Zaccagnini as more emphasis came to be placed on the “New Humanities,” a set of intellectual approaches which arose out of the neo-Marxist embrace of culture.

In an introduction to a collection of essays on the ancient economy (including one on the Ancient Near East by Liverani), the Classicists Ian Morris and Joseph Manning explained the concept of “New Humanities” as arising from the struggles of Marxist intellectuals in the 1950’s to 1970’s to escape the purely economic determinism of orthodox Marxism, which lead them to embrace diverse philosophies such as “existentialism, psychoanalysis, structuralism, poststructuralism, and feminism”; as a result,

“Rather than seeing culture as an epiphenomenon, legitimating the economic infrastructure and institutional structure, some Marxist humanists argued that these structures were culturally constituted.... [These] new humanists pay great attention to economics but generally argue that economic categories are culturally constructed as merely one dimension of the creation of a new set of subjectivities, narratives, and gender relations.”⁷⁴

While no Hittitologist advanced so bold an argument on the economy (though Mario Liverani comes closest in certain literary analyses of ancient sources),⁷⁵ the field could not help but be influenced by emerging new humanistic studies.⁷⁶ A year after the appearance of Zaccagnini’s

⁷⁴ Ian Morris and J.G. Manning, “Introduction,” in *The Ancient Economy: Evidence and Models*, eds. J.G. Manning, I. Morris (Stanford: Stanford University Press, 2005), 28.

⁷⁵ The most important in the Hittite context are Liverani, “Storiografia politica hittita - I. Šunaššura, ovvero: della reciprocità,” *Oriens Antiquus* 12 (1973): 267-297, and Liverani, “Storiografia politica hittita - II. Telipinu, ovvero: della solidarietà,” *Oriens Antiquus* 16 (1977): 105-131. Liverani outlines his methodology in Liverani, “Memorandum on the approach to historiographic texts,” *Orientalia* 42 (1973): 178-194.

⁷⁶ To the great lament of Itamar Singer, who railed against corrupting influence of Liverani’s approach (variously described as “pessimistic,” “hyper-critical,” and, most damningly, “postmodern”). Against the proponents of Liverani’s “semiological revolution,” who claimed it had not received the attention it deserved, Singer argued its outsized impact on the field:

neo-AMP model, Fiorella Imparati wrote an article pleading for the expansion of historical research to take into account the cultural products of the Hittite state. In it she gave a description of the erosion of the communal sector and village life in Hittite Anatolia that is in practice almost identical to Liverani's account for Syria, but with the caveat that the loss of village autonomy was not uniform but disproportionately greater in the political and economic spheres.⁷⁷ Because a

“My own impression is that Liverani's influence on ancient Near Eastern studies has been far more decisive than it may appear on the face of it. As noted by the renowned French historian Marc Bloch, co-founder of the Annales School, ‘for a philosophy to impregnate an entire age, it is not necessary that it should act precisely in accordance with a prescribed formula nor that the majority of minds should come under its influence except by a sort of osmosis of which they are often only half aware.’”

(Singer, “Between scepticism and credulity: In defence of Hittite historiography,” in *Diversity and Standardization: Perspectives on social and political norms in the ancient Near East*, edd. E. Cancik-Kirschbaum, J. Klinger, G. Müller (Berlin: Akademie Verlag, 2013), 178).

As of 1973, Liverani was not post-structuralist. His focus was: “the text as source of knowledge of its author, and not {or previously to being} source of knowledge of narrated events.” (p.198) The post-structuralist criticism will be that the text is not even a source of knowledge of its author, but can only be interpreted as an object in and of itself; that the difficulties experienced in recovering narrated events from the text are the same as recovering knowledge of the author – i.e. both impossible. The tendency of structuralism to lead to post-structuralism, and from there to “a conspicuous transformation in scholarly focus, namely a decreasing interest in political history and a rush towards other historical sub-disciplines, such as socio-economic, cultural and intellectual histories,” (Singer, “Between scepticism and credulity,” 179) is the thrust of Singer criticism of Liverani. Others, such as Gary Beckman (“The Limits of Credulity,” *Journal of the American Oriental Society* 125 (2005): 343-352), riposte that traditional scholars (cf. William Hallo, “The Limits of Skepticism,” *Journal of the American Oriental Society* 110 (1990): 187-199) ignore the internal structure of the text.

⁷⁷ Fiorella Imparati, “Aspects de l'organisation de l'État Hittite dans les documents juridiques et administratifs,” *Journal of the Economic and Social History of the Orient* 25 (1982): 260-1:

“Il me semble donc qu'on puisse conclure en remarquant que, avec le temps, le secteur communautaire tendait de plus en plus à être subordonné au pouvoir central. Et même si certaines compétences continuaient à être attribuées à ce secteur et à ses représentants, les Anciens et l'inspecteur de ville ou de village, cela semble avoir eu lieu surtout pour les institutions liées à certaines traditions,

purely economic typology of Hittite society would fail to capture the continued independence of law and religion in the communities, she argued for increased attention to the cultural side of Hittite history, or as she phrased it: “des ainsi-dites ‘super-structures’ (religieuses, juridiques, idéologiques, linguistiques, etc.), qui exerçaient une fonction très considérable dans les sociétés à économie pré-capitaliste.”⁷⁸ This decidedly new humanistic approach risks stretching the definition of Marxism so as to become unrecognizable (indeed her article a page later went so far as to suggest that different periods of Hittite society could have different Modes of Production, a categorically impossible proposition in orthodox Marxism),⁷⁹ but looking ahead to Hittitological research in the 1990’s and 2000’s, the renewed appreciation for culture was fruitful in explaining the monumental yet under-inhabited urban plan of Hattusa, or the recognition of the importance of religious institutions to the state economy.

In retrospect, the main contribution of Italian Neo-Marxism to the discussion of Hittite and Near Eastern history was to create testable hypotheses for the archaeological and textual data of the different cultures and periods of the region (cf. the second half of Zaccagnini, “Asiatic Mode of Production,” 56ff. on the transfer of villages in the Ancient Near East). The political subordination of village to city, for example, while unremarkable given the natural tendency to centralize power in human government, becomes a productive statement when it makes specific claims of where certain economic activities took place, i.e. agrarian villages and industrial cities for Liverani, versus diversified villages and monumental cities for Zaccagnini. Comparing such claims to the much less testable hypothesis of Orientalization in the culture-historical model

comme les institutions juridiques et religieuses. Mais tout ce qui concernait le secteur politique et économique était contrôlé par la vaste organisation bureaucratique du Palais.”

⁷⁸ Imparati, “Aspects de l’organisation de l’État Hittite,” 263.

⁷⁹ Imparati, “Aspects de l’organisation de l’État Hittite,” 264.

demonstrates the welcome scientific rigor brought to the study of Hittite history by the neo-Marxists. The results of their approach can and should be contested, but the questions and method are still useful to modern attempts to model the Hittite state.

1.11 New Western Consensus

The new Western consensus on the Hittite state emerged as an adaptation to the Marxist critiques of the 1970's. Its earliest stages were prefigured by Richard Haase's article on feudalism; that is to say, scholars were willing to entertain (neo-)Marxist ideas without adopting the theoretical apparatus itself. However, the rapprochement between East and West quickly faded as the study of religion, a topic famously ill-suited to historical materialist explanation, grew in importance for modeling the Hittite state. A slew of articles published in the 1980's began the immense and still ongoing task of untangling the Hittite religious-administrative corpus. By the mid-1980's Western scholars achieved the framework of a consensus that remains stable into the 21st century: a paradigm firmly rooted in a centralized temple and palatial infrastructure, but with a growing awareness of regional difference and impact of the Anatolian environment on the Hittite government (the implications of which will be discussed in the next chapter).

1.12 The End of Feudalism

At the same time as Liverani and Zaccagnini were drawing attention to the differences between palaces and villages in the Ancient Near East, the Italian Hittitologist Alfonso Archi was attempting to put Hittite society back together amidst the disintegration of feudalism as a useful model. His major insight was to focus research on the palatial (and later temple)

infrastructure as the premier site of integration for the Hittite state. When he began modeling the Hittite state in a pair of articles from 1973, two years before the publication of Liverani's study on two-sector Syria, the question of Hittite feudalism was still alive and well. Haase's debunking (1968) and Cornelius' defense (1972) were still recent, and it remained to be seen which direction the new generation of Hittitologists would go with the controversy. Archi for his part rejected the feudal label from the standpoint of Diakonoff's Two-Sector Model, but used the intellectual space created by feudalism's demise to craft his own alternative interpretation of the Hittite state.

Archi was perhaps the first Western Hittitologist to positively cite Diakonoff's Two-Sector Model, when he used it to side with the anti-feudalists in his 1973 article on "Bureaucratie et communautés d'hommes libres dans le système économique hittite."⁸⁰ At this time Archi was in general agreement with Diakonoff's assessment of the nature of power in the Hittite state; that is, observing a two-sector division in Hittite society while acknowledging a much more limited economic role for the Hittite state sector than its Mesopotamian contemporaries. In practical terms this meant that while the Hittite Palace had the usual responsibilities for defense, religion, justice, and basic infrastructure, it lacked the decisive control over the means production needed to create the grand public works observed to the south. Anatolian villages, like their counterparts everywhere in the Ancient Near East, were essentially economically self-sufficient; however Archi argued that in contrast to other societies they had a relatively open membership, being composed of essentially anyone who could afford land. The Hittite Laws recorded that landowners, state tenants, and even deportee "serfs" could freely buy and sell land so long as the

⁸⁰ Alfonso Archi, "Bureaucratie et communautés d'hommes libres dans le système économique hittite," in *Festschrift Heinrich Otten*, ed. E Neu, Ch. Rüster (Wiesbaden: Harrassowitz, 1973), 17-24.

general service-tax on land was paid, and there was thus very little evidence for the persistence of communal ownership in Hittite Anatolia.⁸¹ Though the Hittite Palace lacked decisive economic control, it paradoxically may have had a broader base of interaction with the village sector than its Mesopotamian and Syrian counterparts. Land grants, often with attendant serfs, were the primary currency of the Hittite state, and were used for everything from the maintenance of temples, the salary of state officials large and small, and even purchasing services from craftsmen. Archi agreed with Haase's earlier argument that the land grants were no evidence for a feudal relationship, because the beneficiaries enjoyed the use of the land only as result of their continuing participation in the state bureaucracy. But he improved the argument with respect to Diakonoff's Two-Sector Model by claiming that the serf-like condition of the deportees was an anomaly in Hittite society, and arose only in the specific moment in Hittite history when the kingdom was consolidating its conquests into empire. For Archi, Hittite serfdom was only a phenomenon that "vint s'insérer dans une situation essentiellement 'asiatique', puisque, à la base du système, il y a contraste entre les communautés et la bureaucratie."⁸² This sentence marks the high point of Archi's commitment to (neo-)Marxist theory, which he seems to tacitly abandon after the late-'70's, but the general conclusion of a Hittite society defined by a broad, direct interface between palace and community remains remarkably durable.

Archi returned to the topic of feudalism in 1977 with the publication of "Il 'feudalismo' ittita," an article which more than any other can be credited with permanently ending the debate on the term in Hittite society. Living up to the categorical promise of its title, the work began with a deep Soviet and Western bibliography of the use (and misuse) of the feudal designation in

⁸¹ Archi, "Bureaucratie et communautés," 18-22.

⁸² Archi, "Bureaucratie et communautés," 21-22.

studies of the Hittite and Ancient world.⁸³ Archi's method of attacking the label was the same as Haase's ten years earlier, namely stripping the "benefices", normally cited as evidence, of their feudal characteristics ("La concessione di tali benefici è un tratto comune a molti stati antichi e dell'Oriente medievale, e non costituisce di per sé un elemento feudale...").⁸⁴ Archi expanded the philological foundations for rejection by showing that the service obligations of the LÚ^{MEŠ} GIŠ^{TUKUL} and LÚ^{MEŠ} ILKI, and not just *sahhan*, must also be disqualified from feudal evidence. Previously the LÚ^{MEŠ} GIŠ^{TUKUL} (lit. 'men of the weapon/tool') were thought of as "free men," i.e. those entitled to bear arms,⁸⁵ and the LÚ^{MEŠ} ILKI (lit. 'men of the soke') as the palace dependents. A sharp distinction between these two groups had been assumed by both the feudal and two-sector models of the Hittite state: the former because it postulated a class of armigerous freemen in voluntary service to the state, and the latter because it needed contrasting groups of autonomous villagers and palace dependents. Archi showed that in practice the distinction between TUKUL-men and ILKŪ-men was not exact: rather, both groups were holders

⁸³ Alfonso Archi, "Il 'feudalismo' ittita." *Studi Micenei ed Egeo-Anatolici* 18 (1977): 7-18.

⁸⁴ Archi, "Feudalismo," 16. Archi seems to reach this conclusion through the works of Paul Garelli, "Le problème de la 'féodalité' assyrienne du XV^e au XII^e siècle av. J.-C.," *Semitica* 17 (1967): 5-21; and Richard Haase, "Einführung in das Studium keilschriftlicher Rechtsquellen. Rezension von G. Cardascia," *IVRA* 17 (1966): 325-28. However, Haase's "Herrscher und Beherrschte" is overlooked.

⁸⁵ On the ambiguous etymology of GIŠ^{TUKUL}, Rich Beal came to the conclusion that the military implications were nil by the historical period of the Hittite Kingdom:

"In summary GIŠ^{TUKUL}-men appear to have been men who worked for the government or others and received their pay in the form of land who produce supported them. This type of pay seems to have originally been introduced to pay for army troops, hence the title 'weapon-man' for those paid in this way. However, already in the Old Hittite Period, it had been extended so as to provide pay for a vast number of different types of civilian employees, who, since they were paid in the same way as their military counterparts, were also called 'weapon-men.'"

(Beal, "The GIŠ^{TUKUL}-institution in Second Millennium Hatti," *Altorientalische Forschungen* 15 (1988): 304).

of land tenure agreements that could be freely bought and sold, with the distinction being that TUKUL-tenure was on land that belonged to a village, and *ILKÛ*-tenure on land belonging to the palace. Holders of TUKUL obligations were taxed indirectly under the system of *luzzi* ‘corvée’, which was the collective responsibility of the village, while *ILKÛ*-holders paid taxes directly to the palace as *sahhan* ‘socage’. Individuals, even “muškênu” who were bound to their *ILKÛ*-land, could simultaneously hold TUKUL and *ILKÛ* land, provided they could meet the tax obligations.⁸⁶ Archi thus did for the LÚ^{MEŠ} GIŠ TUKUL and *luzzi* what Haase did for *sahhan*, that is, showed the terms to be another variety of land-tax, and not the permanent social categories required to use them as evidence for feudalism in the Hittite state. However by demonstrating the free mixing of palace and village service obligations he also undermined the validity of the Two-Sector Model for the Hittites—a trend that would continue in his later articles.

Archi concluded his dismantling of Hittite feudalism with what was perhaps his most innovative contribution to Hittite political theory. He began with the premise, going back to Goetze, that external Hittite political relationships should correspond to internal political relationships. While Goetze used the link to argue that the seemingly feudal vassal treaties reflected the feudalism of Hittite society, Archi turned the conclusion on its head: he argued that the internal political documents, especially the instruction and loyalty oath genre that regulated the relationship of the king and palace dependents, had a non-feudal, contractual arrangement that is also observed in the vassal treaties.⁸⁷ The language shared by the instructions and treaties revolves around clearly defined obligations (*ishiul*) that bind (*lengai*-) the two parties before the

⁸⁶ Archi, “Feudalismo,” 13-15.

⁸⁷ Archi, “Feudalismo,” 16-18.

gods.⁸⁸ While mutual protection (*pahs-*) and homage⁸⁹ can be part of the treaty/instructions, they are only two stipulations among the many which can appear. The instruction genre prescribed the responsibilities, schedules, and even hygiene of palace officials, and treaties could include stipulations ranging from the exact number of troops to be contributed by a village (Arnuwanda I and the Men of Ismerikka, CTH 133) to the sexual behavior of the vassal when he visits the Hittite court (Suppiluliuma I and Huqqana of Hayasa, CTH 42). Despite the loyalty and mutual protection undergirding the stipulations (such as the responsibility of vassals and officials to report malicious gossip and curses to the king), Archi argued that the treaties and instructions cannot be considered in feudal terms. The missing feature of both the vassal treaties and the instructions was the element of subordination—political, financial, cultural, or otherwise.⁹⁰ Referring to Hittite vassals as protectorates or even confederates, as the Egyptians did in the propaganda surrounding the battle of Qadesh, is entirely inappropriate, as even the smallest cities and village groups were generally free from Hittite interference in their internal matters. While

⁸⁸ Here Archi builds on the work of Einar von Schuler, “Staatsverträge und Dokumente hethitischen Rechts,” in *Neuere Hethiterforschung*, ed. G. Walser (Wiesbaden: Franz Steiner Verlag, 1964), 34-53; von Schuler, “Sonderformen hethitischen Staatsverträge,” in *Anadolu Arastirmalari. Helmuth Bossert'in Hatırasına Armağan* (Fs. H. Th. Bossert) (Istanbul: Istanbul University, 1965), 445-64; and von Schuler, *Hethitische Dienstanweisungen für höhere Hof- und Staatsbeamte* (Graz: Archiv für Orientforschung, 1957).

⁸⁹ There is no direct Hittite translation for the concept of homage, but a number of vassal treaties, including all of the Syrian treaties beginning with Suppiluliuma I and Aziru of Amurru (CTH 49), require the appearance of the vassal in person at the Hittite court at least once a year.

⁹⁰ Archi does not explicitly define a sociologically typical feudal society, but he could have referenced here the analysis of Marc Bloch on the personal locus of feudalism as a relationship of subordination. Bloch found the feudal relationship in Medieval Europe to be illustrated best not by oaths of fealty or law codes, but the act of homage between two free men: where one man places his clasped hands between the hands of another as a gesture of submission, and declares himself to be the “man” of the person facing him, and they kiss each other on the mouth in a gesture of friendship (Marc Bloch, *Feudal Society*, trans. L.A. Manyon (Chicago: University of Chicago Press, 1961), 145-6). From everything we know as Hittitologists, such a scene would be entirely alien to Hittite culture and completely insufficient as a contract between the king and his vassal, which had to be defined and then sworn before the assembled gods.

Archi conceded that “vassalage” may be the least worst term to describe the network of treaties binding the Hittite kingdom with its allied states, care must be taken not to confuse the situation with Medieval Europe.⁹¹

Archi came very close to banishing feudalism completely from the Hittite state. He still considered the “loyalty oaths,” decrees requiring an unlimited and personal allegiance from all senior officials and vassals to the Hittite king, to be evidence of a growing feudal tendency at the very end of the Hittite New Kingdom.⁹² But as Fiorella Imparati pointed out in her article from 1982 (discussed previously), these oaths are better read as symptoms of the difficulties of the last days of the Hittite New Kingdom.⁹³ While Imparati attributed the troubles of the Hittite state to the Kaskaens and Assyrians, her view was confirmed by the discovery of the Bronze Tablet and re-reading of the Ulmi-Tešub treaty, which laid bare the extent of the political fractures resulting from Hattusili III’s usurpation. With the discarding of the loyalty oaths as evidence, there is very little reason today to find feudalism anywhere in Hittite society.

1.13 Archi: the Palace Network Model

Archi’s second article from 1973, “L’organizzazione amministrativa ittita e il regime delle offerte culturali,”⁹⁴ was a philological study of the administrative units of the Hittite kingdom. The article formed the foundation of what can be called the “Palace Network” model of the Hittite state, and would have a profound impact on future studies of the Hittite state by emphasizing the importance of redistribution, not just extraction as did the Italian neo-Marxists,

⁹¹ Archi, “Feudalismo,” 17.

⁹² Archi, “Feudalismo,” 18.

⁹³ Imparati, “Aspects de l’organisation de l’État Hittite,” 257.

⁹⁴ Alfonso Archi, “L’organizzazione amministrativa ittita e il regime delle offerte culturali,” *Oriens Antiquus* 12 (1973): 209-226.

in the palatial-communal interface. Archi's argument was that the Hittite state functioned as a redistributive apparatus, physically manifested in the palatial infrastructure, and operating through the "regimen of cultic offerings." The very first sentence of the article offers a powerful reappraisal of the Hittite state, described as

"... organizzato su una rete di cosiddetti palazzi, É.GAL, dislocati in numerose città, anche di non primaria importanza, che non solo servivano al re come residenze durante i suoi spostamenti, ma costituivano i centro da dove i funzionari controllavano i possedimenti statali, detti appunto del palazzo."⁹⁵

The "palaces" were full-service administrative centers implanted in the local communities, accompanied by storehouses and seal houses, and governed by superintendents who distributed taxes and labor to state and especially temple institutions. Finished goods and foodstuffs were supplied to government workers through the system of cults, and members of local communities received ration supplements at festivals. Archi argued that there was neither a distinction between state and royal property, nor a functional difference between the palace and temple: all were aspects of the same redistributive system of the Hittite state.⁹⁶

Archi returned to his Palace Network model in 1984 to provide a historical account of its development out of the pre-Hittite political infrastructure.⁹⁷ The article can in many ways be read as a counterpart and corrective to Goetze's culture-historical description of Hittite government, sharing the basic details and periodization as the earlier model, but explained from a resolutely economic and administrative perspective. Epigraphic and archeological evidence agree that pre-Hittite Anatolia was composed of multiple principalities, based around cities mentioned in the Old Assyrian trade documents such as Purushanda, Ankuwa, Kanesh, and Hattusa, each with

⁹⁵ Archi, "L'organizzazione amministrativa," 209.

⁹⁶ Archi, "L'organizzazione amministrativa," 218-20.

⁹⁷ Alfonso Archi, "Anatolia in the Second Millennium B.C.," in *Circulation of Goods in Non-Palatial Context in Ancient Near East*, ed. A. Archi (Roma: edizioni dell'Ateneo, 1984), 195-206.

dependent towns and hinterland. Besides the Assyrian trade network, the Anatolian principalities had independent contacts with the kingdoms of Syria, as evidenced by ivories, lapis lazuli, and seals with the name of Mari kings at Acem Höyük.⁹⁸ The conquest of the Anatolian Plateau by the Hittites changed this by cutting off the lateral contacts of the former principalities and routing all trade through Hattusa. The newly centralized taxation system provided, perhaps by political design, an insufficient economic stimulus to maintain the population base of the large cities. The diminishing of the principalities meant local government could flourish: while the large urban centers were systematically disadvantaged compared to Hattusa, Archi argues that the villages, “favoured by the morphology of the largely mountainous and hilly territory,” were privileged with new autonomy.⁹⁹ A tangible result of the autonomy was the system of local Elders in unmediated contact with the central government observed in the Old Kingdom period.

While echoes of the pre-Hittite “urban+hinterland” organization persisted into the time of Hattusili I and Mursili I, by the reign of Telepinu Central Anatolia was reorganized into 100 or so administrative centers centered on the É^{NA4}KIŠIB ‘seal-house’. The seal-houses were outposts of central authority in the now largely rural Plateau, and were staffed by the LÚ^{MEŠ} AGRIG, local authorities who acted as liaisons between the villages and Hattusa. In later times the É^{NA4}KIŠIB network was supplemented by strategically placed É.GAL ‘palaces’ that served as extensions of the palace in Hattusa.¹⁰⁰ The palaces collected metals and wool as taxes (compared to the agrarian responsibilities of the É^{NA4}KIŠIB and LÚ^{AGRIG}), with some evidence

⁹⁸ Archi cites Kurt Bittel, *Die Hethiter* (München: Beck’sche Verlag, 1979), 64ff. for a general overview of trade relations, and Machteld Mellink, “Archaeology in Asia Minor,” *American Journal of Archaeology* 81 (1977): 295 for Acem Höyük specifically.

⁹⁹ Archi, “Anatolia,” 198.

¹⁰⁰ Archi, “Anatolia,” 199.

for the existence of dependent craftsmen such as weavers.¹⁰¹ Temples were planted along with the palaces as extensive land-owners and self-sufficient centers of production.¹⁰² In the absence of local dynasties and urban conglomerations Hittite state officials, who were often members of the royal family,¹⁰³ accumulated scattered estates and governorships; but Archi, ever watchful for misconstruings of feudalism, emphasized that their individual power never supplanted or constituted the state.¹⁰⁴

Taken together, Archi's two articles from 1973, and their descendants of 1977 and 1984, erased the feudal interpretation of the Hittite state and in its place offered a new evaluation focused on the role of palace infrastructure in uniting the Anatolian Plateau in a redistributive

¹⁰¹ Archi, "Anatolia," 201-2.

¹⁰² Archi, "Anatolia," 204-5.

¹⁰³ The question of the identity and origin of the Hittite state apparatus is still unresolved, and perhaps unresolvable. It is clear that royal family members received many positions of power, including most of the internal governorships in Hittite Anatolia (Archi, "Il 'feudalismo'," 18) and many of the high-level positions in the palace bureaucracy. Gary Beckman in his article on the "The Hittite Assembly" (*Journal of the American Oriental Society* 102 (1982): 435-442) demonstrated that the *panku* was composed of the court officials and high-level servants resident at the palace ("[n]ot a gathering of a class, but rather primarily a judicial body, subject even in this area to the will of the monarch" (Beckman, "The Hittite Assembly," 435)). While there was a terminological distinction between the *panku* and the royal family (*salli hassatar*) (Beckman, "The Hittite Assembly," 442), prosopography shows there was at least a partial overlap between the two groups. As Beckman notes, "the extent to which the higher bureaucracy was coterminous with what indeed might be called the Hittite 'ruling class' is a question which awaits further study" (ibid. 442, ft. 91). This proposed equation could be expanded to read: "bureaucracy = ruling class = extended royal family?" Fiorella Imparati agrees with Beckman's interpretation of the *panku* as palace officials, and considers this an attempt by the kings of the Hittite Old Kingdom to create a centralized power base to counterbalance the power of local potentates (Imparati, "Autorità centrale e istituzioni collegiali nel regno ittita," in *Esercizio del potere e prassi della consultazione*, edd. A. Ciani, G. Diurni (Rome, Libreria editrice vaticana: 1991), 161-181).

¹⁰⁴ Archi, "Anatolia," 205-6. Emmanuel Laroche came to the same assessment in "Pouvoir central et pouvoir local en Anatolie hittite," in *Les Pouvoirs locaux en Mésopotamie et dans les régions adjacentes: colloque organisé par l'Institut des Hautes Études de Belgique 28 et 29 janvier 1980*. ed. A. Finet (Bruxelles: Institut des hautes études de Belgique, 1982), 138-143. He noted (p. 139) that the recently discovered Maşat letters show that local officials behaved as executors of the king's will, not independent rulers (though this might only apply to the northern frontier).

scheme. Much of the philological detail is shared with the consensus of Goetze and Gurney, but presented with a finer appreciation of socio-economic power thanks to the Marxist literature published in the intervening decades. It should be stressed, though, that Archi was not a theoretician. He was comfortable with using theory to contextualize his source material, but then uncompelled to develop theory for its own sake. Thus his articles from 1973 were the high point of his engagement with neo-Marxist interpretations of Hittite history. From this point on Archi abstained from engaging directly with the neo-Marxists, even after the work of Liverani and Zaccagnini in the late 1970's and early 1980's. Nevertheless, his model evolved to be tacitly incompatible with the strong divisions of Liverani's Two-Sector Model. There is evidence that Archi is aware of this, as his later work includes commentary that contradicts two of the main pillars of Liverani's model, namely the internal colonization of the communal sector by the palatial and the impoverishment of the village at the expense of the city. To wit, Archi found in his study of the LÚ^{MEŠ} TUKUL and LÚ^{MEŠ} ILKI a muddling of the two social categories, and noted that "Tra i due gruppi, gli uomini dipendenti dal Palazzo e i membri delle comunità, non esisteva una separazione netta e definitiva."¹⁰⁵ And in his assessment of the historical development of the palace administrative system, Archi argued that the decline of Anatolian regional centers actually favored the growth of the villages, so that the region was on the whole not impoverished by Hattusa's new preeminence as capital city.¹⁰⁶ At the same time Archi did not embrace Zaccagnini's neo-AMP. Perhaps at the time of its publication in 1981 Archi was

¹⁰⁵ Archi, "Feudalismo," 14. An antagonism to a strong two-sector division can also be read in Haase's remarks on the thematic unity of the Hittite Laws: "Hier wie überall findet man ein einheitliches Recht für Stadt und Land. Das zeigt sich auch daran, daß gewisse Vorschriften für die Hauptstadt Hattusa in die Rechtssammlung übernommen und damit verallgemeinert worden sind." (Haase, "Die ländliche Gemeinschaft im Hethiterreich," in *Les Communautés rurales, Deuxième partie: Antiquité = Rural Communities, Second Part: Antiquity*, by Société Jean Bodin pour l'histoire comparative des institutions (Paris: Desain et Tolra, 1983), 201).

¹⁰⁶ Archi, "Anatolia," 204.

already contemplating the “religious turn,” incompatible with Marxist analysis, that would define his work and others’ into the 1980’s and 1990’s. Indeed, it was only when the Palace Network Model shifted its focus to emphasize the temple and performative religious experience in the Hittite state that it truly escaped co-option by the neo-AMP.

1.14 The Palace-Temple Synthesis

By the 1970’s the Hittite Laws had been picked over for decades, and it became clear that advances in understanding the Hittite state would have to come from elsewhere. Investigating the administrative corpus led Hittitologists to realize that the living bureaucracy of the Hittite state was confined almost exclusively to the religious sphere, though it was not yet known if this was an accident of preservation or a fundamental feature of Hittite society.¹⁰⁷ In 1975, Horst Klengel provided the first investigation of the economic role of the Hittite temple, a topic which, as he noted in his introductory footnotes, had previously received attention only in passing.¹⁰⁸ His article was not concerned with theory, but on the inapplicability of models of the Mesopotamian temple to the Hittite situation. For Klengel, the differences between the Hittite and Mesopotamian systems was most revealed by the absence of independent “temple cities” in Anatolia. All temples in Hittite lands functioned as part of the palace system outlined by Archi: physically, the temples were built proximate to palaces and in the same “government style” of architecture, and administratively no distinction can be found in the Hittite state archives between temple and state property.¹⁰⁹ Unlike in Mesopotamia, Hittite temples did not seem to

¹⁰⁷ Archi, “Bureaucratie et communautés,” 23.

¹⁰⁸ Horst Klengel, “Zur ökonomischen Funktion der hethitischen Tempel,” *Studi micenei ed egeo-anatolici* 16 (1975), 181-200.

¹⁰⁹ Klengel, “Zur ökonomischen Funktion,” 181-83. On the architecture of Hittite temples, see recently Dirk Paul Mielke, “Hittite Cities: Looking for a Concept,” in *Insights into Hittite*

conduct activities to accumulate wealth, using their benefices only to serve their cult obligations.¹¹⁰ As such they played no role as workshops or engines of economic innovation (Klengel suspects Hittite temples failed to innovate because there was no money economy in which to exchange their products; similarly Gregor Giorgadze traced the dearth of hired labor—a key driver of a monetized economy—to the prevalence of *corvée* in the Hittite economy.¹¹¹ Combining these two points suggests a vicious equilibrium where the Hittite economy was too dependent on compulsory labor to innovate). Land transferred to temples remained state land. It was worked to provide offerings for the gods, but any surplus production was sent back to the state palace/temple complex. Thus, unlike the situation in Mesopotamia, there was a complete identification between the interests of the temple and state in Anatolia, unified in the person of the king.¹¹²

History and Archaeology, edd. H. Genz, D.P. Mielke (Leuven: Peeters, 2011), 167-70, where he notes that later Hittite temples look like compact, stylized palaces. Both structures tended to be built in prominent, artificially elevated areas of landscape within a city and are difficult to distinguish because of their similar economic functions.

¹¹⁰ Klengel, “Zur ökonomischen Funktion,” 191.

¹¹¹ Gregor Giorgadze, “Two Forms of Non-Slave Labour in Hittite Society,” *Labor in the Ancient Near East*, ed. M. A. Powell (New Haven, American Oriental Society: 1987), 251-255.

¹¹² Klengel, “Zur ökonomischen Funktion,” 199. In 1979, Vladimír Souček examined KBo 19.28, a list of temple personnel probably belonging to the Temple 1 in Hattusa, in which 205 administrative personnel (singer, priests, seers, musicians, and nineteen scribes and thirty-three “scribes on wood”) are mentioned. Emphasizing the role of the state in managing the temple, Souček notes that at least some of the temple personnel were NAM.RA “deportees” assigned to the temple by the king. (Vladimír Souček, “Soziale Klassen und Schichten in der hethitischen Tempelwirtschaft,” *Archív Orientální* 47 (1979): 78-82.) Alfonso Archi in 1989 penned a short but philologically detailed article confirming Klengel’s assessment of the temple as an arm of the Hittite government. Archi’s main argument is that the temples, while possessing economic-administrative structures of their own, were fully integrated and subordinate to the king, and act as centers of redistribution and royal ideology (Alfonso Archi, “Funzioni economiche del tempio ittita,” *Scienze dell’Antichità* 3-4 (1989-90): 119-125). It should be noted that the English abstract of the article is somewhat misleading when it says “The Hittite temple has ‘Oriental’ features, in the sense that the important economic-administrative structures were autonomous of the Palace.” The structures, i.e. the economic apparatus that allowed the temple to provision its cultic activities, were separate from the Palace but subordinate to it in every way.

For Klengel, the unity of temple and palace in Anatolia results from its pre-Hittite history. The geography of the Anatolian Plateau encouraged scattered local communities and did not permit large collective institutions like the Mesopotamian temples (see discussion of the impact of geography in Chapter 2). On the positive side, this meant that when the Hittites united Anatolia, they did not have to contend with powerful and independent urban institutions (which would have necessitated a different response, as seen with their later conquests in Syria¹¹³). The negative side was there was no preexisting system for coordinating the economic surplus of the Anatolian region, and the temple system was an attempt to create one *ex novo*.¹¹⁴ This description of the Hittite temple as an extractive/redistributive unit resulting from the environmental and political history of the Anatolian Plateau can be called the Klengel hypothesis. It remains the foundation for the current understanding of the role of temples and religion in the Hittite state.

¹¹³ Cf. Gary Beckman, "Hittite Administration in Syria in Light of the Texts from Hattusa, Ugarit, and Emar," in *New Horizons in the Study of Ancient Syria*, ed. M.W. Chavalas, J.L. Hayes (Malibu: Undena, 1992): 41-49.

¹¹⁴ Klengel, "Zur ökonomischen Funktion," 200:

"Dem Herrscher der zugewanderten Hethiter, der die politische Gewalt an sich zu bringen vermochte, standen diese Einzelwirtschaften der Leute von GN gegenüber sowie wohl Grosswirtschaften lokaler Dynasten, jedoch, soweit man sehen kann, keine Tempelwirtschaften mesopotamischen Typs. Auf der Grundlage eines Unterwerfungsverhältnisses entstand ein Herrschaftssystem, das im wesentlichen auf der Nutzung intakter Wirtschaftseinheiten beruhte, deren Leistungsfähigkeit im Interesse des Staates lag und daher von ihm kontrolliert wurde. Die Veränderungen lagen vor allem im Bereich der Distribution; die Existenz der Tempel wurde dabei umso mehr von dem Herrscher abhängig, desto umfangreicher ihre kultischen Aufgaben und damit die kultische Konsumtion wurden. Die Tempel wurden als vorgefundene oder neu gegründete lokale Zentren in dieses Herrschaftssystem voll einbezogen und erfüllten darin eine Funktion."

While Klengel's description is difficult to confirm in the absence of historical sources, the Hittite king's self-promotion as priest of the land very much recalls Max Weber's definition of a Caesaropapist society, where the religious structure is fully subordinated to the ruler.

Klengel refined his model over the next two decades and along with Archi lead a theoretical shift away from the old feudal/two-sector binary to a new discussion based on redistribution and bureaucracy.¹¹⁵ At the same time, Hittite administrative philology enjoyed its second great flourishing with the publication of the Palace Administrative Corpus¹¹⁶ and the ration lists of the KI.LAM festival,¹¹⁷ among others, as well as the discovery and publication of the Maşat Höyük texts, the first major collection of Hittite texts found outside the capital, which contained a number of local administrative documents.¹¹⁸ Finally, new archaeological evidence from around the Anatolian Plateau, including many smaller sites, expanded understanding of the conditions of Bronze Age life outside of Hattusa. The three trends—theoretical, philological, and archaeological—combined to usher in the current, redistribution-centered era of study of the Hittite state that forms the subject of the next chapter.

¹¹⁵ See Klengel, “Naturbedingungen und Produktivkraftentwicklung im alten Vorderasien,” *Ethnographische-Archäologische Zeitschrift* 23 (1982): 33-44, in which Klengel grounds his focus on the environment in Marxist materialism; Klengel, “Aspetti dello sviluppo dello stato ittita,” in *Stato Economia Lavoro nel Vicino Oriente antico: Atti del convegno promosso dal Seminario di orientalistica dell’Ist. Gramsci Toscana* (Milan: Franco Angeli, 1988), 183-194, where he extends his hypothesis to include an imported, Mesopotamian influenced bureaucracy in the later Hittite state; and Klengel, “Einige Bemerkungen zur Struktur des hethitischen Staates,” *Altorientalische Forschungen* 30 (2003): 281-289, the latest recapitulation of his thesis.

¹¹⁶ Silvin Kořak, *Hittite Inventory Texts (CTH 241-250)* (Heidelberg: Winter, 1982); Jana Siegelová, *Hethitische Verwaltungspraxis im Lichte der Wirtschafts- und Inventardokumente* (Praha: Národní muzeum v Praze, 1986).

¹¹⁷ Itamar Singer, *The Hittite KI.LAM Festival (Part Two)* (Wiesbaden: Harrassowitz, 1984), 139-170.

¹¹⁸ For the letters, which contain interesting evidence of royal intervention in local affairs, see Sedat Alp, *Hethitische Briefe aus Maşat Höyük* (Ankara: Türk Tarih Kurumu, 1991). For the local administrative texts, see Giuseppe del Monte, “I testi amministrativi da Maşat Höyük/Tapika,” *Orientalis Antiqui Miscellanea* 2 (1995): 89-138.

CHAPTER 2

CURRENT MODELS OF THE HITTITE STATE

Just as “feudalism” was the theme of post-war scholarship on the Hittite state, “redistribution” can be considered one of the main themes of studies today. The terms feudalism and redistribution work similarly as labels: they both explain the system of Hittite government in a convenient way, but on closer analysis are found to have limitations as accurate descriptions of the state. In their separate ways feudalism and redistribution under-explain and over-explain, neglecting some features of Hittite government and assuming others that were not there (feudalism neglects the importance of slavery to the Hittite economy and assumes sociological features of personal dependence not there; redistribution neglects communal self-sufficiency and assumes extensive state economic intervention). Criticism of the terms has thus far produced diverging results. The critique of feudalism ended in complete rejection of the model, perhaps because the Marxist wing of Hittitology would brook no less. The critique of redistribution, arising as it does from the more ecumenical fields of anthropology and archaeology, seems to be resulting in a progressive refinement rather than rejection of the model. So while Hittitologists today no longer speak of feudalism, redistribution is still a perfectly acceptable function of the Hittite state, if care is taken to specify the *kind* of redistribution, and to what end.

Unfortunately, a gradual awakening to the intellectual limits of a trend is not nearly compelling a narrative as a clash between political philosophies of East and West. Thus the present chapter will eschew the chronological and character-driven structure of the previous chapter, and proceed topically. The influence of the Anatolian environment looms large over modern research on the Hittite state, so the chapter is divided into sections derived from the propositions of the Klengel Hypothesis, which to recap from last chapter, was that the

environment of the Anatolian Plateau conditioned a system of weak political integration in the Hittite state based on a redistributive network of palaces and temples. Accordingly the chapter will discuss the Environment, its impact on Political Integration, and the kinds of Redistribution in the Hittite heartland.

2.1 ENVIRONMENT: Forschungsgeschichte

For most of the history of Hittite studies, when Hittitologists acknowledged the influence of the Anatolian environment (if they did at all), it was in the negative sense: usually how the unfavorable geographical conditions retarded the formation of a centralized state like those found in the rest of the Ancient Near East. There could be some upsides to low centralization, as Viktor Korošec pointed out when he attributed the comparatively better legal situation of the Hittite slave at least in part to the impossibility of extreme economic concentration and exploitation on the Plateau.¹ But in general, the Hittite Empire's location on the Anatolian Plateau was seen as perhaps its greatest misfortune.

For decades, from the 1970's to the 90's, Horst Klengel was one of the few Hittitologists to examine the constructive impact of the environment on the Hittite state (even his valiant attempt to connect Marxism materialism and environmental studies failed to entice further work on the environment from other Marxist Hittitologists).² Klengel's earliest work still emphasized the deleterious effects of low-density settlement patterns. In his 1975 study on the economics of Hittite temples, Klengel posited that the great difference between the Mesopotamian and Hittite

¹ Viktor Korošec, "Einige Beiträge zur gesellschaftlichen Struktur nach hethitischen Rechtsquellen," in *Gesellschaftsklassen im Alten Zweistromland und in den angrenzenden Gebieten; XVIII. Rencontre assyriologique internationale, München, 29. Juni bis 3. Juli 1970*, ed. D.O. Edzard (Munich: Verlag der Bayerischen Akademie der Wissenschaften, 1972), 111.

² Horst Klengel, "Naturbedingungen und Produktivkraftentwicklung im alten Vorderasien," *Ethnographische-Archäologische Zeitschrift* 23 (1982): 33-44.

religious systems was the comparative absence of independent “temple-cities” in Anatolia. While Mesopotamia was possessed of economically active religious institutions throughout its history, Hittite temples were extensions of the central government but played no independent role in economic accumulation or innovation, hindering the formation of non-governmental capital and credit. Klengel traced the reason for missing temple-cities to the dispersed population of the Plateau, which forbade the formation of large collective institutions.³

The first hint of a positive role for the Anatolian environment came in 1988 in a short article by Klengel on the development of the Hittite state. He argued that the short growing season and rich mineral wealth of the plateau encouraged a focus on metallurgy, and that the scattered communities were conducive to local aristocracies specialized in exchanging and accumulating wealth.⁴ The influence of metallurgy on Anatolian history had been recognized since the beginnings of Hittitology, where metal was identified mostly as a source of trading wealth and military technology (the study of Anatolian metal production goes back to 1939;⁵ for a history of the importance of iron in Hittitology, see the introductory chapter of Silvin Košak’s book on Hittite inventory texts;⁶ more recently see Andreas Müller-Karpe’s book on Anatolian metal-working⁷). Klengel, however, was the first to argue a direct link between the environment, metallurgy, and political structure of Anatolia. Thus instead of a simple brake on the growth of complex states, the environment was depicted as a positive factor in promoting an alternate,

³ Horst Klengel, “Zur ökonomischen Funktion der hethitischen Tempel,” *Studi micenei ed egeo-anatolici* 16 (1975): 199-200. See previous chapter for main treatment of this article.

⁴ Horst Klengel, “Aspetti dello sviluppo dello stato ittita,” in *Stato Economia Lavoro nel Vicino Oriente antico: Atti del convegno promosso dal Seminario di orientalistica dell’Ist. Gramsci Toscana* (Milan: Franco Angeli, 1988), 184-5.

⁵ Stefan Przeworski, *Die Metallindustrie Anatoliens in der Zeit von 1500-700 v. Chr.: Rohstoffe, Technik, Produktion* (Leiden: Brill, 1939).

⁶ Silvin Košak, *Hittite Inventory Texts (CTH 241-250)* (Heidelberg: Winter, 1982).

⁷ Andreas Müller-Karpe, *Altanatolisches Metallhandwerk* (Neumünster: Wachholz, 1994).

indigenous form of political hierarchy that would eventually challenge the riverine states to the south. Klengel still acknowledged an important role for Mesopotamian influence on Anatolian history, in the accelerated formation of competing principalities on the Plateau caused by the Assyrian trade colony network. Mesopotamia also offered a model to the Hittites on how to break the power of the native Anatolian nobility, as Hattusili's conquests of Syria allowed to him acquire the booty, the alternative religious cults, and bureaucracy staffed by Syrian scribes necessary to centralize the state.⁸

Since the 1990's much of the progress in understanding the Hittite state can be attributed to archaeologists. Studies like Jürgen Seeher's work on the grain silos of Hattusa, Claudia Glatz's work on the archaeological markers of empire, and Ulf-Dietrich Schoop on Hittite pottery, and Marcella Frangipane on Mesopotamian influence and finance on the Hittite state, (all of which, along with others, will be discussed below), have made the 21st century an "archaeologist's century" thus far in the field of Hittitology. The basis of much archaeological insight in Anatolia has been the anthropological consequences imposed by the environment: a sort of "history from below" beginning with the soil itself. This chapter will follow the archaeologists' lead, and now begin with a description of the Anatolian Plateau and its anthropological impact.

2.2 ENVIRONMENT: Geography of the Anatolian Plateau

The landscape of the Anatolian Plateau is predominantly semi-arid steppe with hills and scrubby forest (with more forest and less steppe in the past), generally lacking navigable rivers and deep alluvial soils. The high plains of the Plateau are surrounded on all sides by mountains

⁸ Klengel, "Aspetti dello sviluppo," 186-7.

and fall in elevation from east to west. Archaeologist Jak Yakar, in his overview of the growth of Ancient Anatolian society, divided the area into three zones based on agricultural potential. To the north the Plateau contains “a narrow discontinuous belt” along the inner arc of the Pontus Mountains that contains soils favorable to agriculture.⁹ In Hittite times this fertile zone lay just north of Hattusa and, as will be discussed, seems to have been one of the few regions directly managed by the Hittite state. The fertile area was often contested between the Hittites and Kaska tribesmen because of its agricultural potential and proximity to the refuge of the Pontus Mountains. To the south of the farming belt is a region, including Hattusa itself, defined by moderate rainfall in the fall and spring allowing for the dry farming of various cereals.¹⁰ Most of the “Upper Land” in Hittite times belonged to this region. Then, beginning with the Kızıl Irmak valley and continuing south and west to the center of the Plateau, the climate becomes arid and steppe-like. The agricultural potential of the zone is precarious, with the land having saline soils suitable for wheat and barley, if provided sufficient rain for the year, but prone to exhaustion from over-cultivation.¹¹ The Hittite “Lower Land” encompassed most of this region. In total, Yakar estimated that about one-third of the Anatolian Plateau was suitable for agriculture and horticulture in ancient times, enough to sustain good-sized but dispersed population.¹²

In prehistoric times most of the Plateau was covered by pine forests (*Pinus brutia*, *P. nigra*, *P. halepensis*). Pollen samples found in sedimentary layers of ponds demonstrate that Central Anatolia was, on the whole, more wooded, wetter, and ecologically diverse than it is

⁹ Jak Yakar, *Reflections of Ancient Anatolian Society in Archaeology: From Neolithic Village Communities to EBA Towns and Polities* (Istanbul: Homer Kitabevi, 2011), 345.

¹⁰ Yakar, *Reflections*, 345.

¹¹ Yakar, *Reflections*, 345.

¹² Yakar, *Reflections*, 345.

today.¹³ The forests helped store precipitation and supported a diverse range of wildlife, including nutritionally significant game animals such as roe (*Capreolus capreolus*), fallow (*Damus damus*), and red (*Cervus elaphas*) deer (the latter, with its size and impressive antlers, being a popular subject in Anatolian art). However, during the period from 1500-700 BC, an archaeological era known as the Beyşehir Occupation Phase, the forest was cleared from most of Anatolia, and since then kept clear by the intensive grazing of sheep and goats.¹⁴ Deforestation made the region more susceptible to cyclical drought, which may be implicated in the collapse of the Hittite state around 1180 BC.

Prior to the urbanization and territorialization of the region during the late 3rd/early 2nd Millennium BC Assyrian Trade Colony Period, the Plateau was covered with small settlements.

Yakar describes these towns as:

“hardly more than villages with small residential areas....The spacing of villages, usually no closer than ca. 4-5 km from each other, would have allowed each small community to develop separate tracts of land for cultivation and pasturage.... According to a rough estimate of 4-5 ha of cultivatable land per household and judging from the spacing of most small EBA sites, it is reasonable to suggest that an average-sized farming village consisted of less than 50 or 40 households.”¹⁵

¹³ Walter Dörfler, Reinder Neef, and Rainer Pasternak, “Untersuchungen zur Umweltgeschichte und Agrarökonomie im Einzugsbereich hethitischer Städte,” *Mitteilungen der Deutschen Orient-Gesellschaft* 132 (2000): 367-380.

¹⁴ For the Beyşehir Occupation Phase in Anatolia, see Willem van Zeist et al., “Late Quaternary vegetation and climate of southwestern Turkey,” *Paleohistoria* 17 (1975): 55-143; Sytze Bottema and Henk Woldring, “Late Quaternary vegetation and climate of Southwest Turkey II,” *Paleohistoria* 26 (1984): 123-149; Sytze Bottema, et al., “Palynological investigations on the relations between prehistoric man and vegetation in Turkey: The Beyşehir Occupation Phase,” *Proceedings of the 5th Optima Congress, Sept. 1986* (Istanbul: İstanbul Üniversitesi, Fen Fakültesi, 1993), 315-328; Sytze Bottema and Henk Woldring, “Anthropogenic indicators in the pollen record of the Eastern Mediterranean,” in *Man’s role in the shaping of the Eastern Mediterranean Landscape*, edd. S. Bottema, G. Entjes-Nieborg, W. van Zeist (Rotterdam: Balkema, 1990), 231-264; Warren J. Eastwood, et al., “Paleoecological and archaeological evidence for human occupation in southwest Turkey: the Beyşehir occupation phase,” *Anatolian Studies* 48 (1998): 69-86.

¹⁵ Yakar, *Reflections*, 436.

The overall effect of the numerous hills, hollows, and original forests of the landscape was to create a dispersed and isolated human geography across the ancient Anatolia Plateau.

2.3 ENVIRONMENT: Subsistence on the Anatolian Plateau

Because of the uneven productivity of the soil, survival for the populations who dwelled on the Plateau required a diversified and extensive (as opposed to specialized and intensive) approach to food resources. The environmental constraints of the Anatolian landscape produced a remarkable continuity in subsistence economy, called agropastoral after the two loci of production, that remained the default mode of subsistence for the region from the Neolithic to Ottoman times.¹⁶ Unlike in Mesopotamia, there was far less specialization into herders and farmers, as communities needed to be able to quickly switch from one food source to the other. Drought was a regular occurrence in the region: it has been estimated at Gordion, a site lying some 250km west of Hattusa but sharing a similar climate and occupation pattern during the Hittite period, that drought conditions occurred once every ten years.¹⁷ Other hazards to crops

¹⁶ On methods for measuring the importance of agropastoralism for a given era, see Naomi Miller, "From Food and Fuel to Farms and Flocks: The Integration of Plant and Animal Remains in the Study of Ancient Agropastoral Economies at Gordion, Turkey," *Current Anthropology* 50 (2009): 915-24; Naomi Miller and John Marston, "Archaeological Fuel Remains as Indicators of Ancient west Asian Agropastoral and Landscape Use Systems," *Journal of Arid Environments* 86 (2012): 97-103.

¹⁷ The Anatolian archaeologist John Marston describes the area around Gordion as consisting of "[l]arge upland plains with poor soils, suitable for grazing but marginal for agriculture..." with most agricultural activity restricted to the river valleys and supplemented by pastoralism on the plains (John Marston, "Agricultural Strategies and Political Economy in Ancient Anatolia," *American Journal of Archaeology* 116/3 (2012): 385). The precipitation levels at Gordion were estimated by John Marston, "Evaluating Risk, Sustainability, and Decision making in Agricultural and Land-Use Strategies at Ancient Gordion" (Ph.D. diss., University of California Los Angeles, 2010), 173-5; and Naomi Miller, *Botanical Aspects of Environment and Economy at Gordion* (Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology, 2010), 11-12.

were possible, too, as shown in the Hittite letters from Maşat Höyük, where a major Kaskaen incursion was triggered by a locust-induced crop failure.

In pre-industrial “peasant economies” (i.e. what the Marxist Hittologists of the last chapter would call the village sector), such as would have dominated Anatolia during the Hittite period, production tends to be based on the subsistence needs of the household unit. The anthropologist Marshall Sahlins noted in his book *Stone Age Economics* that peasant economy households tend to strive towards a type of self-sufficiency, what he termed the Domestic Mode of Production, where households grow or manufacture as many of necessities of life as possible while relying on the skills and labor of the immediate family.¹⁸ While dominant in “traditional” societies, the Domestic Mode’s mindset of self-sufficiency is itself not innate or traditional, but a calculated reaction to the high transaction costs of infrequent interactions with a market economy. While there is no data for private households during the Hittite period,¹⁹ conditions favoring the Domestic Mode would likely have pertained in Hittite Anatolia: it can be assumed that the slim agricultural margins of the landscape, low population density, and lack of navigable rivers precluded a robust market economy such as occurred in Mesopotamia in some periods.²⁰

¹⁸ See Chapters 2 and 3 in Marshall Sahlins, *Stone Age Economics* (New York: Aldine de Gruyter, 1972).

¹⁹ For indirect evidence of the economic disposition of the Hittite household, see Horst Klengel, “The Economy of the Hittite Household (É),” *Oikumene* 5 (1986): 23-31, which draws from Hittite government sources to confirm a picture of the Anatolian household as a diversified, agro-pastoral economic unit with distributed fields and a basic household size of 7-10 people. Klengel argues that the structure of the households pre-date Hittite expansion and were co-opted relatively intact by the state. Archaeologist Christoph Bachhuber comments on the agrarian focus of Anatolian life, noting that “Assyrian trading enterprise was brought to a standstill during the cereals harvest in the summer and the grape harvest in the fall.... Similarly, nearly all references to property in the Hittite laws are farm-related and rural.... The Hittite laws were meant to govern the farming hinterland” (Bachhuber, “The Anatolian Plateau,” in *A Companion to the Archaeology of the Near East*, ed. D.T. Potts (Oxford: Wiley-Blackwell, 2012), 577).

²⁰ For examples of a market economy in the Neo-Babylonian periods based on date production, see especially Chapter 4 of Michael Jursa, *Aspects of economic history of Babylonia in the first*

The drive for self-sufficiency in peasant economies is not restricted to the household unit, but also extends to long-standing relationships beyond the immediate family, i.e. the community. Communal survival strategies are especially important in marginal landscapes like Anatolia, where households pool resources with neighboring villagers (who if they had lived in the community long enough were probably related by blood anyhow) in order to mitigate risk. The resulting interdependence can often be observed in the architectural record, generating nucleated settlement patterns such as the compact, agglutinated villages observed in ancient Anatolia. Communal interdependence also creates an economy at least partially regulated by social norms, so that self-sufficiency at the village level uses social and not just market resources. The social dimensions of communal exchange allows for behaviors like altruism that were vital for survival in times of disaster. But socially regulated exchange is permeated by politics to a far greater extent than a market economy, so that power and coercion are implied by the survival strategies of even the smallest village. As was discussed last chapter on the origins of the Palace sector, neighbors borrowing in times of need may incur debt, social or otherwise, that can never be repaid, leading to ties of semi-feudal dependence or debt-slavery *in extremis*. In short, there is a clear link in Anatolia between environment, communal survival strategies, and political power.

2.4 ENVIRONMENT: Communal Self-Sufficiency

The relationship between food production and political power is one of the central questions pursued by Timothy Earle, an economic anthropologist who studies subsistence,

Millennium BC (Münster: Ugarit-Verlag, 2010). It has long been thought that a reference in an Egyptian-Hittite letter to seasonal iron production is result of cottage industry economics (see KBo 1.14, a letter from Hattusili III to an Assyrian king, and background discussion of Hittite metal industry in Jana Siegelová and Hidetoshi Tsumoto, “Metals and Metallurgy in Hittite Anatolia,” in *Insights into Hittite History and Archaeology*, edd. H. Genz and D.P. Mielke (Leuven: Peeters, 2011), 282).

specialization, and exchange in early complex societies. Earle is best known for his work on the Incan Empire and Hawaiian chiefdoms, but his theoretical insights apply just as well to the Hittites (as recognized by Marcella Frangipane, who used an article of Earle's on Incan finance strategies in discussing the Hittite state—see below). In his book *Bronze Age Economics*, based on three decades of case studies and theory and titled as a conscious reference to Sahlins' *Stone Age Economics*, Earle endeavors to explain the connection between village economies and chiefdoms/early kingdoms.²¹ He begins by outlining three common strategies of self-sufficiency at the village/community level: diversification, overproduction, and communal storage.

Diversification includes not only flexibility in choice of cultivated varieties but also a drive to exploit a range of different geographies. In a case study of pre-colonial Hawaii, Earle shows that communities will try to control, exploit, and defend the full range of ecological niches in their vicinity rather than attempting to specialize. Thus the same village will be involved in growing cereals and catching fish in the riverlands, herding livestock at higher altitudes, and hunting game and gathering plants in the forest. This drive towards diversification contradicts a previous anthropological model that posited community specialization—e.g. pure pastoralists trading with pure farmers—as the catalyst for the evolution of social complexity. Earle notes that local specialization is not impossible, as a community will take advantage of an especially abundant local resource for trade purposes. But in general, and returning to the principal of self-sufficiency, villages strive to be able to trade for luxuries and not necessities.

The other two strategies of self-sufficiency are overproduction and communal storage, both dependent on the fruits of successful diversification. Villages will strategically overproduce more foodstuffs than needed for survival in order to increase the margin for error. In good years,

²¹ Timothy Earle, *Bronze Age Economics: The Beginnings of Political Economies* (Boulder, Colorado: Westview Press, 2002).

the surplus can be consumed in communal feasts. In bad years the extra food is consumed right away to make up for caloric shortfalls or put into storage. Storage can be private or communal (and usually a mix of both), but communal storage has the advantage of sharing risk and minimizing conflict between the have and have-nots of a particular year's harvest. Communally stored food will be placed in a central and defensible location where many observers can keep watch.

All three of the above strategies were present in Anatolia at the time of the Hittites. For evidence of diversification, paleobotany at Gordion show that inhabitants hedged against the decadal droughts through a diversification of cereals (barley and wheat), pulses (bitter vetch and lentil), and animals (goat and sheep).²² It has also been noted in excavations at Kaman Kalehöyük that animal consumption patterns responded to the economic insecurity after the end of the Hittite Empire, with low investment animals such as goats preferred over sheep and cattle,²³ and it is possible that a more drought-tolerant breed of cattle spread across the region during the same period.²⁴ Geographical diversification, where a village seeks to dominate multiple ecologies, is more difficult to determine for ancient Anatolia. The range of biomes exploited by a settlement can ideally be estimated by floral and faunal remains, but it is difficult

²² Marston, "Agricultural Strategies," 387-90.

²³ Hitomi Hongo, "Continuity or Changes: Faunal Remains from Stratum IId at Kaman-Kalehöyük," in *Identifying Changes: The Transition from Bronze to Iron Ages in Anatolia and Its Neighbouring Regions. Proceedings of the International Workshop, Istanbul, November 8-9, 2002*, eds. B. Fischer, H. Genz, É. Jean, and K. Köroğlu (Istanbul: Türk Eskiçağ Bilimleri Enstitüsü, 2003), 257-269. See also Salima Ikram, "A Preliminary Study of Zooarchaeological Changes between the Bronze Age and Iron Ages at Kinet Höyük, Hatay," in the same volume, pp. 283-94. However the trend towards low investment animals was not seen at Hattusa, according to Angela von den Driesch and Nadja Pöllath, "Changes from Late Bronze Age to Early Iron Age Animal Husbandry as Reflected in the Faunal Remains from Büyükkaya/Boğazköy-Hattuša," in the same volume, pp. 295-99.

²⁴ For evidence of the introduction of zebu cattle, see Claudia Glatz and Roger Matthews, "Anthropology of a Frontier Zone: Hittite-Kaska Relations in Late Bronze Age North-Central Anatolia," *Bulletin of the American Schools of Oriental Research* 339 (2005): 58.

to distinguish between food acquired by cultivation and by trade. Future studies based on GIS surveys might be able to better determine boundaries of settlements and agricultural exploitation in Anatolia.

The strategies of communal storage and overproduction (as measured by feasting) have been topics of intensive study in Hittitology. Written sources for grain storage are few in the Hittite corpus, but administrative documents from Maşat Höyük/Tapikka record inventories of around one hundred pieces of agricultural equipment as well as modest amounts of seed grain (this however may be due to the exceptional circumstances surrounding the archive at Maşat Höyük/Tapikka, found in the destruction layer following a Kaskaen raid and recording defensive preparations, including taking in the wine and grain harvest).²⁵ Archaeological evidence is much richer, with the massive subterranean grain silos of Boğazköy/Hattusa, enough to feed 25,000-30,000 people for a year, representing the apex of Hittite grain storage techniques.²⁶ It was observed that the grain silos were unlikely to have been entirely filled and emptied every year: the grain was kept in sealed pits, creating a cool, low-oxygen environment that allowed for conservation of at least ten to fifteen years—a period that recalls exactly the pattern of decadal drought observed at Gordion.²⁷ Similar, though proportionally smaller, grain silos were also found at Alaca Höyük,²⁸ Kaman-Kalehöyük,²⁹ and Kuşaklı/Sarissa.³⁰ Artificial ponds can also be

²⁵ Giuseppe del Monte, “I testi amministrativi da Maşat Höyük/Tapika,” *Orientalis Antiqui Miscellanea* 2 (1995): 89-138.

²⁶ Jürgen Seeher, “Getreidelagerung in unterirdischen Großspeichern: Zur Methode und ihrer Anwendung im 2. Jahrtausend v. Chr. am Beispiel der Befunde in Hattuša,” *Studi Micenei ed Egeo-Anatolici* 42/2 (2000): 261-301.

²⁷ Seeher, “Getreidelagerung,” 268.

²⁸ Seeher, “Getreidelagerung,” 291. See also Aykut Çınaroğlu and Elif Genç, “Alaca Höyük ve Alaca Höyük hitit barajı kazıları, 2002,” *Kazi Sonuçları Toplantısı* 25/1 (2003): 279–288.

²⁹ Andrew Fairbairn and Sachihiko Omura, “Archaeological identification and significance of É.SAG (agricultural storage pits) at Kaman-Kalehöyük, central Anatolia,” *Anatolian Studies* 55 (2005): 15–23.

considered a form of state-sponsored communal storage, with examples found outside the walls at Boğazköy/Hattusa, Kuşaklı/Sarissa, and Ortaköy/Sapinuwa.³¹ The ponds stored large volumes of non-potable water using relatively simple technology of clay-core dams (which were remarkably low-maintenance, with some still functioning today) fed by wells cut into shallow aquifers. The ponds were convenient watering holes for draught animals and presumably local irrigation in times of drought.

Overproduction, in the form of feasting, was also prevalent in Hittite society, and judging by the administrative records, seems to have been a cornerstone of the Hittite state. The Hittite state archives abound in festival texts scripting the performance and supply of religious ceremonies, and describe large quantities of foods distributed to the participants.³² The festival participants were local Anatolians drawn from towns across the Anatolian Plateau and were supplied food and presumably lodging for the duration of the celebration.³³ The festival texts are one of the most prevalent of genres in the Hittite corpus: Theo van den Hout counted 22 festival texts out of the 49 compositions with duplicates (i.e. the “permanent records” of the Hittite

³⁰ Walter Dörfler, Reinder Neef, and Rainer Pasternak, “Untersuchungen zur Umweltgeschichte und Agrarökonomie im Einzugsgebiet hethitischer Städte.” *Mitteilungen der Deutschen Orient Gesellschaft* 132 (2000): 367-378.

³¹ Andreas Schachner and Hartmut Wittenberg, “Zu den Wasserspeichern in Boğazköy/Hattuša und der Frage ihrer Befüllung,” in *Wasserwirtschaftliche Innovationen im archäologischen Kontext: Von den prähistorischen Anfängen bis zu den Metropolen der Antike*, ed. F. Klimscha, R. Eichmann, Ch. Schuler and H. Fahlbusch (Rahden: Leidorf, 2012), 245-256.

³² See the discussion of the *MELQĒTU* lists in Itamar Singer, *The Hittite KI.LAM Festival* (Wiesbaden: Harrassowitz, 1984), 157-70.

³³ For discussion of one such example of religious “draft,” see Ian Rutherford, “Women Singers and the Religious Organisation of Hatti. On the Interpretation of CTH 235.1&2 and Other Texts,” in *Offizielle Religion, locale Kulte und individuelle Religiosität*, edd. M. Hutter, S. Hutter-Braunsar (Münster: Ugarit-Verlag, 2004), 377-94. The women singers were usually daughters or servants of well-connected men living in or within a short journey Hattusa. Rutherford suspects that the presence of stereotyped personnel lists indicated Hittite religious festivals were not celebrated by permanent temple staff but rather by local citizens fulfilling obligatory religious service.

chancery) written in the New Script of the Hittite Empire period.³⁴ Though unrecorded, feasting was likely a feature of pre-Hittite Anatolia given the local nature of many of the festivals celebrated by the Hittites: it is unlikely that a practice with such clear ideological implications was made up whole cloth.

2.5 *POLITICAL INTEGRATION: State Intervention*

The “high” economic features of a given society tend to reflect, consciously and unconsciously, the conditions of its basic economic unit, which in many ancient states meant the extended patriarchal household (as opposed to, for example, the large slave-holding plantation of Imperial Rome, the nomadic yurt encampments of Mongolia, or the nuclear family of today). Palaces and temples were households writ large, employing an economic approach similar to the peasant economy household described by Sahlins, where self-sufficiency is prized and long-standing social relationships—in the case of the palace, tributary inferiors and gift-exchanging equals—are leveraged for the rest. David Schloen, an archaeologist specializing in Bronze and Iron Age Syro-Palestine, has argued that for much of Mesopotamian history the patriarchal extended household, “the house of the father,” was not only the economic basis of the state but also the conceptual and symbolic model for legitimate authority.³⁵ Mesopotamian rulers used the language of patriarchy because it took advantage of a potent symbol of authority familiar to every Assyrian, Amorite, or Canaanite in their land. In addition, Schloen argues that it was also, quite simply, the only language available at the time to describe a position of compassionate-but-

³⁴ Theo van den Hout, “Administration in the Reign of Tuthaliya IV and the Later Years of the Hittite Empire,” in *The Life and Times of Hattusili III and Tuthaliya IV: Proceedings of a Symposium Held in Honor of J. de Roos, 12-13 December 2003*, ed. Th. van den Hout (Leiden: NINO, 2006), 83.

³⁵ David Schloen, *House of the Father as Fact and Symbol* (Winona Lake: Eisenbrauns, 2001).

absolute authority. Hittitologist Amir Gilan has applied Schloen's work to the Hittite state, finding it a better alternative to the artificial divisions of the Two-Sector/neo-AMP models, whereby the systems of cultic supply system and universal corvée labor are seen instead as part of a single organic, manorial economy pervading Hittite society.³⁶

At the heart of Schloen's thesis is the observation that states not only reflect the economic conditions of their subjects but shape them by symbolically and factually amplifying activities useful to the state and suppressing (or monopolizing) activities that are threatening. It is certain that the Hittites supported the preexisting village-level economic strategies of communal storage and overproduction, but there is also evidence that some of the most extreme features—the grain silos and regional festival system—were inventions of the Hittite state, aggrandized to an extent unrecognizable from pre-Hittite antecedents.

Food storage changed greatly in Anatolia in the transition from the Middle to Late Bronze Age. Private household storage is reduced, while institutional storage at temples and palaces in the form of pithoi (large ceramic storage vessels, often built in place and partially buried in the ground, meant for bulk storage of commodities such as grain, wine, and oil) is amplified. While excavations of private residences are limited, both Middle Bronze Age (MBA) Kültepe/Kanesh and MBA Boğazköy/Hattusa show evidence for extensive household storage,³⁷

³⁶ Amir Gilan, "Formen der Transaktion im hethitischen 'Staatskult' - Idee und Wirklichkeit," in *Geschenke und Steuern, Zölle und Tribut*, ed. H. Klinkott, et al. (Leiden: Brill, 2007), 293-322. As Gilan concludes on p. 318: "Die bisher aufgeführten Texte geben m.E. also keinen Anlaß, eine redistributive Tempelwirtschaft im Sinne des Zwei-Sektor-Modells zu postulieren. Vielmehr suggerieren sie ein hierarchisches, dem Palast untergeordnetes manoriales System, in dessen Rahmen ein Teil der Bevölkerung ihre corvée- oder vergleichbare Teilzeit-Dienstleistungen dem Tempel oder anderen Institutionen direkt zur Verfügung stellte."

³⁷ At Kültepe/Kanesh, see Tahsin Özgüç, *Kültepe. Kaniş/Neşa: The Earliest International Trade Center and the Oldest Capital City of the Hittites* (Ankara: The Middle East Culture Center in Japan, 2003), 88-90. At Boğazköy/Hattusa, see Andreas Schachner, *Von der Rundhütte zum Kaufmannshaus: Kulturhistorische Untersuchungen zur Entwicklung prähistorischer*

while private storage in the Late Bronze Age (LBA) Hittite period is limited in volume and extent.³⁸ Conversely, the system of institutional pithoi and sealing bullae discovered at MBA Acemhöyük³⁹ and MBA Kültepe/Kanesh⁴⁰ is magnified, as seen by the over 100 pithoi, ranging in size from 900 to 1750 liters, discovered at LBA Boğazköy/Hattusa.⁴¹ Grain silos are unattested in the MBA period, at least on the scale detectable in the archaeological record. Nevertheless, the Hittite subterranean silos were likely built using pre-existing Anatolian technology: it would be exceedingly fortuitous for grain silo technology to have been invented at the exact same time as the foundation of the Hittite state (and indeed, the anthropological parallels discussed by Seeher suggests storage of grain in cool, hypoxic conditions was a relatively widespread ancient technology,⁴² and Ulf-Dietrich Schoop notes that storage in subterranean pits predate pithoi technology in EBA Anatolia⁴³). It seems that what changed was the enlargement and institutionalization of a previously minor practice. The use of the grain silos

Wohnhäuser in Zentral-, Ost- und Südostanatolien (Oxford: Oxford University Press, 1999), 116.

³⁸ It has been noted at Hattusa that large household pithoi, well-attested from EBA to the early Hittite Old Kingdom, are replaced by a kind of medium-sized storage jar (Ulf-Dietrich Schoop, “Indication of Structural Change in the Hittite Pottery Inventory,” in *Central-North Anatolia in the Hittite Period: New Perspectives in Light of Recent Research (Acts of the International Conference Held at the University of Florence (7-9 February 2007))*, ed. F. Pecchioli Daddi, G. Torri, C. Corti (Roma: Herder, 2000), 151-2). Schoop interprets this as reflecting “a change in household economy from bulk storage to middle-range storage. The situation implies that there must have existed a now secure and permanent supply from a more central source.... It is tempting to see a connection with the large grain silos identified as such in Hattuša and other Hittite centres recently, even if most of these will have played a role outside daily supply in Hittite economy” (Schoop, “Structural Change,” 152).

³⁹ Nimet Özgüç, “Seal Impressions from the Palaces at Acemhöyük,” in *Ancient Art in Seals*, ed. E. Porada (Princeton: Princeton University Press, 1980), 61-100 (discussion of bullae pp. 61-9).

⁴⁰ The preliminary archaeological report for 2015 is yet to be published, but discovery of three large pithoi was announced in a news article, “Giant amphoras unearthed in Kültepe,” *Hurriyet Daily News* (Sept. 24, 2015)

⁴¹ Peter Neve, “Der Große Tempel und die Magazine,” in *Boğazköy IV: Funde aus den Grabungen 1967 und 1968*, ed. K. Bittel (Berlin: Gebr. Mann, 1969), 12-17.

⁴² Seeher, *Getreidelagerung*, 261-68.

⁴³ Schoop, “Structural Change,” 151-2.

ended with the Hittite state (though grain storage continued inside the fortification walls), with the silos at Boğazköy/Hattusa filled in and built upon even before the final abandonment of the city.⁴⁴

The religious festivals also show evidence of being a preexisting Anatolian practice greatly amplified in service of the state. Without written records it is impossible to estimate the frequency and economic burden of religious festivals in trade colony period (and its immediate aftermath), but the local nature of the cults attested in the Hittite records, possessed of innumerable minor gods and regional hypostases, suggests a continuing tradition. The system of cultic supply, however, was deemed by Itamar Singer, in a 1984 article stemming from his work on the KILAM festival,⁴⁵ as unlikely to have predated the Hittite state.⁴⁶ Hittite festival texts show that food products for many of the festivals were managed by the ^{LÚ}AGRIG. The ^{LÚ}AGRIG was a palace servant and nominal member of the royal household, classified in the younger Laws as a slave, albeit with additional rights.⁴⁷ The ^{LÚ}AGRIG's were not normally appointed from members of the nobility or royal family, and rather seemed to be drawn from important local Anatolians, who, based on the Telepinu Edict, accumulated considerable economic power in the countryside through their office.⁴⁸ The ^{LÚ}AGRIG was responsible for maintaining two storehouses: one in his home town (some forty "AGRIG towns" are recorded,

⁴⁴ Seeher, *Getreidelagerung*, 298. See also Jürgen Seeher, "Die Zerstörung der Stadt Hattusa," in *Akten des IV. Internationalen Kongresses für Hethitologie. Würzburg, 4.-8. Oktober 1999*, ed. G. Wilhelm (Wiesbaden: Harrassowitz, 2001), 623-34. Seeher cautions that the last phase of settlement in the Upper City, which is marked by the installment of potter's kilns instead of temples, the infill and building over of grain silos with houses, the walling up of the gates, and movement of grain storage to inside the fortification walls, is actually immediately post-Hittite.

⁴⁵ Itamar Singer, *The Hittite KILAM Festival*, Studien zu den Boğazköy-texten 23-4 (Wiesbaden: Harrassowitz, 1983-4).

⁴⁶ Itamar Singer, "The AGRIG in the Hittite Texts," *Anatolian Studies* 34 (1984): 97-127.

⁴⁷ Singer, "AGRIG," 100-1.

⁴⁸ Singer, "AGRIG," 105-6.

all within the Hittite heartland), and one in Hattusa. Singer hypothesized that the twinned storehouses were the basis of an extractive system, with the ^{LÚ}AGRIG collecting and storing foodstuffs in the local house before importing it to Hattusa, where the AGRIG-office appears in many festival texts as distributing foodstuffs for the participants.⁴⁹ According to Singer, the AGRIG system was not a remnant of Hattian administration, but rather an innovation of an expanding Hittite state: his reasoning turns on the philological grounds that while the ^{LÚ}AGRIG is always named by his hometown and the Hattian gentilic suffix *-il*, the AGRIG towns exceed the Hattian linguistic area in their geographical range; the “Hattianness” of the AGRIG system is in other words only a by-product of its being set up early in the Hittite kingdom’s history.⁵⁰ The absence of a regional system of religious festivals fits well with the general impression of temples in MBA Anatolia, which are not attested as owning land or accumulating the large agricultural surpluses of the LBA period.⁵¹

Not every element of pre-Hittite lifestyle was in harmony with the needs of the Hittite state. A survival strategy that is vital for populations in marginal landscapes is nomadism or semi-nomadism, that is, the ability to pick up and move when a landscape becomes seasonally unproductive, exhausted, or stricken by drought. Seasonal nomadism was practiced in Anatolia,

⁴⁹ Singer, “AGIRG,” 111-13. Singer cautions that only the distributive, and not extractive, responsibilities of the ^{LÚ}AGRIG are recorded in the Hittite archives. It seems taxation occurred at the local level.

⁵⁰ Singer, “AGRIG,” 126-7. Singer considers his point proved by attestations of AGRIG’s with Hattian gentilics coming from towns far outside of the Hattian cultural area. This shows that the “Hattianness” of the AGRIG’s resulted from their appearance in the Hattian liturgy of the early Hittite festivals.

⁵¹ Bachhuber, “The Anatolian Plateau,” 578 (“...temples appear to have been marginal in most aspects of the productive and commercial life of Kanesh.”), also citing Jan Dercksen, *Old Assyrian Institutions* (Leiden: Nederlands Instituut voor het Nabije Oosten, 2004), 139, for absence of MBA temple land ownership.

even until recent times.⁵² However, population movement in any form was inimical to the Hittite state, and almost every one of their treaties with neighboring states includes stipulations concerning the return of migrant Hittite subjects.⁵³ Moreover, the state took comparatively little interest in herding livestock.⁵⁴

The grain silos and religious festivals show that the Hittite state adapted local survival strategies, either attested in pre-Hittite Anatolia or recognizable from anthropological parallels, as models for government programs designed to serve the economic and ideological integration of the state. Thus some of the most conspicuous features of what it meant to be “Hittite” in day-to-day life, i.e. the intense and diverse calendar of festivals, the massive grain storage silos and artificial ponds, stem directly from the environment of the Anatolian Plateau. However, the tension with migrant groups illustrates that the Hittite state, despite its recognizably Anatolian character, was not the benign apotheosis of the Anatolian way of life. The Hittite Imperial state was selective in what strategies it appropriated and which it suppressed, and as will be seen, even successful programs like the grain silos were met with resistance, and regionalism remained a problem within the confines of the Plateau.

⁵² See Glatz and Matthews’ comments on the *yayla* pattern of seasonal nomadism in Claudia Glatz and Roger Matthews, “Anthropology of a Frontier Zone: Hittite-Kaska Relations in Late Bronze Age North-Central Anatolia,” *Bulletin of the American Schools of Oriental Research* 339 (2005), 57.

⁵³ See the introduction to Gary Beckman, *Hittite Diplomatic Texts* (Atlanta: Society for Biblical Literature, 1996).

⁵⁴ Gary Beckman, “Herding and Herdsmen in Hittite Culture,” in *Documentum Asiae Minoris Antiquae. Festschrift für Heinrich Otten zum 75. Geburtstag*, ed. E. Neu (Wiesbaden, Harrassowitz: 1988), 33-44.

2.6 POLITICAL INTEGRATION: Anatolian Regionalism

Anatolian Archaeologist Claudia Glatz, in one of the most insightful pieces of research in recent years on the Hittite state, has demonstrated that Hittite control of the Anatolian Plateau was an ongoing and contested project for the duration of Hittite history. Her thesis measures Hittite domination of Anatolia and Syria in a set of imperial markers, namely glyptics, landscape monuments, pottery, and a particular pattern of settlement, that were simultaneously imposed by imperial agents and selectively adopted by imperial subjects.⁵⁵ The core of Anatolia is defined by the presence of all four markers, while peripheral regions such as Kizzuwatna (Cilicia), Isuwa (Eastern Anatolia), and the Near West of Anatolia (the Luwian vassal-states) experienced an intensive hegemony, lacking the particular settlement pattern. Ugarit and Amurru showed indirect control, adopting glyptics, with only a veneer of control of coastal western Anatolia marked only by outposts of landscape monuments.⁵⁶

While the Hittite imperial project was negotiated between rulers and subjects, the terms could vary from imposition to free adoption. The clearest case of imposition is the change in settlement pattern from Middle Bronze to Late Bronze Age Anatolia. Glatz's survey of archaeological sites revealed a concerted program of de-urbanization on the Anatolian Plateau at the beginning of the Hittite Empire, and possibly progressing by stages to peripheral areas with the growth of the state. Reductions in settlement sizes had been observed by earlier archaeologists (Ron Gorny had even speculated that destruction of walls and reduction in size in the Middle Bronze to Late Bronze Age transition at Alişar Höyük was a direct consequence of

⁵⁵ Claudia Glatz, "Empire as Network: Spheres of material interaction in Late Bronze Age Anatolia," *Journal of Anthropological Archaeology* 28 (2009): 129.

⁵⁶ See especially figs. 9 and 10 in Glatz, "Empire as Network," 137-8.

Hittite rule),⁵⁷ but Glatz argues the phenomenon was a regionally significant trend. Cities that were seats of principalities in the Assyrian Trade Colony period were reduced in size and systematically demoted in settlement hierarchy in favor of secondary sites. The new centers of administration were smaller, ranging between 10 and 20 ha in size (e.g. Kuşaklı-Sarissa (18.2 ha—intramural) and Maşat-Tapikka (ca. 8 ha), compared to MBA Karahöyük-Konya (39 ha) and Acemhöyük (44 ha)), and only five Anatolian settlement “transgressed” the 20 ha threshold in the Hittite period: their size was presumably limited by comparison to Hattusa, which had only 30 ha of inhabited space, the remaining 120 being for monumental purposes.⁵⁸ At the same time there was a corresponding increase in the number of small rural settlements. Glatz considers the reasons for the break-up of the urban settlement to be as much symbolic as practical, used by the Hittites to send “a strong symbolic message of the shift of power from a local to a spatially more extensive polity.”⁵⁹ The program of “ruralization” is restricted to the Anatolian Plateau, but Hittite imperial influence settlement patterns also extended to neighboring areas. Kizzuwatna and Isuwa, while not showing the same restriction on large settlements, demonstrate an increase in the number of small, unwallled settlements during the Hittite period, perhaps as a result of improved regional security.⁶⁰ Conversely, the Kaskean frontier in the Pontic zone was severely depopulated and settlements reduced to a line of compact fortified towns.⁶¹

A more ambiguous case of imperial imposition is the case of Anatolian pottery during the Hittite period. The meaning of the Hittite ceramic tradition has been one of the most controversial topics of Anatolian archaeology in the past two decades. The basic problem is

⁵⁷ Ronald Gorny, “Hittite Imperialism and Anti-Imperial Resistance as Viewed from Alishar Höyük,” *Bulletin of the American Schools of Oriental Research* 299-300 (1995): 74-76.

⁵⁸ Glatz, “Empire as Network,” 132.

⁵⁹ Glatz, “Empire as Network,” 133.

⁶⁰ Glatz, “Empire as Network,” 133.

⁶¹ Glatz, “Empire as Network,” 134.

explaining the relationship between the remarkable uniformity of the Anatolian ceramic assembly and the growth of the Hittite state. By the time of the Hittite New Kingdom, Anatolian pottery was restricted to utilitarian assemblage sometimes called “Gray Drab Ware” that showed almost no regional or chronological variation. The periodization of Anatolian pottery is similarly unusual, showing two discontinuities. Ceramicist Ulf-Dietrich Schoop describes the situation as thus:

“Following up a line of essentially unbroken cultural continuity, we are able to observe the transformation of a comparatively simple late Early Bronze Age society into an urban civilisation within a territorial state. Within this general movement towards increasing complexity, two emergent patterns appear to be of special significance. The first would be that the Assyrian Colony period and the early part of the Old Hittite period seem to belong together and to be set apart from later times by a set of changes in the 16th century. The second would be the rapid formation of what we could call an Empire Period pattern of (pottery) economy around 1400 BC and the subsequent slackening of further change.”⁶²

In the Early Bronze Age, prior to the Assyrian Trade Colony period, Anatolian pottery was handmade and probably produced at the household level. The wares were carefully burnished, decorated with ornaments and colored slips (mostly red, sometimes white), and sometimes with painted motifs.⁶³ The Assyrian Trade Colony period (Middle Bronze Age) introduced the potter’s wheel, but otherwise the pottery was the same (as Schoop puts it, “a strong cultural continuity combined with technological discontinuity”).⁶⁴ Pottery seems to have changed little between the end of the Assyrian trade colony period and the beginnings of the Hittite state in the 17th century, but by the 16th century there is a significant winnowing of the ceramic assemblage

⁶² Ulf-Dietrich Schoop, “Indications of structural change in the Hittite pottery inventory at Boğazköy-Hattuša,” *Central-North Anatolia in the Hittite Period: New Perspectives Light of Recent Research, Acts of the International Conference held at the University of Florence (7-9 February 2007)*, edd. G. Torri, C. Corti, F. Pecchioli Daddi (Rome: Herder, 2009), 155. See also the history of research literature presented in Glatz, “Empire as Network,” 129.

⁶³ Schoop, “Structural Change,” 149.

⁶⁴ Schoop, “Structural Change,” 150.

as formal variations are rationalized to single types. Decorative slips become rare, and where present, reduced to single bands instead of covering the vessel. Large storage pithoi become prevalent for the first time.⁶⁵ Already the pottery of the 15th century can be described, as Schoop puts it, as “bland outputs of an industry of mass production” and older types of pottery, especially the more elaborate, mostly disappeared.⁶⁶ By the 14th century, Hittite pottery is “typologically dead,” and shows very little development until the end of the empire, and all ornamentation is purged from the assemblage.⁶⁷ Almost all pottery in the Hittite Empire period was utilitarian and mass-produced. Two exceptions are locally-produced “Eggshell Ware” in the form of a small hemispherical bowl with extremely thin walls and a blade-like lip, and Red Lustrous Wheelmade Ware, a prestige good imported from Cyprus, usually in the form of a spindle bottle thought to contain perfume and well known from other palace contexts in the Ancient Near East.⁶⁸ Pottery development in the last 200 years of Hittite history is almost imperceptible, as most changes are only in the statistical distribution of forms.⁶⁹ Just prior to the abandonment of Hattusa the assemblage is increasingly restricted, but still recognizably Hittite, with a noticeable decline in quality in some pieces.⁷⁰ Then in the Early Iron Age, pottery at Hattusa reverts to a plain, handmade style reminiscent of the Early Bronze Age and Chalcolithic,

⁶⁵ Schoop, “Structural Change,” 151.

⁶⁶ Schoop, “Structural Change,” 153.

⁶⁷ Schoop, “Structural Change,” 154. See also p. 155, where Schoop explicitly links the lack of change and ornamentation to “industrialization” of pottery production.

⁶⁸ Schoop, “Structural Change,” 155.

⁶⁹ Ulf-Dietrich Schoop, “Pottery Traditions of the Later Hittite Empire: Problems of Definition,” in *Identifying Changes: The Transition from Bronze to Iron Ages in Anatolia and Its Neighbouring Regions. Proceedings of the International Workshop, Istanbul, November 8-9, 2002*, ed. B. Fischer, H. Genz, É. Jean, K. Köroğlu (Istanbul: Türk Eskiçağ Bilimleri Enstitüsü, 2003), 168.

⁷⁰ Schoop, “Pottery Traditions,” 172-3.

offering the possibility that pre-Hittite Anatolian ceramic traditions had been preserved all along,⁷¹ perhaps among the Kaskeans.⁷²

At present there are four major theses on how the Hittites achieved such a remarkably uniform pottery style during their reign (the conventional term “Hittite pottery” will be adopted here, while acknowledging, with Glatz,⁷³ that a more neutral term such as “north-central Anatolian-style” might be more appropriate). An early thesis by Günther Korbel linked the spread of Hittite pottery with the forced resettlement of deportees (NAM.RA) on the Plateau,⁷⁴ (though this fails to explain the adoption of elements of the Hittite assemblage outside of the Hittite coreland pointed out by Glatz below). The second thesis by Marie-Henriette Gates argues that, based on similar or even identical potter’s marks found at Hattusa and the town of Kinet Höyük (Hitt. Izziya, Class. Issus), Hittite pottery was part of a consciously controlled imperial economic system: as she terms it, “an economic program overseen by direct government regulation.”⁷⁵ However, in a third thesis, Uwe Müller⁷⁶ and Nicholas Postgate⁷⁷ consider it more likely that standardized pottery resulted from the presence of Hittite administrative officials.

⁷¹ Hermann Genz, “Früheisenzeitliche Keramik von Büyükkale in Boğazköy/Hattuša,” *Istanbuler Mitteilungen* 53 (2003): 113-29.

⁷² Claudia Glatz and Roger Matthews, “Anthropology of a Frontier Zone: Hittite-Kaska Relations in Late Bronze Age North-Central Anatolia,” *Bulletin of the American Schools of Oriental Research* 339 (2005): 57-8.

⁷³ Glatz, “Empire as Network,” 129-30.

⁷⁴ Günther Korbel, *Die spätbronzezeitliche Keramik von Norşuntepe* (Hannover: Institut für Bauen und Planen in Entwicklungsländern, 1985), 117-120.

⁷⁵ Marie-Henriette Gates, “Potmarks and Kinet Höyük and the Hittite ceramic industry,” in *La Cilicie: espaces et pouvoirs locaux (2e millénaire av. J.-C. – 4e siècle ap. J.-C.)*, edd. É. Jean, A.M. Dinçol, S Durugönül (Istanbul: Institut français d’études anatoliennes Georges Duménil, 2001), 141.

⁷⁶ Uwe Müller, “Norşun Tepe and Lidar Höyük. Two examples for cultural change during the Early Iron Age,” in *Anatolian Iron Ages 5*, edd. A. Çilingiroğlu, G. Darbyshire (London: British Institute of Archaeology at Ankara, 2005), 107-14.

⁷⁷ J. Nicholas Postgate, “The ceramics of centralization and dissolution: a case study from Rough Cilicia,” *Anatolian Studies*, 57 (2007): 141-150.

Instead of intervention in the daily economic life of local towns, the similarity in pots stemmed from Hittite governors and soldiers wanting to (or being expected to?) live in the style of Hattusa, which they demanded from local craftsmen. Postgate reasons that,

“from Assyria in the 13th century we have extensive documentary evidence of the tight control exercised by the state over industrial production, in the shape of a system of work-assignment.... All the signs are that in other respects the Late Bronze Age kingdoms operated along very similar lines to each other, and it would be no surprise if in Hittite territories similar tight administrative control was exerted from the centre at Hattusa.”⁷⁸

Unfortunately there is very little evidence, outside of perhaps goldsmithing⁷⁹ and the supply of ritually pure products for the king’s sacred person,⁸⁰ of industrial intervention by the Hittite state. This makes the last thesis on Hittite pottery, offered by Claudia Glatz, most likely. Glatz argues that uniform pottery was not imposed at all (except perhaps at the very center of the kingdom), but rather adopted selectively by local elites emulating the Hittite court style. Evidence for adoption is best at the periphery of the Anatolian plateau, where elements of the Hittite assemblage begin to appear at different dates, and never in their entirety as would be expected in an imposed ceramic regime.⁸¹

The last two features of Glatz’s model of Anatolian regionalism, landscape monuments and glyptics, are clearer cases of adoption by regional elites. Glyptics, i.e. Anatolian Hieroglyphs, were the most extensive and least regulated marker of the Hittite world: indeed,

⁷⁸ Postgate, “Ceramics of Centralization,” 145.

⁷⁹ See Jana Siegelová’s discussion of the goldsmiths Pallā and Zazū in the introduction to her *Hethitische Verwaltungspraxis im Lichte der Wirtschafts- und Inventardokumente* (Praha: Národní muzeum v Praze, 1986).

⁸⁰ cf. KUB 13.3 iii 10, where leatherworkers are instructed to only use hides obtained from the palace kitchen when crafting leather for the king’s chariot.

⁸¹ Glatz, “Empire as Network,” 138: “ceramic similarities in [the peripheral] regions differ in terms of their chronology of introduction and intensity, [it suggests] a series of local processes of adoption rather than the deliberate imposition of imperial cultural elements on surrounding territories.”

their “classical” period of use is only after the fall of the Hittite Empire and at its former periphery in the Neo-Hittite kingdoms of Syria. As for “Hittite” landscape monuments, Glatz points out that more were created by local elites, some of whom were antagonistic to the Hittites, than commissioned by the royal family.⁸² It seems that Hittite-style landscape monuments were less markers of the Hittite state than a shared visual language for settling local scores. As Glatz writes:

“In view of both the large number of monuments apparently commissioned by princes and local kings as well as textual references to incessant upheavals and subsequent military campaigns across Anatolia, I propose that despite potentially close familial and/or contractual ties with the Hittite core, representations or inscriptions of princes and local rulers [i.e. landscape monuments] should be seen as evidence for power-political discourses among local factions as well as with central forces.”⁸³

Monuments were claims to territory rather than manifestations of control, and more concerned with defining an interior than subjugating a boundary.⁸⁴ They were thus placed where political competition was most intense: Western Anatolia and the border between Tarhuntassa and the Lower Lands were especially popular sites, and it is no surprise that landscape monument building became popular in the political upheaval of the last stages of the Empire.⁸⁵

In sum, Glatz’s research shows that the Anatolian Plateau was a patchwork of competing political and cultural elements during the Hittite kingdom. Even at the height of Hittite power in the Ancient Near East, the Hittite king would have full control over a very small part of the Empire, perhaps even just Hattusa and the Upper Land, marked by the quadruple overlap of political markers discussed above. Though Glatz, as an archaeologist, does not speculate on the

⁸² Claudia Glatz and Aimée Plourde, “Landscape Monuments and Political Competition in Late Bronze Age Anatolia: An Investigation of Costly Signaling Theory,” *Bulletin of the American Schools of Oriental Research* 361 (2011): 57.

⁸³ Glatz, “Empire as Network,” 136.

⁸⁴ Glatz, “Empire as Network,” 137.

⁸⁵ Glatz and Plourde, “Landscape Monuments,” 58-60.

textual-historical aspect of Anatolian regionalism, I suspect that the administrative records found at Hattusa are also restricted to the core region in which the king had full control.⁸⁶

Conveniently, as discussed in the geography of the Anatolia Plateau, this area under direct control contained the richest farmlands of the kingdom. Thus the intense micromanagement observed in, e.g., the Maşat Höyük/Tapikka letters, where the king takes personal interest in repelling a Kaskean incursion into what is otherwise an insignificant frontier town, should neither be generalized to the remaining areas of the Hittite kingdom, nor should it be interpreted as a symptom of a government “incapable of delegation” (a phrase ironically used by Glatz and Matthews to describe the king’s military responsibilities, prior to her dissertation revealing the unique position of the northern frontier in Anatolia).⁸⁷ Rather it was the king exercising the responsibilities of a regional lord in his personal “royal demesne.”⁸⁸

2.7 POLITICAL INTEGRATION: *Anatolian Resistance*

Given the regionalization of Anatolia, it is no surprise that the Hittite faced resistance to their rule. Regional lords, vassals, and (most dangerously) other members of the royal family were threats to the state; though in general they sought to usurp rather than dismantle Hittite power (cf. Hattusili III, Kurunta, and the political aspirations of the Arzawa confederacy in contacting Egypt). Resistance to Hittite rule also came from sub-state actors in two directions,

⁸⁶ This point will take further research, but it can already be seen that most of the place names in the Palace Administrative Corpus, especially the destinations for outgoing shipments, are in Northern Anatolia: the KASKAL series discussed in Chps. 3-5 is a likely example.

⁸⁷ Claudia Glatz and Roger Matthews, “Anthropology of a Frontier Zone: Hittite-Kaska Relations in Late Bronze Age North-Central Anatolia,” *Bulletin of the American Schools of Oriental Research* 339 (2005): 54

⁸⁸ The subsistence of the ruler in the same way as his followers is a well-recognized feature of vertically oriented, or tributary societies (see Frangipane’s discussion below).

external in the form of tribal entities who did not recognize Hittite governance, and internal in the form of passive resistance by Hittite subjects.

Of tribal resistance to the Hittites, none is better known than that of the Kaskeans, a group of semi-nomads who lived to the immediate north of the Hittite coreland in the Pontic region. Like the *foederati* of Imperial Rome, there seems to have been considerable social mobility between the Kaska and the Hittite state,⁸⁹ sometimes difficult to trace by the fact that Kaskean names are oftentimes indistinguishable from the Hattic or “Cappadocian” stratum of Hittite onomastics (cf. the Kaska prisoner list of the Maşat Höyük/Tapikka dossier). It is possible the Kaska were not necessarily even ethnically or religiously distinct from the original Hattic population of Northern Anatolia.⁹⁰ Historically it appears the Kaska did not emerge as a distinct group until the Middle Hittite Kingdom, as they are unattested until the reign of Tudhaliya I, despite frequent campaigns by Hattusili I in Northern Anatolia.⁹¹ And while it is conventional to refer to the Pontic zone as a frontier, archaeologist Paul Zimansky has suggested that there were no “hidden Kaskeans” beyond the boundaries of the Hittite state, and instead that the Kaska were endemic to the hills and valleys of the area, just too expensive for the Hittite state to fully and continuously pacify.⁹² This fits well with the archaeological picture of a relatively stable and peaceful Pontic region in the Middle Bronze Age, which only later changed to the fortified zone

⁸⁹ Glatz and Matthews, “Anthropology of a Frontier Zone,” 54.

⁹⁰ A hypothesis going back to foundational study of the Kaska by Einar von Schuler, *Die Kaškäer: Ein Beitrag zur Ethnographie des alten Kleinasien* (Berlin: de Gruyter, 1965), 89-91; see also von Schuler, “Kaškäer,” *Reallexikon der Assyriologie* V (1976-80): 460-63.

⁹¹ Itamar Singer, “Who were the Kaška?,” *Phasis* 10/2 (2007): 167-8.

⁹² Paul Zimansky, “The Lattimore Model and Hatti’s Kaska Frontier,” in *Settlement and Society: Essays Dedicated to Robert McCormick Adams*, ed. by E. Stone (Los Angeles: Cotsen Institute of Archaeology, 2007), 157-172.

of the Hittite Period.⁹³ If it were indeed the case that the Kaska were neither ethnically distinct (being Hattian) nor geographically separate (dwelling within the nominal boundaries of the Hittite kingdom) from other Hittite subjects, then they are better defined as Anatolians living a lifestyle that rejected the political legitimacy of the Hittite state (or, perhaps given their semi-nomadism, Anatolians living in a Hittite state that rejected their lifestyle).

Within the boundaries of the Hittite state there is also evidence for passive resistance to the regime of taxation represented by the grain silos. Archaeobotanical research has shown that the silos of Hattusa were filled by poor-quality grain likely coming from local sources.⁹⁴ The granaries contained undersized grains of unhulled barley or einkorn in enormous quantities, either indicating a bad harvest or cultivation on unfavorable soil, and mixed with a high proportion of weeds. Analysis of the weed remnants in the grain silos show that all of the grain came from Anatolia, and very likely from the area immediately surrounding Hattusa.⁹⁵ A similar quality of grain is found at Kuşaklı/Sarissa.⁹⁶ Researchers suspect that such poor-quality grain indicates it was likely intended only as an emergency reserve or as fodder, with the silos probably filled by taxation rather than direct cultivation by the state (reasoning that farmers would pay their taxes whenever possible with the poorest part of their harvest;⁹⁷ evidence for direct cultivation comes from higher quality naked wheat found in pithoi at Hattusa, probably

⁹³ Claudia Glatz and Robert Matthews, “The historical geography of north-central Anatolia in the Hittite period: texts and archaeology in concert,” *Anatolian Studies*, 59 (2009): 55-6.

⁹⁴ Walter Dörfler, et al. “Environment and Economy in Hittite Anatolia,” in *Insights into Hittite History and Archaeology*, edd. H. Genz, D.P. Mielke (Leuven, Peeters: 2011), 99-124.

⁹⁵ Dörfler, et al. “Environment and Economy,” 111.

⁹⁶ Rainer Pasternak, “Übersicht über die Ergebnisse der archaeobotanischen Arbeiten in Kuşaklı 1994–1997 und ein Interpretationsansatz zu den Befunden,” in *Untersuchungen in Kuşaklı 1997*, ed. A. Müller-Karpe, *Mitteilungen der Deutschen Orient-Gesellschaft* 130 (1998): 160–70.

⁹⁷ Rainer Pasternak, “Übersicht über die Ergebnisse der archaeobotanischen Arbeiten in Kuşaklı,” 160–70.

intended for cultic supply⁹⁸). Claudia Glatz goes further and sees the poor quality and admixture of weeds in the grain at Kuşaklı/Sarissa (and Hattusa) as possible evidence for active rural resistance to state control.⁹⁹

It is often assumed that the silos of Hattusa were at the center an extensive extractive and redistributive network,¹⁰⁰ but it is quite possible that Hattusa's grain silos were filled by local sources for local purposes, especially if the grain was intended as an emergency reserve. Jürgen Seeher estimated that storage space at Hattusa could store between 4460 and 5140 tons.¹⁰¹ At a yield of 400kg/ha barley,¹⁰² this volume could be filled by one year's cultivation of around 125 km² of land, i.e. in ideal terms, a circle of land around Hattusa with a radius of 6.3 km. Of course not all land around Hattusa can be farmed, but doubling the radius of cultivation to a still modest 12.6 km requires only one quarter of the area be arable. The number of people depending on the grain also need not be as high as the theoretical limit of 30,000 per year. If the grain were an emergency supply, it could be filled over multiple years and only emptied when needed. Moreover, as Seeher pointed out, the grain need not be intended purely for human consumption, as draught animals need to be foddered as well, with horses at rest needing as much grain as a

⁹⁸ Dörfler, et al. "Environment and Economy," 110.

⁹⁹ Claudia Glatz, "The Hittite State and Empire from Archaeological Evidence," in *The Oxford Handbook of Ancient Anatolia*, edd. S. Steadman, G. McMahon (Oxford: Oxford University Press, 2011), 881.

¹⁰⁰ Cf. Christoph Bachhuber, "The Anatolian Plateau," in *A Companion to the Archaeology of the Near East*, ed. D.T. Potts (Oxford: Wiley-Blackwell, 2012), 580: "By the late Early Hittite period most of the AP had become a kind of farming hinterland of the capital Boğazköy-Hattusha." See also Trevor Bryce, *Life and Society in the Hittite World* (Oxford: Oxford University Press, 2002), 77: "We may suppose that the large silos in Hattusa and elsewhere served as redistribution centres for large areas of the homeland, and not merely for the sustenance of the immediate population. None the less...the capital's workforce clearly made much higher demands on the state...necessitating substantial food storage facilities within the city simply to meet its own needs."

¹⁰¹ Seeher, "Getreidelagerung," 295.

¹⁰² A conservative figure calculated by Seeher, "Getreidelagerung," 294.

man (plus large amounts of hay), and three times as much grain, plus free grazing, while working.¹⁰³

2.8 REDISTRIBUTION: Wealth Finance, Staple Finance, and Mesopotamian Influence on the Hittite State

In spite of the difficulties of regionalism and resistance, the Hittite state survived for some 500 years while contending with environmental factors that seemingly should have limited its economic power vis-à-vis its competitors in the Ancient Near East. But as Horst Klengel argued, there are advantages to the Anatolian Plateau, principally in mineral resources and the administrative capacities stimulated by the extraction and taxing of the metals, that allowed the Hittite state to quickly adapt when it came into contact with Mesopotamian models of government.¹⁰⁴ Recently, Marcella Frangipane has revisited and greatly expanded Klengel's thesis in a pair of articles comparing the growth of administration in Anatolia and Mesopotamia, giving both anthropological and historical reasons for the differing, yet equally viable trajectories.

As Frangipane and others have noted, Southern Mesopotamia had a head start on urbanized society due to its highly productive land and competitive household units, which encouraged a naturally stratified society.¹⁰⁵ The necessity of legitimate inequality for civilizational growth is a classic concept (cf. Weber's essay on the "The Social Causes of the Decay of Ancient Civilizations" that rooted Roman and Athenian economic success in slave

¹⁰³ Seeher, "Getreidelagerung," 295.

¹⁰⁴ This is roughly the conclusion of Klengel's article on "Aspetti dello sviluppo dello stato ittita" discussed in section 2.2 above.

¹⁰⁵ Frangipane, "Different Models of Power Structuring," 79-81.

holders concerned with maximizing profit for competitive consumption),¹⁰⁶ but also somewhat unnatural to develop, as shown in the above discussion of peasant economies where countervailing forces of communalism and autarky are encouraged as survival strategies.

Overcoming the communalist inertia requires a set of factors: as Frangipane writes,

“The discriminating factors for the formation of highly urbanised society and centralised systems appear to be mainly of two types: 1) environmental: the growth of large concentrations of people in urban settlements is only possible if there are conditions for a highly productive agriculture, generating large and continuously increasing surpluses; 2) social: a system of social and kinship relations emphasising the separate and competitive role of individual household units, fostering the legitimation of differences within which higher status members of the society can emerge.”¹⁰⁷

The floodplains of lower Mesopotamia are a high risk/high reward environment that rewarded the competing large family units of the original Mesopotamian societies. Minor differences in initial competitive success led to a “feedback circuit,” where families would spend the increased surplus of goods to enhance prestige, which allowed them to attract more dependent labor. As Frangipane describes it, this encouraged “a ‘dynamic’ wealth, consisting of the capacity to reproduce itself through very strict control over the labour force.”¹⁰⁸ The system rewarded efficient and publically-minded householders, which resulted in a strong public sphere which did

¹⁰⁶ Max Weber, “The Social Causes of the Decay of Ancient Civilizations,” in *Essays in Economic Sociology*, by Max Weber, ed. R. Swedburg (Princeton: Princeton University Press, 1999): 138-153.

¹⁰⁷ Marcella Frangipane, “Different Models of Power Structuring at the Rise of Hierarchical Societies in the Near East: Primary Economy Versus Luxury and Defense Management,” in *Development of Pre-state Communities in the Ancient Near East: Studies in Honour of Edgar Peltenberg*, ed. D. Bolger, L.C. Maguire (Oxford: Oxbow Books, 2010), 79.

¹⁰⁸ Marcella Frangipane, “The Evolution and Role of Administration in Anatolia: A Mirror of Different Degrees and Models of Centralisation,” in *Archivi, depositi, magazzini presso gli itititi: nuovi materiali e nuove ricerche*, edited by M. Balza, M. Giorgieri, and C. Mora (Genova: Italian University Press, 2012), 113.

not at the same time restrict private economic activity.¹⁰⁹ According to Frangipane,

Mesopotamian society was marked by:

“elites who centralised primary goods and labour, accumulated wealth in the form of staple products, and established a system of regular reinvestment in various activities by redistributing these staple products, or part of them, to increasingly broader sections of the population in the form of remuneration for their labour. The centralised organisation in this case became almost an ‘entrepreneurial’ system, creating a very close interdependency between all of its social components. The consequences of this system were (conditions permitting) urbanisation, the emergence of sophisticated administrative procedures, and bureaucracy. The origin of the elites and their privileges were usually deeply entrenched in the socio-economic system. It was this model that led to the birth of the state.”¹¹⁰

The accumulation of luxury goods and land rights was only a later outcome of the Mesopotamian system, and durable goods were used for a long time primarily as markers of prestige rather than storable wealth.¹¹¹

Anatolia adopted an urbanized, stratified social organization only later through contact and emulation of their neighbors to the south, which by virtue of its being borrowed was shallowly rooted and maintained by exertions of political and military power.¹¹² Whereas the original role of the Mesopotamian state was to regulate the mutual exchange of service and benefits, in Anatolia the state focused on protecting the populace and defending trade routes, with results measured by the hoarding and display of luxury goods, accumulation of which preceded urbanization.¹¹³ Anatolian societies were thus led by:

“political/military type leaders who seem to have managed small territories and who were probably viewed ideologically in terms of their role as defenders and representatives of the community. Interference by these elites in the basic production system of the general population appears to have been virtually non-

¹⁰⁹ Frangipane, “Evolution and Role of Administration,” 113.

¹¹⁰ Frangipane, “Different Models of Power Structuring,” 84.

¹¹¹ Frangipane, “Evolution and Role of Administration,” 114.

¹¹² Frangipane, “Different Models of Power Structuring,” 81-82.

¹¹³ Frangipane, “Evolution and Role of Administration,” 116-17.

existent, whereas elites may have played a very important role in protecting the trading routes for raw materials and in supporting craftsmen. Their financial system was therefore based essentially on handicraft items and luxury goods, above all metals, and their political role was probably linked to their ability to guarantee access to the supply of raw materials in a weakly hierarchical society made up of small territorial units in a basically mountainous environment.”¹¹⁴

Anatolian society can be described as vertical in that its members had limited dependence on others of the same social class and participated in a hierarchical chain of economic obligations. The Anatolian-type societies were unable to develop an indigenous urbanism and bureaucracy, but selectively appropriated its advantages after contact with Mesopotamia.

As recognized by Frangipane, the two types of society, Anatolian and Mesopotamia, have strong anthropological parallels, falling respectively into the “Wealth Finance” and “Staple Finance” categories first described in a study of the Inca state by anthropologists Terence D’Altroy and Timothy Earle (the latter of whom incorporated the ideas into his *Bronze Age Economics* discussed above).¹¹⁵ Wealth and staple finance refer to different forms of redistribution, defined by Earle as “[s]urpluses...mobilized and distributed centrally to finance institutional apparatuses of power (e.g., warriors, managers, and craftsmen of wealth items and weapons) with the goal to expand political reach.”¹¹⁶ Redistribution is present in any sufficiently centralized state, but elites have multiple strategies to convert dependent relationships into the reinforcement of political hierarchy through finance. The two major, complementary types of finance observed by Earle and D’Altroy are staple finance, based on ownership of land and control of foodstuffs, and wealth finance, based on control of trade-routes and production of prestige objects. Earle describes the distinction and relationship between the systems as follows:

¹¹⁴ Frangipane, “Different Models of Power Structuring,” 84.

¹¹⁵ Terence D’Altroy and Timothy Earle, “Staple finance, wealth finance and storage in the Inca political economy,” *Current Anthropology* 26/2 (1985): 187-206.

¹¹⁶ Timothy Earle, “Redistribution and the Political Economy: The Evolution of an Idea,” *American Journal of Archaeology* 115/2 (2011): 237-8.

“Based on ownership of productive facilities, staple finance involved the mobilization of staples, their storage, and redistribution to support ruling institutions. These systems were difficult to control at any distance, because heavy staples were impractical to move far. Based on control over valuables, wealth finance involved the production and/or procurement of special objects to mark status, which were therefore useful as payment. Staple and wealth finance could often be joined. Staples were used to support attached specialists, who converted the staples into the more easily moved valuables that would allow for a centralized political economy over a greater distance.”¹¹⁷

The choice between staple and wealth finance was often environmental. In Anatolia, the difficulties of moving bulk items over long distances and the abundant mineral wealth of the region made it naturally suited to wealth-financed states. Anatolia’s proximity to the population centers of Mesopotamia were also a factor: Earle notes that while wealth-financed states are difficult to control and comparatively rare, they tend to arise secondarily to the neighboring agrarian states with which they trade.¹¹⁸ William Parkinson and Michael Galaty have argued that this is precisely the situation that gave rise to the Minoan and Mycenaean states of the Bronze Age Aegean,¹¹⁹ and a scenario of wealth-financed secondary state formation also fits well in Anatolia, especially the during Assyrian trade colony period.

The wealth-finance model helps explain some of the more unusual features of the Hittite state compared to their contemporaries. The lack of private enterprise and independent merchants in the Hittite kingdom has long been noticed by Hittitologists (in Goetze’s original description of the Hittite state, merchants were state employees tasked with acquiring raw materials not domestically available).¹²⁰ In the most recent assessment of the merchant as a

¹¹⁷ Earle, “Redistribution,” 241.

¹¹⁸ Earle, “Redistribution,” 241.

¹¹⁹ William Parkinson and Michael Galaty, “Primary and Secondary States in Perspective: An Integrated Approach to State Formation in the Prehistoric Aegean,” *American Anthropologist* 109 (2007): 113–29.

¹²⁰ Albrecht Goetze, “State and Society of the Hittites,” in *Neuere Hethiterforschung*, ed. G. Walser (Wiesbaden: Franz Steiner, 1964), 28.

profession in Hittite society, Harry Hoffner concluded that Hittite merchants were state sanctioned purveyors of foreign goods for the king, with the primary responsibility of conducting tribute and loot to Hattusa, though they were permitted to conduct their own business on the side; otherwise foreign trade was severely restricted.¹²¹ This is confirmed by the archaeological record, as attested by the astonishingly limited assemblage of foreign goods found in Hattusa (including a complete absence of Mycenaean/Aegean material, even in Hittite-controlled Tarsus, which given the proximity and well-attested contact between the regions would be improbable absent the political control of trade).¹²² While severe restrictions on foreign trade seem economically disastrous in today's globally connected world, in a wealth-financed state which relied on the ability to control the distribution of prestige objects as the basis for power, lack of private merchants makes perfect sense. In the same way, the focus of Hittite administrative records on durable goods to the exclusion of staples (there are no "live" records of grain administration in Hattusa, and as discussed above, the agricultural records at Maşat Höyük/Tapikka may be a result of the circumstances surrounding the archives), is sufficient and even apt for a state focused on the production, management, and circulation of luxury goods among elites.¹²³

¹²¹ Harry Hoffner, "Some Thoughts on Merchants and Trade in the Hittite Kingdom," in *Kulturgeschichten: Altorientalistische Studien für Volkert Haas zum 65. Geburtstag*, edd. T. Richter, D. Prechel, J. Klinger (Saarbrücken: Saarbrücker Druckerei und Verlag, 2001), 181-2, 189.

¹²² Ekin Kozal and Mirko Novák, "Geschenke, Tribute und Handelswaren im Hethiterreich. Eine archäologische Bestandsaufnahme am Fallbeispiel Hattusa," in *Geschenke und Steuern, Zölle und Tribute: Antike Abgabenformen in Anspruch und Wirklichkeit*, edd. H. Klinkott, S. Kubisch, R. Müller-Wollermann (Leiden: Brill, 2007), 340-1.

¹²³ This is the concluded purpose of the Hittite state archives by Mauro Giorgieri and Clelia Mora, "Luxusgüter als Symbole der Macht: Zur Verwaltung der Luxusgüter im Hethiter-Reich," in *Organization, Representation, and Symbols of Power in the Ancient Near East. Proceedings of the 54th Rencontre Assyriologique Internationale at Würzburg 20-25 July 2008*, ed. G. Wilhelm (Winona Lake, Eisenbrauns: 2012), 654-7.

By Frangipane's account, the Hittite state inherited its government from the highly localized, wealth-financed Anatolian principalities, upon which the growing Hittite kingdom grafted a Mesopotamian inspired bureaucracy with pretensions to the control of staple products. Her model leaves open motivations for the Hittite adoption of Mesopotamian practices (noting only that all mature states of the Ancient Near East eventually adopted a hybrid system of finance),¹²⁴ but Klengel's original thesis in which the imported governmental practices were used to break the power of the Anatolian nobility rings true, especially in light of Glatz's research showing the historical destruction or reduction of any urban competitors to Hattusa. Frangipane is correct in describing the continued focus on wealth finance in the Hittite state as a source of strength, even if the wealth brought by the burgeoning empire strained the traditional verticalism of Anatolian society.¹²⁵

In light of Mesopotamian influence on the formation of the Hittite state, it is useful to ask whether the Hittite state was Anatolian at all. For some, such as archaeologist Christoph Bachhuber, the Hittites were essentially foreigners in their own land. Bachhuber observes that urbanism is not natural to the Anatolian Plateau, with cities only created and maintained there in exceptional circumstances.¹²⁶ In the Middle Bronze Age, the circumstances sustaining urbanization were the intensified contact and commerce with Assyrian merchants, and in the Late Bronze Age it was the ambition and resources of the Hittite Empire. In both cases foreign contacts and exotic materials were the key to urbanization.¹²⁷ Bachhuber's thesis interprets the

¹²⁴ Frangipane, "Evolution and Role of Administration," 122.

¹²⁵ Frangipane, "Evolution and Role of Administration," 121-2.

¹²⁶ Christoph Bachhuber, "The Anatolian Plateau," in *A Companion to the Archaeology of the Near East*, ed. D.T. Potts (Oxford: Wiley-Blackwell, 2012), 593-5.

¹²⁷ Emphasis should be placed on "materials" here: as shown by the archaeological record, the Hittite did not seem to want finished goods (except perhaps linens, which have not been

cities of the Anatolian Plateau, the same settlement pattern observed by Glatz, as the Hittites building monumental “shell towns” to dominate rural inhabitants of Anatolian Plateau. Even the pantheon of the Hittite state was mostly foreign, incorporated into the temples of Hattusa (and elsewhere)¹²⁸ in order to overawe the locals.¹²⁹ As Bachhuber concludes,

“much of the ideological core of Hittite urbanism was indeed foreign and ad hoc, as well as parasitic. Like those of the elites of the MBA, the urbanizing and imperial ambitions of the Hittites had become over-reliant on their acquisitions from foreign people and foreign lands. And as in the MBA, the urbanism of Hittite society was too shallowly rooted to survive the socioeconomic quakes that ended the Bronze Age in western Asia and the eastern Mediterranean.”

Bachhuber may be correct in arguing that urbanism is unnatural to the Anatolian Plateau. But it is better, I think, to appreciate just how Anatolian the mature Hittite state was. The regional religious calendar, the grain silos, the wealth-financed administration can all be traced directly to the Anatolian environment. By time span the Hittite kingdom is the most successful indigenous Anatolian state by far to have existed. The state could not have survived long without considerable adaptation to the region: so let it be said that, rather than parasitic, the Hittite state was an interpretation of an advantageous way of life, harmonious with the human and physical geography given to them.

2.9: Conclusions and Future Research

Having come to the end of this two-part survey, it can be seen that Hittitologists have produced a mature and sophisticated literature on the Hittite state over the past 100 years of

preserved), but rather raw materials which they could transform into culturally and religiously appropriate *objets d’art*.

¹²⁸ cf. Jared Miller, “Setting up the Goddess of the Night Separately,” in *Anatolian Interfaces: Hittites, Greeks and their Neighbours*, edd. B.J. Collins, M. Bachvarova, I. Rutherford (Oxford: Oxbow Books, 2008), 67-72.

¹²⁹ Bachhuber, “Anatolian Plateau,” 594.

research. The recent contributions of Anatolian anthropologist-archaeologists have been especially enlightening, and continuing and future collaboration between the philological and archaeological wings of Hittitology will be vital for advancing the field.

At present there are three outstanding questions to be answered in the near future. The first concerns the nature of staple-finance in the New Hittite Kingdom. It has been noted by numerous authors that Hittite administrative documents deal almost exclusively with luxury goods. Some have argued for a separate system of wooden tablets,¹³⁰ and/or *cretulae*,¹³¹ that controlled staple goods, but the philological situation of the extensive administration of staple goods on wooden tablets is ambiguous. In the absence of finding a preserved wooden tablet, resolution of the question of a separate administration of staple goods will turn on three points. First, whether there is archaeological evidence for the transport, storage, and redistribution of foodstuffs. As discussed above, the silos at Hattusa were filled with low quality grain from local sources, conceivably from the immediate hinterland of Hattusa. The quality and storage method of the grain, which because of the need for hypoxic conditions did not allow for frequent access, suggests that the silos operated as an emergency supply in case of drought, or perhaps fodder for animals; what it does not suggest is the regular income and distribution of grain rations as would be expected in a primarily staple-financed state. The test for the “defensive hypothesis” of grain storage will be future archaeobotanical research on other grain silos on the Anatolian Plateau, or the discovery of an archive referencing the rationing of grain.¹³² Grain silos operating as an

¹³⁰ For recent discussion, see Willemijn Waal, “They wrote on wood. The case for a hieroglyphic scribal tradition on wooden writing boards in Hittite Anatolia,” *Anatolian Studies* 61 (2011): 21-34.

¹³¹ cf. Frangipane, “Evolution and Role of Administration,” 118-120.

¹³² Again, the Maşat Höyük/Tapikka archive might do just this (although mitigated by the fact the grain amounts are fairly small, the archive records an early harvest triggered by famine-induced raids by the Kaska, and the location of Tapikka in the tightly administered “royal

emergency reserve, as opposed to a center of redistribution, would generate a low administrative burden: perhaps as simple as requiring local farmers each year to bring in carts of left-over grain until the silo is full. If it can be shown that grain storage was defensive in nature, and thus staple-finance was not a priority of the Hittite New Kingdom, then the need for an extensive administration on wood is obviated.¹³³

The second point is a philological version of the first. The primary expenditure of foodstuffs attested in the Hittite state archives is religious festivals. Enormous varieties and quantities of breads and cuts of meat, as well as specialty foods like honey, fruits, and cheeses, appear in the festival descriptions. Yet living administrative documents for provisioning these festivals, e.g. flour expenditures on bread loaves, distribution of livestock, and lists of attendees, are completely absent. In their place are stereotyped lists that seemed to have changed little since the establishment of the festivals in the Hittite Old Kingdom. I think there is a very real chance that the Hittite festival calendar, created to address the needs of a specific period of the Hittite state to bind together the economies, societies, and ideologies of the newly conquered Plateau, had outlived its usefulness by the time of the New Kingdom, becoming dead letter of sorts as a tool of Hittite state policy.¹³⁴ If the Hittite festival corpus had become moribund by the end of the Empire, it should be revealed in the philology. Other religious practices, such as local cults (which, coincidentally, because they use state-supplied metal objects but depend on local food

demesne” of the Hittite king), but a second provincial archive recording grain storage would allow for much firmer conclusions.

¹³³ The word extensive should be emphasized here, as it is of course possible and even likely that wooden tags were used for labeling storage containers or taking a tally. But short-term uses like these are different from the shadow administration being proposed by wooden tablet proponents.

¹³⁴ This is in line with Singer’s conclusion on the ^{LU}AGRIG, but I wonder if it might apply to the whole festival system.

supplies fit much better with the “traditional Anatolian verticalism” discussed by Frangipane)¹³⁵ and votive offerings (see Chapter 6 below), underwent continuous updating and revision in the New Kingdom period, and one would expect a living Hittite Festival corpus to do the same. If it were found that the Hittite festivals were reduced in scope or frequency, or become inert, it would again reduce the need for assuming a large staple-oriented Hittite bureaucracy.

The third and last point is to ask whether a wealth-financed administration attested in the clay tablet archives was sufficient to maintain an empire the size of Hatti. In terms of communications and logistics, the smallness of the administrative archives poses no problems (after all the Incan Empire spanned the length of the Andes with nothing more than messengers and *qipu* knots used as memory-aides), but the question is much more pertinent on the ideological level, and tied to the fate of the Hittite festival tradition. As Earle noted, wealth-financed states are inherently unstable because they are essentially sustained by strong-arming trade routes and continuous bribery of local elites. Moreover, wealth is portable, fungible, and reproduces itself through conquest, which means that a local warlord can rise to threaten the state in a way that a successful farmer or merchant cannot. From the state’s perspective, wealth can be made less fungible and reproducible in two ways, by controlling the means of acquisition (as the Hittites did by monopolizing foreign trade), and by making the most prestigious gifts exotic and unique (cf. the *spondylus* shells used by the Incan Empire, the purple *murex* dye of Rome, or any of the innumerable preciosities fashionable throughout history). The ideal luxury good for the ruler of a wealth-financed state would be a highly desirable object which only he could obtain

¹³⁵ For Hittite local cults, see Michele Cammarosano, “Hittite Cult Inventories – Part One: The Hittite Cult Inventories as Textual Genre,” *Die Welt des Orients* 43 (2013): 63-105, and “Hittite Cult Inventories – Part Two: The Dating of the Texts and the Alleged ‘Cult Reorganization’ of Tudhaliya IV,” *Altorientalische Forschungen* 39/1 (2012): 3-37.

and give, and once given could never be re-gifted.¹³⁶ The closest object to this description in the Hittite world are the religious idols, figurines, and symbols so amply attested in the archives. The idols were a low risk/high reward strategy for the Hittite state: they are inalienable gifts that cannot easily be repurposed by the village (melting down the statue of a local god is not a good start for a potential usurper!), and, if the propaganda was believed that the king was the human interface with the divine world, the idols could not be acquired from an alternate source. Thus the king was able to safely spend wealth in the provinces and trust that it would remain sequestered there. However, a system of ideologically-restricted gifting only works among believers, and makes those who do not participate in the ideology (usually designated “barbarians” with the full cultural force of the word, such as the Kaska to the Hittites), or those who can usurp the ideology (those who also possess the necessary traditional legitimation, such as other members of the royal family), all the more dangerous.

To prove that the wealth-financed administration of the Hittites was sufficient to maintain the Empire, it would have to be shown that the wealth circulated in the religious system had some kind of purchase with the local Anatolian populace. Local cults and festivals are the best attested route in the Hittite archives for luxury objects to filter into the villages, but what is needed is a better sense of the level of popular participation in the celebrations. If it could be shown that local gods continued to be worshipped, presumably allowing for a more intimate connection between worshipper and god, and that a broad spectrum of Anatolians participated in state-sponsored festivals, with the Hittite government endowing the celebrations with luxury and majesty and the people contributing food and enthusiasm, then the clay

¹³⁶ cf. the prohibitions against unauthorized resale of royal gifts in the “Instruction for Priests and Temple Personnel” (CTH 264). It is, of course, one thing to forbid re-gifting and another to make it categorically impossible through selection of specific gifts.

administration preserved the Hittite state archives was sufficient. If not, that is, if religious experience were restricted by low participation or imposed foreign gods, then an alternative explanation for the coherence of the Hittite state must be sought, and perhaps staple finance managed by wooden tablets is the best alternative.

It is my contention, however, that the Hittite administration preserved on clay is sufficient for the Hittite state reconstructed using the theory outlined above. The remainder of this dissertation is offered as a beginning towards proving this hypothesis. Chapters 3 through 5 study the KASKAL series, which record the largest single collection of wealth in the Hittite administrative corpus. The objects of the KASKAL Main Text are examined and their value is compared to other sources of wealth available to the Hittites. It cannot, as of yet, be concluded where the objects of the KASKAL Main Text were meant to go, though the endowment of a temple or large religious program in the “royal demesne” to the north of Hattusa is speculated (possibly Nerik, given the importance of this city to Hattusili and Puduhepa, the monarchs in whose reign the text was likely composed). But solving the destination of the goods in the KASKAL text cannot be conclusively determined by the information contained therein, thus future research on the question will necessarily proceed by exhaustion. Chapter 6 is the first step on this research path, examining the Hittite Votive Corpus. It is shown in this chapter that during the queenship of Puduhepa at least half, if not two-thirds, of all regular income from foreign tribute and gift exchange were spent as votive gifts, providing evidence for a wealth-financed religious system. However, it is also shown that the Hittite vow system was more geared towards regular expenditure than large bursts of wealth like the KASKAL text.

Besides the three research questions discussed above, I hope in my future research to examine the systems of Hittite festivals and cultic reorganization as possible homes for the kinds

of wealth expenditure recorded in the KASKAL series. Once completed, the remaining texts of the Palace Administrative Corpus await reevaluation in light of the modern conceptions of the Hittite state. I suspect that the administrative corpus will be revealed as oriented towards financing the Hittite religious state and localized to Hattusa and the temples of Northern Anatolia. If so, the resulting model will be very different from the current assumption of the Palace Administrative Corpus as the bureaucratic center of the Hittite Empire.

CHAPTER 3

PHILOLOGICAL INTRODUCTION TO THE KASKAL SERIES

The KASKAL series is a subset of Hittite administrative documents that deals with the transportation of durable goods and textiles. Its characteristic mark is the KASKAL sign (a Sumerographic writing for Hittite *palsa/palsi* ‘road, path; way, behavior; journey, campaign, expedition; caravan, transport’)¹ found in most texts at the end of every paragraph. The rest of the paragraph is given over to quantities and objects, giving the series its administrative mien. For this reason the several texts were first classified as inventories. Scholarly investigation fell on the texts piecemeal, as it often does in the genres least accessible to the modern reader. The frequent appearance of Egyptian goods (or perhaps goods in the Egyptian style) garnered the attention of Pierre Cornil and René Lebrun in 1976.² Then, in 1982 it was a search for philological evidence of the Hittite iron industry that inspired Silvin Košak to comprehensively edit the inventory texts, including the KASKAL series.³ But it was finally the work of Jana Siegelová that in 1986 addressed the Hittite administrative corpus as an object of study in and of itself.⁴ Her work still forms the standard text edition for the administrative corpus, and will be heavily referenced throughout this chapter. Within the administrative texts, Siegelová addressed the KASKAL series as a separate group. She brought together seventeen texts fragments, lettering them A through Q, and distinguished them from the other inventories by the common formula which closed their paragraphs. The basic variations described the items listed as being

¹ See entry in Hans Güterbock and Harry Hoffner, ed., *The Hittite Dictionary* (Chicago: Oriental Institute, 1980-).

² Pierre Cornil and René Lebrun, “Fragments hittites relatifs à l’Égypte,” *Orientalia Lovaniensia Periodica* 67 (1976): 83-108.

³ Silvin Košak, *Hittite inventory texts (CTH 241-250)* (Heidelberg: Winter, 1982).

⁴ Jana Siegelová, *Hethitische Verwaltungspraxis im Lichte der Wirtschafts- und Inventardokumente* (Praha: Národní muzeum v Praze, 1986).

ŠA KASKAL ‘of the way/journey/road’ or INA KASKAL NAŠŪ ‘to be carried on the way/journey/road’, and for this she labeled the group as *Transportverzeichnisse* (‘Transport Registers’). She also established that the first eleven fragments, A through K, are witnesses to a single extended text standing at a minimum in four copies; the remainder (L through Q) are scraps of smaller documents from the same genre.⁵ But in her conclusions, she left the interpretation of the KASKAL series’ purpose and meaning to future scholars. The present chapter will attempt to find this purpose and meaning, and show that not only was the extended text recorded an economic event of extra-ordinary magnitude, but that its exemplars reflect a concerted editorial process aimed at revising the text to a “final” draft. For this it is necessary to reevaluate the series, beginning with the structure.

3.1 Structure of the KASKAL Series

In the KASKAL series every paragraph begins with a container (usually either ^{GIŠ}*tuppas* ‘chest’, or ^{GI/GIŠ}PISAN, Sumerian for “basket”, though in Boğazköy it can signify any kind of container made of reed (^{GI}) or wood (^{GIŠ})), and every paragraph ends with the ŠA KASKAL/INA KASKAL NAŠŪ formula (which will be left untranslated pending the full investigation of the texts). Thus a typical entry will look like this:

KUB 42.11 (Siegelová A)

rev. v

23. 1 ^{GIŠ}PISAN SA₅ KU[R] mi-iz-ri sa-ra-a [wa-as-sa-an-za]

24. 13 GÚ GU₄ KÙ.BABBAR 3 GÚ UR[.MAH KÙ.BABBAR]

25. 5 GÚ Á^{MUŠEN} KÙ.BABBAR 2 ŠU[.SI KÙ.BABBAR]

⁵ Siegelová, *Hethitische Verwaltungspraxis*, 397. In the present chapter, these texts will be variously referred to as e.g. “fragment A”, “text A”, or “Siegelová A”.

26. 14 GAL KÙ.BABBAR an-da ŠA [KASKAL]

“One red container, Egypt(ian), [clothed (=upholstered?)] on top. Thirteen silver cow’s head rhyta, three [silver] li[on’s] head rhyta, five silver eagle’s head rhyta, two [silver] fin[ger(-shaped) rhyta], (and) fourteen silver cups are inside. ŠA [KASKAL].”

Such entries follow one after the other separated by paragraph lines. The general rule is one container per paragraph. If a paragraph describes more than one container at a time, more detail is added to clarify the situation to explain just how the situation is working (e.g. the two chests in A obv. ii 8’-17’, and especially 14’-17’ which describes how the items are distributed in the two chests). Depending on the contents of the container, the entries can be as long as twenty-four lines (A obv. i 1’-24’) or as short as one line (A rev. v 28). Finally the KASKAL formula can be in-line with the last item of the contents, or given a line of its own depending on the formatting of the particular tablet and the length of the formula. Regardless of variations, the tripartite structure of Container, Contents, and KASKAL formula is the defining feature of the series.

Though the entries may be structurally well-defined, the rest of the text is not. There is no explicit beginning in the KASKAL texts, but this is no surprise given the acephalous structure of other Hittite inventories.⁶ The body is a string of self-contained entries, usually filling a three-column tablet. Occasionally one can discern some attempt to group the entries by contents: thus within fragment A there is a progression of materials: first gold, then iron, then stone jewelry,

⁶ The one KASKAL fragment preserving the first line of the tablet lacks an introduction and starts with a normal entry, though this text, KUB 42.49 (Siegelová M), is a non-standard fragment and must be used with caution. Finding other inventories with their first line intact is also rare, but see KUB 42.75, IBoT 1.31, KUB 42.10+Bo 5166, KUB 42.84, all of which start *in medias res* with inventoried goods.

and then iron weapons and silver implements. Within the extended text A-K there is a division by material. Fragments A, B, C, and J record durable goods, and E, F, G, H, I, and K record textiles. Only fragment D, which is unusual in other respects, has both. Finally, the remnant of a colophon is found in the one tablet preserving the end of a text.⁷

In the absence of a preserved KASKAL formula, the entries of the KASKAL series are difficult to distinguish from other inventories. Perhaps for this reason the group has not received

⁷ This colophon, at the end of KUB 42.11 (Siegelová A), is unusual also for the two copper items added afterwards. Not only do they seem out of place, but they are the only items associated with a personal name in the entire KASKAL series. I can only offer that these items were last minute additions to the text.

KUB 42.11 (Siegelová A)

rev. vi

1'		]KASKAL- <i>NI</i> -kán
2'		]a-ni-ya-an
3'		]Ú- <i>UL QA-TI</i>
{blank line}		
{blank line}		
4'	UR ₁ UDU	<i>AN-KU-RI-NU</i> GAL AMAR ^m kam-ma-li-ya
5'	URU ₁ DU	<i>AN-KU-RI-NU</i> GAL AMAR ^m a-mu-na

“ [...]KASKAL...[]... made. []...Not finished. []... large [co]pper *ANKURINU* AMAR, Kammaliya. []... large [co]pper *ANKURINU* AMAR, Amuna.”

The first three lines are probably part of a larger phrase that would read “# tablet: ‘[when the ...] KASKAL... is made’... (series) not finished.” The phrase *ÚL QATI* “not finished” is the regular way to indicate in a colophon that a tablet is not the last in a multi-tablet series. As Siegelová notes on p. 409 ft. 21, the copper *ANKURINU* objects appear as tribute elsewhere in the administrative corpus, but nothing more can be said about their characteristics. The sign AMAR usually means “calf”, but can be the young of any animal. Not much can be done with the personal names. Amuna does not appear elsewhere in the administrative corpus. Kammaliya appears once as LÚ^{URU} Tūmanna “man of Tūmanna”, which means something like “governor of Tūmanna”, in KBo 16.83+ KBo 23.26 obv. ii 8’ (= Siegelová text 6.1). This text appears to record expenditures or gifts of metal implements from the palace for the cult of Ištar. Siegelová also points out the existence of a roughly contemporary Kammaliya who is a scribe and Chief of the Cooks under Tudhaliya IV, but who has no special connection with Tūmanna (p. 289). It is not possible to firmly equate these two individuals, nor to identify the Kammaliya of the colophon above with either one. But it would be interesting to know if the *ANKURINU* associated with his name was the gift(?) of a palace official or a provincial official.

its own CTH number, technically being subsumed in the category of CTH 241 *Inventaire de Coffres*. But if this classification cannot be overturned, it can at least be refined. The texts in the KASKAL series are more like some inventories than others. In Siegelová's study of the administrative genre, she divides the chapter on inventories into two parts, 2.1 - *Systematische Inventuren* (Systematic Inventories) and 2.2 - *Inventurprotokolle verbunden mit einer Ermittlung* (Inventory Notes Combined with an Evaluation). The Systematic Inventories share many of the same features as the KASKAL series: they are three-column tablets composed of lists of chests, quantities of objects, and very little else. They also rarely contain personal names indicating possession or responsibility, another trait shared with the KASKAL series. This sets them apart from the Inventory Notes with Evaluations which are usually single-column tablets containing comments on the administrative disposition of the chests, and evaluations about labels or tags on the chests, or whether the contents have been fully counted.

An important inference can be made from the structural simplicity of the KASKAL series (and implicitly about the Systematic Inventories). The regular and monotonous nature of the entries results from their completeness, because the work of discovering and sorting the contents of the chest, which sometimes requires extra comment, has been done elsewhere. It was recorded perhaps in single-column Evaluation Inventories like those mentioned above, where the incidentals of the inventory process were thrashed out: whether tags had been made for the chests, or if the Hittite queen wanted to look through the items first.⁸ Such comments are

⁸ A full treatment of these two topics and the inventorying process will require an article-length investigation. For examples of commentary on tagging and inventory see: KBo 18.179 obv.¹ II 9' (a sealed chest lacking a tag), KUB 42.66 rev. 2' (items unaccounted for on an inventory), and the many attestations of various terms for tags and inventories (GIŠ.HUR, *parzakis*, *lalames*, *hawiwi*). Examples of the queen's direct involvement include: IBoT 1.31 obv. 11 (queen removing items from chest), 14-15 (commanding that inventorying be delayed until she looks

completely lacking in the KASKAL series. Even when a KASKAL tablet itself shows physical evidence of being a rough draft, with erasures and mistakes, the information within is complete. Thus the information recorded in the KASKAL series is the culmination, not the beginning, of an administrative process.

It is unfortunate that the precursor inventories of the KASKAL series have not been better preserved (but see Siegelová L below). Perhaps the chests had sat counted and closed for some time, administratively inert, giving the tablets more time to be lost or recycled. But the modern scholar is more than compensated for this when they consider that, while they have lost an origin, they have gained an end. With the other Systematic Inventories it may prove impossible to recover the purpose. There is no way of knowing what occasioned their creation. Were they the products of regular stocktaking? Were they made at a scribe's individual initiative or an audit requested by the king? For the KASKAL series at least some questions can be answered. Košak in his study of the texts tentatively suggested that they are the records of incoming shipments,⁹ but the editorial layers suggest the opposite. The chests and the goods are known quantities at the end of one administrative chain, which are being organized and rearranged in preparation for a new beginning "on the road". At a minimum this means they are being moved, probably as a single collection. If one takes seriously the tripartite structure of the entry, where the contents of the paragraph are the contents of a chest, then some of the containers must have been huge. One chest held twelve articles of clothing, 125 KÙŠ of tapestry (approximately 62.5 meters in length, unknown width)¹⁰, and a gold-ornamented ivory bed

through chest) and KBo 18.180 vs. 1'-4' (commanding that no one open the chest), among others.

⁹ Košak, *Hittite Inventory Texts*, 13.

¹⁰ According to the entry on "Masse und Gewichte" in Erich Edzard and Bruno Meissner, ed., *Reallexikon der Assyriologie* (Berlin; Leipzig: de Gruyter, 1920-), the Sumero-Babylonian "30

(presumably disassembled) and bed sheets.¹¹ Another container had 41 mina and 4 (Hittite) shekels of gold, which weighs around twenty-one kilograms, plus two leather bags of pearls, and two leather bags of some other objects (A obv. ii 18'-23'). The large twenty-four line entry mentioned earlier has each line filled with unknown quantities of gold, iron, and stone implements and jewelry (A obv. i 1'-24'). The point is that the contents of the KASKAL series are far too numerous to be intended for an individual, or even a group of individuals. Their magnitude suggests a transfer from one institution to another, and this means that many eyes and hands would have passed over the chests—including at the very least a person authorized to move them, the scribe to record them, and workers to stack and arrange them. Such an undertaking would require royal initiative and consent.

3.2 Defining the Corpus

In her *Hethitische Verwaltungspraxis*, Siegelová edited seventeen texts that she assigned to the KASKAL series. As far as can be observed, they are all written in Late New Script. This

finger" cubit (Sum. KÙS, Akk. *ammatu*) in use before the Neo-Babylonian period was about 50cm in length.

¹¹ F rev. v 3-16. To give an idea of weight of the tapestry, there are two gifts of linen in the Egyptian gifts that are 5 *ammatu* (KBo 28.32 obv. 5') and 6 *ammatu* (KUB 3.63 rev. 6') in width, so between 2.5 and 3 meters wide. Most modern linen is sold in 56"-60" width (~1.5 meters). With these two data points in mind, one might guess that a 2 meter width for the Hittite tapestry/tapestries would not be far from the mark. A decent quality, modern flax linen cloth used for clothing and bed sheets weighs about 265 g/m², though a tapestry might use a heavier, canvas-like cloth. Putting this all together gives 62.5m x 2m x 265g ≈ 33kg of cloth. For comparison, in an Neo-Babylonian administrative document from the Eanna temple in Uruk, a single curtain (sent out for cleaning) of the goddess Bēlti-ša-Uruk was recorded as weighing 28 mina (=14kg), showing that Ancient Near Eastern tapestries could be quite heavy (cf. Ignace J. Gelb et al., ed., *The Assyrian Dictionary* (Chicago: Oriental Institute, 1956-2010), s.v. *bulû* 'curtain of linen'). This weight estimated for the Hittite tapestry could vary depending on the width of the cloth and its quality, but one can at least say that along with the bed frame and other linens in the container, the chest would be at the upper limit of size and weight that two people could comfortably carry.

matches well with Siegelová's argument that the entire administrative corpus, KASKAL series included, stems from the last two or three generations of the Hittite kingdom, certainly at least the reigns of Hattusili III and Tudhaliya IV.¹² The KASKAL corpus as it stands can be divided into three parts: the main text A-K, the isolate texts L and KUB 60.112, and texts of insecure attribution. The last group consists of texts which lack a preserved KASKAL formula, and thus cannot be assigned with certainty to the series. Siegelová assigned these texts, letters M-Q, to the series based on their format and contents, while acknowledging the possibility they belonged to the Systematic Inventories instead. This group will not be referenced in the present chapter because they may not have been part of the single administrative act recorded in the main text. Because the rationale behind Hittite archive maintenance is not known, there is no way to tell if texts M-Q are contemporary with A-K, or even each other. Their times of creation could be separated by as little as a day or as long as years.

The isolate texts, Siegelová L (KUB 42.64) and KUB 60.112,¹³ preserve a KASKAL formula but are not part of the main text. Both are unusual. Text L can be described as the product of a distressed scribe. It is a one-sided, single-column tablet with very sloppy formatting. It has many open spaces towards the end, skewed paragraph lines, and even preserves "hen-pecks" (of frustration or boredom?) made by repeatedly tapping the stylus-point into the clay in the second to last paragraph. But what truly sets this text apart is that its entries lack the tripartite structure defined above. Each of its eight preserved paragraphs starts without mention of a container, and end without a KASKAL formula. It does not meet the criteria for belonging to CTH 241 'Inventory of Chests', and it would be impossible to identify as a KASKAL text were

¹² Siegelová, *Hethitische Verwaltungspraxis*, 566.

¹³ Published in transliteration by Detlev Groddek, *Hethitische Texte in Transkription KUB 60* (Wiesbaden: Harrassowitz, 2006), 109f.

it not for the last line, spaced far below the body of the text at the lower edge of the tablet, which reads EGIJR KASKAL-*NI* ‘... after(wards)/behind the path’.

Where does such a text lie in the administrative process? The tablet is single-column and roughly finished, and so is probably a rough draft (or a note taken by the scribe). It would have slight use as a shipping manifest: lacking a description of the containers the reader cannot find the goods listed without the burdensome task of opening each chest or finding the label and comparing the contents. One can imagine two situations where a description of the containers is not needed. It could be that the scribe was interested only in the absolute quantity of the contents, perhaps needing to report it to a higher official or use it in a yearly account; but neither genre is attested in the Hittite administrative corpus. Alternatively, the items have not yet been packed into a chest. Perhaps the scribe is working in a storeroom, gathering piles of goods to be packed up. In this case the last line would be better translated: “(these goods are to be packed) later (for) transport.” This makes text L a strong candidate for an example of a precursor inventory, the relative absence of which type was lamented above. But it will be impossible to tell unless more of the same texts are recovered, and given that text L was identified as a KASKAL text only by its very last line on the edge of the tablet—the most fragile and least likely part to be preserved—this is unlikely to happen. A number of KASKAL precursor inventories could thus be lurking unidentified among the other inventories, even those that do not mention chests.

KUB 60.112 is the other unusual KASKAL text, and the only one not edited by Siegelová (it not being published until four years after her book). Truthfully, it is much more interesting for the non-administrative information it contains. The fragment appears to have been re-used at some point, before the clay dried, to take a note on the dietary restrictions of certain

women.¹⁴ The change in subjects is marked by a change in handwriting, with smaller sign-size used. Very little information from the body of the text has been preserved, so the text will not be presented here. But by its format, KUB 60.112 appears to have been a potential precursor tablet like L. It may be then that its reuse to take a note on a different subject is the only reason for its preservation.

3.3 The Main Text: Siegelová A-K

The main text of the KASKAL series consists of eleven fragments labeled A through K by Siegelová (see *Concordance of Referenced Texts* in appendix for publication numbers). It is probable that three of these fragments, F(+)G(+)H, are indirect joins.¹⁵ Texts A through H can be connected with each other through overlaps, where the same text is replicated on multiple tablets. Only J and K cannot be securely joined to the main body, but their contents are very similar to the other tablets and their ductus and format suggest they were written by the same scribe(s). If they are included in the total, there were thus originally at least nine tablets bearing witness to the extended main text. Only hints can be gleaned from the find-spots of the fragments. Five text fragments came from Büyükkale, the acropolis of Hattusa and location of the Hittite palace: tablet F(+)G(+)H has a secure find-spot in Büyükkale Building D, and tablets B and C were

¹⁴ The prohibition portion is published in translation by Yoram Cohen, *Taboos and Prohibitions in Hittite Society* (Heidelberg: Winter, 2002), 170, though as he notes the broken nature of the text precludes further discussion. The prohibition against eating is specifically applied to a woman named Henti, of whom de Martino argues should not be identified with a wife of Suppiluliuma, but rather a daughter of the royal family in the late New Kingdom (Stefan de Martino, “The Wives of Suppiluliuma I”, in *New Results and New Questions on the Reign of Suppiluliuma I*, ed. J.L. Miller, S. de Martino (Firenze: Elite, 2013), 70).

¹⁵ See Siegelová, *Hethitische Verwaltungspraxis*, 391. Though she does not make her reasoning explicit, she even places them in the correct order based on space considerations: fragment G, based on the locations of its paragraph lines, must be in the upper half of obv. i/ii, and H must be in the lower half of rev. iv.

found in secondary deposits also on Büyükkale. The remaining tablets have no find-spot listed on the Konkordanz. While the association with Büyükkale does not rule out temple involvement (see van den Hout's argument that the archives of Hattusa openly circulated between the temple and palace),¹⁶ it does indicate the palace was an important partner in the economic event behind the KASKAL series. This will have important implications when the meaning of the series is ready to be determined.

There was a neat thematic division between the tablets, with A recording durable goods and F recording textiles. Every tablet obeyed this division: tablets A, B, C, J, and K in the former category, and tablets E, F(+)G(+)H, and I in the latter. Only tablet D stood apart, with its obverse containing durable goods and its reverse textiles. The modern scholar is exceedingly fortunate for its preservation, as it is the linchpin uniting the two halves. Without text D it would be impossible to prove the main text of the KASKAL series recorded a single economic act. The series would most likely have been treated like the rest of the administrative texts, as a collection of quotidian economic records.

The editorial relationship between the nine tablets of the main text is tangled, and may be impossible to resolve. Siegelová seems to assume a flat editorial hierarchy between the tablets, that is to say, she does not acknowledge that one copy might be an earlier or later draft.¹⁷ That all nine tablets were contemporary duplicates is difficult to accept, as there are significant differences in style and composition between the tablets. Siegelová does note some of these differences in her editions, such as systematically recording the variations in KASKAL formulae

¹⁶ Theo van den Hout, "On the Nature of the Tablet Collections at Hattusa," *Studi Micenei ed Egeo-Anatolici* 47 (2005): 289.

¹⁷ See Siegelová, *Hethitische Verwaltungspraxis*, 394 for a graphic representation of the tablet overlaps, reproduced in Figure 1 below.

between the tablets. But a more nuanced cladistic relationship mapping the evolution of the series can be recovered.

3.4 Variation in the Main Text: Systemic Differences

There are two ways to approach the variation in the main text: through examining systemic differences and particular differences. Systemic differences are those that consistently pertain to an entire text. An example is the different styles of KASKAL formulae that Siegelová documented. From the evidence available, if a text for example uses *ŠA KASKAL-NI* in one place, it will use it everywhere. Systemic differences are useful in that they can be recovered by comparing any sufficiently large tablet fragment to another. On the other hand, particular differences are those that can only be observed where texts overlap. An example is when one text has a sentence that the duplicate text does not. Without the overlap, there would be no way to know that a sentence was missing.

The ultimate goal in examining the differences among duplicates is to identify the stages of the editing process. This is done by correlating particular differences with systemic differences, and then based on reasonable assumptions like “messy tablets, and tablets with lots of erasures, are likely to be earlier drafts”, associating systemic differences with stages of the editing process.

In this section, the systemic differences among the tablets of the main text will first be identified and briefly discussed, with a comprehensive analysis postponed until the diagnostic section.

1.) Columns and Dividers

Siegelová finds a larger pattern in the Hittite administrative corpus concerning columns and column dividers.¹⁸ About two-thirds of the corpus consists of three-column tablets divided by simple vertical lines (a feature almost unique to the administrative corpus). The three-column tablets tend to contain texts of a “recapitulatory” type—inventories and summaries. In the remaining third of the corpus, one half is two-column tablets, which can contain any variety of contents, and have a wide intercolumnium. The other half is single-column tablets, which tend to contain notes and first-drafts of the inventory process. This pattern applies remarkably well to the KASKAL series. The inchoate disposition of the one-column tablet L has already been discussed above. In the main text, at least one (probably two or three) tablets have two columns, but most of the tablets have three columns of text befitting their systematic nature.

What is interesting about the three-column tablets in the KASKAL series is that it is not just the number of columns they share: when the same text appears on more than one tablet, it tends to have the same lineation (the way the information content is broken into lines). The duplicate lines begin and end with the same words.

Text D is the only clear example of a two-column tablet. Though it has fewer columns, it appears to have been similar in size to the other tablets. Thus each column is wider, so that together they accommodate the same total of information as a three-column tablet. This can be observed where D overlaps with a three-column tablet (see transcription of Nexus 2 and 3 below): one line of D is equal to one-and-a-half to two lines of a three-column tablet. If one can assume the logical inverse, that wider lines in the KASKAL series mean a two-column tablet, this means that text D is not alone. Text C, a fragment which is otherwise too small to identify as a two-column tablet, also shows “two-for-one” lineation (see transcription in Nexus 2 below).

¹⁸ Siegelová, *Hethitische Verwaltungspraxis*, 1-6

Because C and D themselves overlap, this means there are at least two examples of two-column tablets. Text K should also be added to the two-column group, based on its wide intercolumnium and its similarity in ductus to text D.¹⁹

As for column dividers, the KASKAL series follows the pattern established by Siegelová, with the exception of text E, which has what can be described as either a “double vertical line” divider, or a very narrow intercolumnium.

Three-Column with simple divider: A, B, F(+)G(+)H, I, J

Three-Column with unusual divider: E

Two-Column (with wide intercolumnium): C, D, K

2.) Space before Paragraph Lines

A readily observable feature of certain KASKAL texts is the inclusion of large blank spaces at the end of paragraphs and before the following paragraph line. These spaces are in fact peculiar to “administrative” texts—only inventories and oracle question texts regularly have them (perhaps it is the temporary and businesslike nature of these two genres that unite them). The purpose of the blank space is unclear, though it may have allowed entries to be distinguished at a glance (useful for frequently consulted administrative texts). One can at least observe a great internal consistency in their usage. When a text has a blank space after one paragraph, it has it everywhere. The one exception to this is in text E, obv. iii[?] 1’-4’ (which will be transcribed and discussed in Nexus 4 below), which has an unexpected blank space, but this occurs in a paragraph marred by erasures.

¹⁹ A join between these two tablets is ruled out by Siegelová, *Hethitische Verwaltungspraxis*, 392 based on the differences in writing certain key terms, including the KASKAL formula.

Blank-space: B, F(+)G(+)H, I

No space: A, C, D, J, K

Mostly no space: E

3.) KASKAL formula

Siegelová systematically recorded these in her introduction to the KASKAL series,²⁰ though she simplifies the matter for texts D and E.

ŠA KASKAL

Text A: ŠA KASKAL in body, ŠA KASKAL-*NI* in sentence used in colophon

Text D: *anda* KASKAL (x1), ŠA KASKAL (x6)

Text J: ŠA KASKAL

ŠA KASKAL-*NI*

Text F(+)G(+)H: ŠA KASKAL-*NI*

Text I: ŠA KASKAL(-*NI*?)

Text K: ŠA KASKAL-*NI* (x1), ŠA KASKAL-*NI* EGIR-*anda* (x1)

Other

Text B: [not preserved]

Text C: *anda* KASKAL (x1)

²⁰ Siegelová, *Hethitische Verwaltungspraxis*, 388-392.

Text E: KASKAL (x1), *INA* KASKAL *NAŠŪ* (x3), *ŠA* KASKAL *I+NA É.GAL-LIM* (x1)

Despite the variability, there is no obvious difference in meaning between the KASKAL formulae.

The *anda* KASKAL (lit.) ‘in the path’ in D obv.[?] i 3’ is possibly an influence from text C (or vice-versa?), as it occurs right before an interpolation that only these two texts have. One would have expected the *ŠA* KASKAL ‘of the path’ that appears in the duplicate portion of A, and that D consistently uses elsewhere.

The *ŠA* KASKAL-*NI* EGIR-*anda* ‘of the path, after(wards)’ in K rev. vi[?] (probably rev. iv if it considered a two-column tablet), line 10’ has the *ŠA* KASKAL-*NI* written normally and the EGIR-*anda* running over into the intercolumnium. Either the scribe did not budget enough space, or the EGIR-*anda* was added later.²¹ Because the right-dislocation of the EGIR-*anda* is unexpected in Hittite syntax, the later addition is more likely. The meaning of this is unclear. Were the objects in the chest being prepared for “the road”, but were then pulled aside for additional processing? This interpretation would fit with an argument made further below, that the KASKAL texts document an administrative event in revision and flux.

As with the previous two categories, text E is unusual. It is uniquely experimental in its use of KASKAL formulae. In E obv. ii[?] 8’, there appears the phrase ^{É.GAL}*karupahias=kán* | [] *danza* KASKAL (which can be translated as ‘The...of the palatial store-house is taken. KASKAL’ or ‘(it) is taken to the palatial store-houses,’ depending on whether *karupahias* is read as a gen. sg. or a dat.-loc. pl. and whether one wishes to restore the subject in the break before

²¹ Though before the clay dried fully, which would leave a window of about twenty-four hours, according to Waal, (*forthcoming*).

danza).²² The *danza* is right aligned, which is not uncommon in the final word in the last line of a paragraph, but in this case the *danza* is not the last word of the line, as it is followed immediately by the KASKAL sign. The lone KASKAL sign is a conundrum. It cannot be read as part of the previous sentence, but at the same time it is the only example of a one-word KASKAL formula. What would such a terse formula mean? In contrast, E obv. ii' 15'—the same column, only seven lines later—has a similar phrase fully spelled out:]*karupahi INA KASKAL NAŠŪ*.

As for the location of the KASKAL formulae in the texts, certain texts seem to prefer them in-line with the last entry of the paragraph (e.g. text A), and other prefer them to have their own line after the last entry (e.g. text F), but there are too many exceptions within each text to consider this feature systematic.

4.) Uncorrected Erasures

Some texts have more erasures than others. Usually when a scribe has more than just a sign to erase and correct, he will smooth out the offending signs with his finger and write over it. But certain texts have erased spaces that have not been written over. One might assume that these uncorrected erasures indicate an earlier draft of the text.

Uncorrected Erasures: D, and (again) especially E

²² In either case the É.GAL 'palace' before *karupahias* 'store-house (gen. sg./dat.-loc. pl.)' should probably be read as a determinative. If it had masked the Hittite word for palace (*halentuwa*), Hittite syntax would require it to appear in post-position (*karupahias=kán* É.GAL). If (pseudo-)Akkadian syntax was used, one would like to see a *ŠA* (admittedly optional) indicating a genitival relationship (É.GAL *ŠA karupahias=kán*).

It is entirely possible that some of the smaller fragments do not show erasures because of an accident of preservation. Nonetheless, the positive results of the larger fragments should not be ignored.

5.) Other features: out of place numbers and triple *Glossenkeil*

A few texts contain graphical oddities that cannot be explained as part of the discursive content. Most notable are certain numbers appearing at the end of paragraphs in texts F(+), G(+), H and D. An example looks like this:

KUB 42.14 (Siegelová D)²³

obv. i

6' [1 ^{GIŠ}tup-]pa-as <^{GIŠ}>ERIN {erasure} NA₄ KÁ.DINGIR.RA NA₄.T[I

7' [^{NA4}mu-]us-nu-wa-an-ti-is²⁴ ŠÀ 1 ^{GIŠ}tup-pa SIG₅ ŠA [KASKAL]

7a' 11²⁵

“[One cont]ainer. Cedar, “Babylon” stone, “li[fe]” stone, “[t]rue” stone. Inside is one fine container. ŠA [KASKAL.]

11”

In every case, the numbers appear right above the paragraph line, and are often faintly impressed, as if they had been added after the clay had hardened, or if the scribe was tentative about their

²³ See fuller discussion of this passage in Nexus 2 below.

²⁴ This restoration of “*musnuwantis*” stone (poss. related to Hurr. *muš(u)ni* ‘true, reliable, trustworthy’?) from entry in the Chicago *Hittite Dictionary* (op. cit.). In addition to the two attestations given in the *CHD*, see now the inventory text KBo 55.5 obv.⁷ 14’, where a ^{NA4}*m[u-us-nu-wa-an-ti]* appears among other precious metals and stones. Due to the paucity of attestations, no translations are offered by Anna Maria Polvani, *La terminologia dei minerali nei testi ittiti* (Firenze: Elite, 1988): 67-8.

²⁵ Immediately above paragraph line.

inclusion. Siegelová explains some of them away: the “2” in F obv. i 19’ she reads as the end of a KI.]MIN ‘ditto’, and the “16” in D obv. i 10’ is interpreted as the misplaced quantity for the preceding entry. But the uniformity of style and placement of these numbers argue instead a common phenomenon, the meaning of which is elusive. It is possible the numbers are related to a system van den Hout has proposed for the oracle questions.²⁶ Here he guessed that small tablets containing a single question to be answered by oracle were given a number to keep them in order. Because the oracle process was procedural, certain questions could only be asked after others. The numbering system allowed the questions to be answered piecemeal and remotely, probably at the site of the animal sacrifice or observation, and then reconstituted later on a summary tablet. Unfortunately, there were not enough numbered tablets preserved to confirm his system. Perhaps the numbers in the KASKAL series, which are similarly too few to test, represent a similar editorial system. It is possible they refer back to a precursor tablet, or a paragraph within, or even a labeled chest.

Post-paragraph Numbers

*F(+)**G(+)**H*

F obv. i 2’: “1”

F obv. i 19’: “2”

G obv. r. col, 7’: “9”


D

²⁶ Theo van den Hout, “Bemerkungen zu älteren hethitischen Orakeltexten,” in *Kulturgeschichten: Altorientalische Studien für Volkert Haas zum 65. Geburtstag*, ed. Thomas Richter, et al. (Saarbrücken: Saarbücher Druckerei und Verlag, 2001), 423-40.

obv. i 7a': "11"

obv. i 10': "16"

Another graphical oddity occurs in text A in the form of three diagonal wedges grouped next to each other at the beginning of the line in A obv. ii 5'. Siegelová noticed this in her edition, and even had the feature printed (without comment).²⁷ There would be nothing to add except that checking the photograph of the tablet shows the same glyph appears again in the following line at beginning of A obv. ii 6', something which was not recorded in the handcopy of the cuneiform. The wedges are smaller in size and impressed faintly but clearly to the left of the margin, as if the scribe realized he forgot to add the mark after he had written the line. There is not enough context to determine what the glyph means. One immediately thinks of a *Glossenkeil* (German: "glossing wedge") which usually precedes a translation of a foreign word, or identifies an untranslated word as non-Hittite, but is also sometimes used for punctuation.²⁸ The typical glossenkeil is a diagonally oriented triangle (known as a *Winkelhaken* in German) or a wedge. Its international form is a single wedge, but there is a Syrian and Hittite regional variant with two wedges.²⁹ Perhaps the glyph here is a further, "northern" elaboration of the glossenkeil? Once again, more examples are needed.

²⁷ Siegelová's printing of the glyph is slightly inaccurate: the heads of the three wedges should be aligned in an ascending diagonal line like so: 

²⁸ Of the Hittite uses of the glossenkeil mentioned in the "Glossen" entry in the *Reallexikon der Assyriologie* (op. cit.) perhaps the most likely in this case is the marking of a line which will overrun into the margin. Unfortunately the end of A obv. ii 5' and 6' is not preserved, so this cannot be tested. But it is curious that other overruns are not marked by glossenkeil in the KASKAL series.

²⁹ See Pinhas Artzi, "The Glosses in the El Amarna Tablets," *Sefer Bar Ilan* 1 (1963): 33-35. English summary: XIV-XVII.

3.5 Variations in the Main Text: Particular Differences

The particular differences are only discoverable at the overlaps, of which there are four. These have been labeled Nexus 1-4, and are transcribed in score format with translation and discussed below.³⁰

Nexus 1. KUB 42.11 obv. ii 18'-26' (Text A); KBo 18.173 rev. 1'-10' (Text B)

Transcription

A obv. ii 18'-26'

18' 1 ^{GIŠ}PISAN SA₅ GIŠ^{HLA} GAM x[
19' ŠÀ-ŠU 2 ^{GIŠ}PISAN DU₈.ŠÚ.A [(ŠA NUNUZ
20' 2 ^{GIŠ}PISAN DU₈.ŠÚ.A mi-iz-r[(i)-i
21' 2 ^{GIŠ}PISAN DU₈.ŠÚ.A GU[(ŠKIN 38 MA).NA
22' 4 KI.LÁ.NA₄ 3 MA.NA 4 [(GÍN GUŠKIN)
23' 1 KI.LÁ.NA₄ [ŠA KASKAL³¹

24' 1 ^{GIŠ}PISAN SA₅ TUR UGU wa-as-s[(a-an-za)
25' 4 MA.NA 7 GÍN GUŠKIN KUR kar[(-an-du-ni)-ya-as]

³⁰ In general I will use the transcription conventions of the Chicago *Hittite Dictionary* (op. cit.). The nonconventional notation used is the following: an underline indicates text which overruns the normal line length and is written in the margin. A “#” indicates that a numeral should be restored, but the value cannot be guessed (other editions often indicate this with a ‘x’). Blank lines and erasures are noted within braces { }. The translation of the combined text is presented after the transcription, and the lines of this synthetic text receive a star * to indicate they are reconstructed. Phrases with partial restorations have not been interrupted by brackets in the translation.

³¹ Siegelová does not restore this in her edition, failing to see the clear beginnings of a ŠA sign in the photograph of text B (which is admittedly obscured by cross-hatching in the handcopy). Moreover, even if it were not present in the duplicate, text A has not missed a KASKAL formula anywhere else so there is no reason to assume it does so here.

- 2* Inside it are two leather containers of pearls[
- 3* Two leather containers, Egypt(ian)[
- 4* Two leather containers, thirty-eight mina of gold[
- 5* Four stone weights. Three mina, four shekels of gold[
- 6* One stone weight.³⁵ ŠA KASKAL.

- 7* One small red container. Upholstered (lit. “clothed”) on top.
- 8* Four mina, seven shekels of gold. Babylon.
- 9* Two mina, two shekels of gold. Lycia.
- 10* ŠA KASKAL.

Discussion

The differences between A and B are minor. The phrase 1 KI.LÁ NA₄ ‘one stone weight’ which appears in A obv. ii 23’ is not found in B. The sign traces at the end of B rev. 5’ do not permit restoring the phrase there, and there is hardly room afterwards. There is insufficient context to tell if the omission in B is significant.

As for the differences in place names, B has the edge in accuracy, with KUR *karandunias* in A obv. ii 25’ versus ^{URU}*karandunias* in B rev. 9’. “Karandunias” is technically the Kassite name for the city (URU) of Babylon, not the name of the territory controlled by the Babylonians. The other geographical discrepancy of *mi-iz-r[(i)-i* in A obv. ii

³⁴ The GIS^{HLA} poses a translation problem. As a description of the material of the chest it is redundant, this already being indicated by the determinative of GIS^{PISAN}. The plural marker HLA also indicates that the material is not unitary: perhaps the phrase is communicating that the chest is made of multiple types of wood, or multiple maybe pieces?

³⁵ In text A only.

20' versus KUJR *mi-iz-ri* in B rev. 3' is not a problem.³⁶ The form *mizrī* 'Egyptian' substitutes freely with KUR *mizri* 'Land of Egypt' in the KASKAL series. The plene *-i* in *mizrī* is probably an Akkadian (or West Semitic?) *nisba* formation, indicating appurtenance, and thus should be properly read as an Akkadogram.

Nexus 2. KUB 42.11 rev. v 4'-11' (Text A); KBo 18.175a 1'-5' (Text C); KUB 42.14 obv. i 1'-10' (Text D)

Transcription

A rev. v 4'-11'

4' 5 E[M]E GÍR TUR AN.BAR GE₆ 6 GÍR TUR AN.BAR

5' 10 EME GÍR AN.BAR 6 EME GÍR ZABAR

6' 18 EME GÍR GAL ŠÀ.BA 2 TUR

7' 7 pal-za-ha-as AN.BAR ŠÀ 1 LIBIR³⁷

8' 81 NÍG.GÍD.DA AN.BAR GE₆ 3 pu-ri-as ŠÀ.BA 1 AN[.BAR

9' #+]1 pal-za-ha-as AN.BAR SIG₅ {erasure}³⁸ ŠA KASKAL

10' 1 GÍŠ]tup-pa-as SA₅ 81 GÍR GÁM-RU [

11']x³⁹ GÍR LÚ[(MUHALDIM)

³⁶ Only one exception to this pattern occurs, in text D rev. iv' 7' (and probably the duplicate line in H rev. ? r. col. 5'), which has a non-plene *mizri* without a KUR determinative.

³⁷ Because of space considerations, I prefer Košak's earlier reading of LIBIR (Košak, *Hittite inventory texts*, 33) instead of Siegelová's reading *gul-* [sa-an-za 'inscribed'. The space after the LIBIR/*gul* sign is too long to force a restoration in the break.

³⁸ The erased sign looks very much like an *a-* or maybe a warped *an-* given the context. See discussion below.

{Approximately 2 lines of text broken away, which probably contained a KASKAL formula on the first line, and a paragraph line on the second.}

14' [1^{GI}]^štup-pa-as SA₅ TUR A[(N.BAR GE₆ ki-i-na-an)]

15' 16 NÍG.GÍD.DA AN.BAR GE₆ ŠÀ.BA 1 ŠU.U[

16' ŠA KASKAL[]

C 1'-5'

0' [(5 E)M(E GÍR TUR AN.BAR GE₆)]

1' (6 GÍR TUR AN.BAR 10 EME GÍ)]R AN.BAR 6[(EME GÍR ZABAR)

2' (18 EME GÍR GAL ŠÀ.BA 2 TU)]R 7 pal-z[(a-ha-as AN.BAR ŠÀ 1 LIBIR)]

3' (81 NÍG.GÍD.DA AN.BAR G)]E₆ 3 pu-ri-as ŠÀ 1 x⁴⁰ x x[

4' #+(1 pal-za-ha-as AN.B)]AR SIG₅ an-da⁴¹ KASKAL

5' [1^{GIš}h(u-u-up-pár-al-lis SA₅ 27)]^{KU}[(^šMAR)-Š]UM an-da

D obv. i 1'-10'

(Begin at middle of A rev. v 6'/C 2')

1' [(ŠÀ.BA⁴² 2 TU)]R 7 pal-z[(a-ha-as AN.BAR ŠÀ 1 LIBIR)]

³⁹ Restoring from text D, one would expect the numeral 57 here, but the preserved traces do not allow this. The sign-traces instead appear to preserve *r*]a-as. Perhaps this is the end of the phrase GÍR *gi-im-ra-as* if one can allow a different order to the entries.

⁴⁰ Whatever these signs are, they are not “AN.BAR” as expected from text A.

⁴¹ Košak, *Hittite inventory texts*, 17 reads here and in D obv. i 3' AN.BAR SIG₅-an-da KASKAL ‘...(of) goodly iron. Path.’ with SIG₅-anda read as a neuter plural nom.-acc. adjective. I prefer Siegelová’s reading where the *anda* is not a phonetic complement to SIG₅, both for spacing reasons in the cuneiform and because SIG₅ occurs without phonetic complement everywhere else in the palace administrative corpus.

2' [(81 NÍ)]G.GÍD.DA AN.B[(AR GE₆ 3 pu-ri-as ŠÀ.BA⁴³ 1)o o o]

3' [#+(1 pal-)]za-ha-as AN.BAR SIG₅ an-d[(a KASKAL)]

4' [1 ^{GIŠ}h]u-u-up-pár-al-liš SA₅ 27 (^{KU})^ŠMAR-[(ŠUM an-da)]

5'] {erasure} ŠA [KASKAL

6' [1 ^{GIŠ}tup-]pa-as <^{GIŠ}>ERIN {erasure} NA₄ KÁ.DINGIR.RA NA₄.T[I

7' [^{NA4}mu-]us-nu-wa-an-ti-is⁴⁴ ŠÀ 1 ^{GIŠ}tup-pa SIG₅ ŠA [KASKAL]

7a' 11⁴⁵

8' [1 ^{GIŠ}PISAN] SA₅ ^{siG}pít-tu-la-as ŠU-as ŠA KASKAL

9' [1 ^{GIŠ}(tup-p)]a-as SA₅ 81 GÍR GÁM-RU ŠÀ.BA 57 GÍR ^{LÚ}MUHALDIM

10']GÍR gi-im-ra-as 16⁴⁶ ŠA KASKAL

⁴² Though infrequent, it is possible to start a line with something other than a numeral: see the ŠÀ.BA at beginning of line in KUB 42.11 obv. ii 5' (text A), KBo 18.175 rev. v 6 (text F), and KUB 42.50 8' (text M).

⁴³ See D obv. i 14' which uses ŠÀ.BA. This is not to say that a simple ŠÀ like in text C isn't possible. The rule for the use of ŠÀ, ŠÀ.BA, and ŠÀ-ŠU in the KASKAL series appears to be the following. ŠÀ.BA means 'among which' and is used to single out an object within a set. ŠÀ-ŠU means 'inside of which' and is used to describe the contents of a container. ŠÀ can be used for either meaning. There seems to be no pattern to its distribution: even in a text like A, which uses the fuller forms ŠÀ.BA six times (obv. i 12', obv. ii 5', rev. v 2, 6, 8, 15) and ŠÀ-ŠU three times (obv. ii 9', 19', 28'), still uses ŠÀ twice (obv. ii 12', rev. v 7).

⁴⁴ See ft. 22 for restoration of "musnuwantis" stone.

⁴⁵ Number added right above paragraph line. See the section on "out of place numbers" under Systemic Differences above.

⁴⁶ Number added below line-of-writing, and much shallower inscription (probably added after clay had dried more). See the discussion on "out of place numbers" under the Systemic Differences above.

- 11' [1^{GI}(š^štup-pa-a)]s SA₅ TUR AN.BAR GE₆ ki-i-na-a-an[]
- 12' [(16 NÍG.GÍD.DA AN.BAR GE₆)]ŠÀ.B[(A 1 ŠU.U)]

Translation

- 1* Five small knife blades of black iron. Six small knives of iron.
- 2* Ten knife blades of iron. Six knife blades of bronze.
- 3* Eighteen large knife blades, of which two are small(er)
- 4* Seven statue bases of iron, of which one is old.
- 5* Eighty-one spear(heads) of black iron. Three trays, of which one is iron.
- 6* Eleven? statue bases of good iron. ŠA KASKAL.⁴⁷

(here begins an interpolation found in C and D, but not A)

- 7* One red *h.* container. Twenty-seven leather straps are inside.
- 8* ŠA KASKAL.

- 9* One chest (made of?) cedar, “Babylonian” stone, “life” stone,
- 10* (and) “true” stone.⁴⁸ Inside of which is a fine chest. ŠA KASKAL.

⁴⁷ C and D have *anda* KASKAL.

⁴⁸ This might also be translated “1 chest (containing) cedar, “Babylonian” stone, “life” stone, and “true” stone.” This translation has two problems. First, there are no quantities given for the stones, which is exceedingly unusual. Second, the following ŠÀ ‘inside, among’ usually comes immediately after the object or group it is modifying. It doesn’t make sense to translate “(a collection of stones), among which one is a good chest.” Whereas a “(gem-studded cedar chest), inside of which is one fine chest” is understandable. As for the stones themselves, ^{NA4}KA.DINIGIR.RA is a well attested stone that was probably reddish-brown in color (Polvani, *Terminologia dei minerali*, 145-8), and ^{NA4}TI (‘life/living(?)’ stone) is hypothesized to be named after a feature of its surface (*ibid.*, 161-3). The translation of [^{NA4}*m*]usnuwantis as “true stone” is based on the etymological considerations discussed in ft. 22 above.

11* One red container. Woolen carry straps.⁴⁹ ŠA KASKAL.

(end interpolation, resume D and A)

12* One red chest. Eighty-one complete knives, of which fifty-seven are cook's knives,

13* (and a number are) field knives.⁵⁰ 16 ŠA KASKAL.

14* One small red chest. Assorted black iron.

15* Sixteen spear(head)s of black iron, of which one is ŠU.U-stone.

Discussion

As discussed under the Systemic Differences, tablet D and most likely tablet C are two-column tablets. Tablet C is a smaller fragment that does not preserve a column divider or tablet edge, but based on the restorations, it must have either had wide columns characteristic of a two-column tablet, or consistently had overruns at the end of its lines.

Texts C and D share another feature besides their format, specifically the interpolation of five lines, starting in copy D obv. i 4'-8' and duplicated in C 5' (if these lines had appeared in A, they would have been inserted between lines A rev. v 9' and 10'). What is interesting is that this interpolation is the only known instance in the KASKAL corpus. That is to say, while other texts

⁴⁹ There are no good translations here. Either the chest has woolen carrying straps (as Siegelová translates) and no contents, or contains woolen carrying straps the number of which is unknown (as translated in the Chicago *Hittite Dictionary* (op. cit.) for *pittula-*). My preference is for the latter, given the container of twenty-seven leather straps just two entries earlier.

⁵⁰ Text A might have the cook's knives and field knives listed in reverse order. See next footnote for another example of rearranged entries.

may differ by a word or sign from each other, or (as will be seen in Nexus 3) miss a couple lines at the end of a paragraph, no other text overlap has an insertion of this magnitude.

The contents of the interpolation are thematically different from the surrounding metal implements, being leather, gems(?), and wool. The format of the entries is also unusual. Only the first has all the expected features, with both the number and type of contents listed (twenty-seven leather straps). The second entry lacks well-defined contents, either containing a smaller chest, or an unspecified quantity of gems. The last entry either has contents without quantity (woolen carrying straps) or no contents at all, being just a box with carrying handles.

It is clear that C and D, by their number of columns and inserted text, stand at a different editorial level than A. Is there a way to tell which came first? One glimmer of hope comes from the last common line in A, C, and D before the interpolation. Text A rev. v 9' ends with *ŠA KASKAL* and the equivalents lines in C and D end with *anda KASKAL*. As a formula, *anda KASKAL* is doubly unique: it appears only in C and D, and within D it appears only once, compared to six instances of *ŠA KASKAL*. This unusual formula might have caused the scribe some difficulty. Immediately before *ŠA KASKAL* in text A, precisely where the first difference between A and C/D is encountered if one reads the lines sequentially, there is an erasure. In this erasure there are traces of a sign that could plausibly read as an *an-* (though given the displacement of clay caused sometimes by erasure, this is by no means certain). It is possible that the scribe copying from tablet C/D reached the unusual *anda KASKAL*, wrote the first sign without thinking, and then corrected it to bring the formula in line with the rest of text A. Also removed are the five interpolated lines, which were thematically out of place (perhaps these entries were moved to another tablet, since text A is concerned exclusively with durable goods). Thus the direction of copying should be reconstructed as from two-column tablet to three-

column. This fits well with Siegelová's observation that the three-column tablets tend to be retrospective and summarizing, qualities one might expect in the "final" products in the administrative chain.

Nexus 3. KUB 42.14 rev. iv[?] 1'-13' (Text D); KUB 42.16 rev. v[?] 6'-12 (Text E); KUB 42.15 rev.[?] r. col. 1'-10' (Text H); IBoT 3.144 rev. r. col. 1'-7' (Text I)

Transcription

D rev. iv[?] 1'-13'

- 1' [#^{GAD}ŠU-]U-RU 2^{TÚG}ku-si-si[#^{TÚ}(^GKU-UŠ-ŠA-DI) (1^{TÚG}GÚ HA-Š)AR-TI]
- 2' [#+(1^{TÚG}HI.HI-)]na-tar HAŠ-MAN-NI 1^{TÚG}HI.HI-na-tar[(1^{TÚG}ka-pár-ta-s)a]
- 3' [#^{TÚG}ta-p]is-pa 1^{GAD}ŠU-U-RU 1^{TÚG}ka-p[(í-ta-sàm-na)]
- 4' [(1^{GAD}BAR.S)]I 1^{TÚG}ma-za-ga-an-ni-is TUR S[(A₅)]
- 5' [(5^{TÚG}i)]r-hi-is 14 GAD.DAM ŠÀ 4 HAŠ-MAN-[NI]
- 6' [6]ZA.GÌN 4 SA₅ ŠA KASKAL []

- 7' [(1)]^{GIŠ}PISAN SA₅ mi-iz-ri UGU wa-as-sa-an[-za
- 8' [(^{TÚG}.M)]EŠ^dhé-pát Û^dLUGAL-ma an-d[a
- 9' [(1^{TÚG})]SIG HAŠ-MAN-NI ka-pí-it-ta-sàm[-na
- 10' [(1^{TÚG}Z)]A.GÌN ka-pí-ta-sàm-na[
- 11' [1^{TÚG}GÚ]hur-ri 1 tap-pís-pa BABBAR 1 x[
- 12' [(1^T)]^{ÚG}GÚ hur-ri HA-ŠÁR-DI[
- 13']x ŠA K[ASKAL

6' [o o o o o o o o o o o o o o o o o o o]x GIBIL ^{TÚG}NÍG.LÁM^{MES} SAL.LUGAL an-da

7' [# ^{GAD}ŠU-(U-RU 2 ^{TÚG}ku-si-si) # ^{TÚ}]G KU-UŠ-ŠA-DI

8' [(1 ^{TÚG}GÚ HA-Š)AR-TI (1 ^{TÚG}HI.HI-na-tar)⁵¹ #+]1 ^{TÚG}HI.HI-na-tar HAŠ-MAN-NI

9' [(1 ^{TÚG}ka-pár-ta-s)a # ^{TÚG}ta-p(is-p)]a 1 ^{GAD}ŠU-U-RU 1 ^{TÚG}ga-pí-ta-sàm-na

10' [(1 BAR.SI^{GAD} 1 ^{TÚG}ma-za-ga-an-ni-is TU)]R SA₅ 5 ^{TÚG}ir-hi-is

11' [(14 GAD.DAM ŠÀ 4 HAŠ-MAN-)NI 6 (ZA.)]GÌN 4 SA₅

12' [I-NA KASKAL] NA-ŠU-Ú

(F+G+)H rev.? r. col 1'-10'

1' 2^{TÚG} [(ku-si-si) # ^{TÚ}G*KU-UŠ-ŠA-DI*]

2' 1^{TÚG}*GÚ HA-Š[AR-TI* (1^{TÚG}*HI.HI-na-tar*) #+(1^{TÚG}*HI.HI-na-tar HAŠ-MAN-NI*)]

3. 1^{TÚG}*ka-pár-ta-s[a* # ^{TÚG}*ta-p(is-pa* 1^{GAD}*ŠU-U-RU* 1^{GAD}*ga-pí-ta-sàm-na)*]

4' 1 BAR.SI^{GAD} [*ŠA KASKAL*]

{blank}

{blank}

5' 1 ^{GIŠ}PISAN SA₅ mi-iz-ri U[(GU wa-as-sa-an)-za

128

- 6' TÚG.MEŠ ^dhé-pát Û^dL[(UGAL-ma an-d)a
7' 1 TÚG SIG HAŠ-MAN-NI k[(a-pí-it-ta-sàm)-na
8' 1 TÚG ZA.GÌN ka-pí-ta[(-sàm-na)
9' 1 tap-pa-as-pa BABBAR 1[
10' 1 ^{TÚG}GÚ hur-ri HA-Š[(ÁR-DI)
{blank}
{blank}

I r. col. 1'-7'

- 1' {traces}
2' 1 k]a-pár-ta-as x[^{TÚG}ta-p(is-pa 1 ^{GAD}ŠU-U-RU 1 ^{GAD}ga-pí-ta-sàm-na)]
3' 1 ^{GAD}BAR.SI Š[A KASKAL⁵²
{blank}
{blank}

- 4' 1 ^{GIŠ}PISAN SA₅ mi-i[(z-ri UGU wa-as-sa-an)-za
5' [(TÚ)]G.MEŠ ^dhé-pát Û[(^dLUGAL-ma an-d)a
6' [(1 T)]ÚG SIG HAŠ-MAN-NI [(ka-pí-it-ta-sàm)-na
7' [(1 TÚG)] ZA.GÌN ka[(-pí-ta-sàm-na)

Translation

⁵² The sign traces show the clear beginning of two horizontal wedges, which I have interpreted as the start of a ŠA sign based on the expectation of a KASKAL formula at the end of the paragraph. What is certain is that the sign traces cannot be the “1 ^{TÚG}mazagannis” from texts D and E.

(Translation follows lineation of text E)

1*] new. Ceremonial garments (of the) queen are
inside.

2* (a number of) *ŠŪRU* linens, two *kusisi* cloths, (a number of) *KUŠŠADI* cloths,

3* one green shirt, one HI.HI-*natar* cloth, #+1 blue-green HI.HI-*natar* cloth,

4* one *kapartasa* cloth, (a number of) *tapispa* cloth, one *ŠŪRU* linen, one *kapitasamna*
cloth,

5* one BAR.SI linen,

(next two-and-a-half lines only appear in D and E)

one small red *mazagannis* cloth, five waistbands,

6* fourteen gaiters, of which four are green, six are blue, four are red.

7* *I-NA KASKAL NA-ŠU-Ú.*

(E ends here)

(Translation follows D)

8* One red container, Egypt(ian), upholstered (lit. “clothed”) on top.

9* Garments of (the gods) Hepat and Šarruma are inside.

10* One fine shirt, blue-green, *kapitasamna*.

11* One shirt, blue, *kapitasamna*.

12* One Hurrian shirt, one white *tapispa* cloth, one...

13* ...one green Hurrian shirt

14* *ŠA KASKAL.*

Discussion

Text D again contains text that other copies do not. This time it is only a few items, thematically appropriate, tacked on to the end of an entry. Text E also contains these items. Once more a decision must be made as to which version is the rough draft and which is the corrected. With the previous interpolation, it was decided that the extra lines in D and C belonged to an earlier editorial level than A. The fact that D and C were both two-column tablets, and that the interpolation was thematically out of place, was adduced as confirmation. This time the additions in D are backed by E, a three-column tablet. But despite E's outer format, text D could hardly appeal to a more unreliable witness if its revision is to be preferred. As noted in the section on Systemic Differences, text E is consistently an outlier in every category. It is ravaged by erasures (see Nexus 4 immediately below), riddled by unorthodox KASKAL formulae, and has a unique type of column divider. Text D must once again be considered an earlier draft.

In real terms, the anteriority of D can mean two things for the extra contents. It's possible they were listed by mistake, and were never in fact to be found in the chest at all (perhaps the scribe's eyes strayed to the wrong column of whatever tablet he was copying, and the mistake was not immediately discovered until the next draft). The other possibility is that the extra contents were removed from the chest before H and I were written. Perhaps they were removed completely, or perhaps they were placed in a different chest.⁵³ If this is so, a neat inference can be made about the organization of the contents within the chests. In every case that items are present in one draft and absent in another (see also nexus 1 and 4), the items are removed from the end, and not the beginning or middle, of the entry. If one can assume that the order of the

⁵³ My guess is that what is being observed is a mundane "rebalancing" of chests, where a few items are removed from the top of overloaded chests and transferred to others. This would make sense for chests that are being prepared for transportation.

contents in the text roughly matches the physical order in the chest, then the last items in the entry, which are most likely to be removed, must be the topmost items in the chest (unless the scribe enjoyed consistently unpacking the chests to remove items from the bottom). This also gives a clue as to the direction of movement of the chests in the KASKAL series, which will be more fully explored in section 4 of this chapter. The order of the entries, starting from the bottom layer and finishing with the top, is the order that a scribe would record while *packing* the chests, not unpacking, where the top layers would be encountered first. This is evidence that the chests originated in Hattusa, where they are being prepared to be shipped out of the capital, and not are being received from elsewhere to be unpacked and processed.

Nexus 4. KUB 42.16 rev. iii[?] 1'-10' (Text E), KBo 18.175 obv. i 3'-11' (Text F)

Transcription

E obv. iii[?] 1'-4'

[0' 1 ^{GIŠ}PIS(AN SA₅ LÚGUD.DA 40 ^{TU})^GG(Ú HUR-RI GAD)]

1' 39[(^{TÚG}GÚ GAD 2 SA₅ 1 ^{GAD}ŠU-UH-U-RU)]

2' 8 GAD SIG 5[(GÚ GAD ^{URU}a-la-si-ya)]

3' 5 GAD LÚGUD.DA [(k)a-]

{erased line}

{erased line}

{erased line}

4' ŠA KASKAL I+NA É.GAL-LIM[

{blank}

F obv. i 3'-7'

3' [1 ^{Giš}PIS]AN SA₅ LÚGUD.DA 40 ^{TU}[^GG]Ú HUR-RI GAD []

4' 39 ^{TÚG}GÚ GAD 2 SA₅ 1 ^{GAD}ŠU-UH-U-RU

5' 8 GAD SIG 5 GÚ GAD ^{URU}a-la-si-ya

6' 5 GAD LÚGU[(D.D)]A k[a-o-o] ^{Giš}PISAN ŠA É.GAL-LIM

7' [] [] ŠA KASKAL-NI

{blank}

{blank}

Translation

1* One short red container. Forty Hurrian shirts of linen.

2* Thirty-nine shirts of linen, two red, one ŠUHURU linen,

3* eight fine linen, five shirts of Cypriot linen,

E {4* five short linens [...]

{5* ŠA KASKAL I+NA É.GAL-LIM [

F {4* five short linens [...] Container of the Palace.

{5* ŠA KASKAL-NI.

Discussion

In the above transcription, text E displays three unparalleled oddities. In no other text in the palace administrative corpus are so many lines of erasure left in the middle of a paragraph,

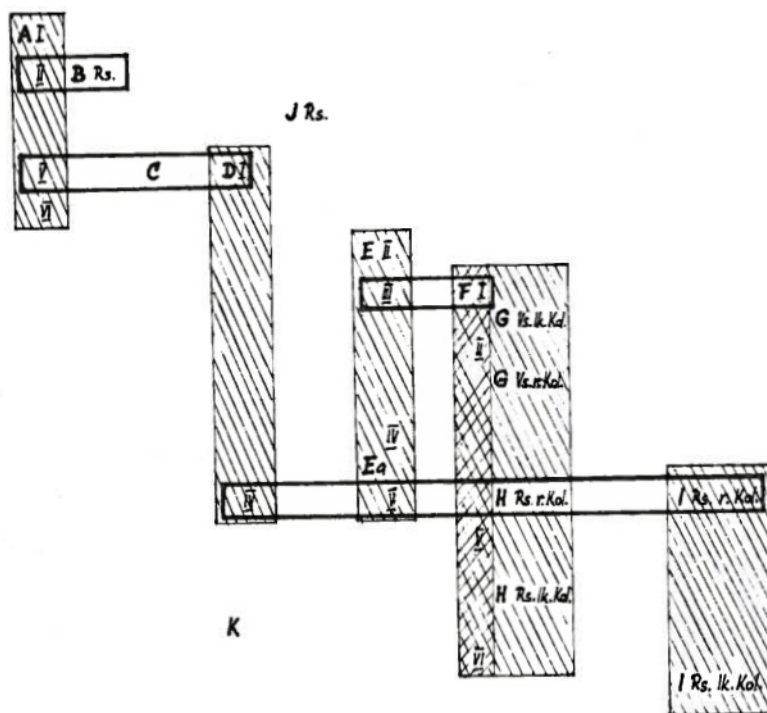
and in no other text of the KASKAL series does information stand after the KASKAL formula. Third, and perhaps because of the erasure, the blank line after the KASKAL formula in E obv. iii[?] 4' is the only example of a space before the paragraph line in a text that normally lacks them. All this confirms the impression that E is an unusual tablet.

When the transcribed entry is reflected in F, it takes a different appearance. Gone are the erased lines and the atypical single blank space, and the KASKAL formula is rehabilitated into a respectable *ŠA KASKAL-NI*. The phrase *I+NA É.GAL-LIM* hanging at the end of the entry in E is now replaced by ^{GIŠ}PISAN *ŠA É.GAL-LIM* 'the container (is) of the palace' in the body of the entry in F. Here one finds clarification (or revision?) of what the scribe was struggling to communicate, that the box being prepared for transportation is not in the palace, but of the palace. What exactly this means is not clear. Describing a container as being "of" an institution is itself unparalleled in the KASKAL series. It seems that whatever situation led to the erasures and abnormalities in E required an unprecedented phrasing in F. In any event it seems clear that F is a later draft than E.

3.6 Editorial Layers in the KASKAL Series

With the preceding analysis in mind, a new overview of the tablets of the KASKAL Main Text is now possible. One of the first conclusions is that the continuity of the text across drafts needs to be reevaluated. Siegelová presented the following informative graphic on the relationship between the tablets:

Figure 1: Relationship of KASKAL Main Text Witnesses (from Siegelová, *Hethitische Verwaltungspraxis*, 394)



The implicit assumption behind this depiction is that the textual archetype, the ideal document behind all of the textual witnesses, is transcribed continuously without break or rearrangement within the tablets. But doubt must be cast on this assumption by the interpolation, additions, and erasures found in the overlaps analyzed in the preceding section. It appears that tablets of the main text are not all drawing on the same source.⁵⁴

⁵⁴ As a consequence the length of the main text can no longer be confidently fixed. At a minimum, the text filled two three-column tablets, with texts A and F representing the probably beginning and end. But there is no way to tell how many tablets lay between these endpoints. At the very least, text E begins approximately a column-and-a-half before F (the top of its column III matches with the second half of F's column I). Has the extra material at the beginning of E been removed to the end of F, or was there another tablet of textiles before F, the only evidence of which has been preserved in E. My personal interpretation is that tablets A and F do indeed contain the entirety of the main text (there is a nice symmetry to having one tablet devoted to

The perturbations in the text tradition can be explained in two ways: the differences are either scribal errors or conscious revisions. The former would be explained by entropy, the usual culprit in textual criticism. The more times a manuscript is copied, the more chances for error to be introduced, especially when the instances of copying are separated by time or done by different hands. But this explanation fits better with “texts of tradition”, like political or literary documents which are disseminated widely or retained across generations. The KASKAL series is not this. It has an administrative nature, and as such is constrained by a need to function within an administrative reality. Discrepancies between tablets in the KASKAL series would have more consequence than just a mistransmission of esoteric knowledge. They would mean that certain valuable goods might disappear or be left behind, and that is not something a scribe would want to confess to the palace.

If the differences in between the tablets are conscious revisions which reflect a change in administrative reality, this means that the texts have a hierarchical relationship to each other. Some are earlier drafts which have been superseded in correctness by later drafts. By making use of the particular differences at the overlaps in the text, which often fixed one tablet’s anteriority to another, it can be shown that the editorial levels exhibit certain features, which are presented below:

Precursor Texts

Exemplars: none (but compare text L)

Features: (using text L as model) single-column tablet, messy writing and sloppy formatting, no space before paragraph lines, no mention of chests, no mention of KASKAL until colophon

durable goods and one to textiles), but to concede that a third tablet could be discovered to fit in between them.

Comments: As discussed in the section on sources, text L represents a probable KASKAL precursor text, though it cannot be conclusively connected to the main text.

Level 1

Exemplars: C, D, (K?)

Features: two-column tablet, heterogeneous contents, interpolations, erasures, no space before paragraph lines, some variation in KASKAL formulae

Comments: This level represents the first gathering together of the single-column drafts and attempt to segregate the chests by contents, though this process is incomplete. It is interesting that text D contains the second half of text A and the first half of text F, as if it were a hinge tying the series together. Was text D the middle of a three part series of two-column tablets? Or was it the holistic core around which the later KASKAL revisions grew?

Level 2

Exemplars: A, J

Features: three-column tablet, thematic division of contents, no space before paragraph line, consistent KASKAL formulae (ŠA KASKAL)

Comments: At this level the main text is beginning to assume its final form, with a perfect thematic division of contents, but there are extra items that need to be weeded out.

Level 3a

Exemplars: E

Features: three-column tablet, thematic division of contents, space before most paragraph lines, erasures, experimental KASKAL formulae, odd column divider

Comments: Text E is included in this intermediary category because it displays the formatting qualities of final drafts, but has too many idiosyncrasies. My guess is that this draft was used by the scribe to resolve the outstanding questions about the chests, which would explain the erasures and the verbosity of the KASKAL formulae (see the discussion of the phrase ŠA KASKAL I+NA É.GAL-LIM in Nexus 4).

Level 3b

Exemplars: B, F(+)G(+)H, I

Features: three-column tablets, thematic division of contents, space before every paragraph line, consistent KASKAL formulae (ŠA KASKAL-NI), final trimming of contents

Comments: The final drafts of KASKAL series are very consistently formatted and with perfect thematic division of contents. A final inventory of the chests might have been performed, and the items which had been erroneously included in the earlier drafts, or since removed (see Nexus 3), are now pared from the tablets. It is probably just an accident of preservation that tablet B is the only representative from the durable goods half of the series to be found at this final editorial level.

3.7 Conclusions on Structure

Two trends can be observed in the editorial history reconstructed above. First, there is a growth from single to triple columns, which matches Siegelová's proposal for the editorial flow of the rest of the palace administrative corpus. Second, there is a consistent winnowing of

complexity: from heterogeneous to homogeneous contents, from a variety of KASKAL formulae to a single type, and from more content to less. The final product is a standardized, three-column tablet with generous spaces between paragraphs that allow for distinguishing entries at a glance. Such spacing and three-column format with simple dividers is rarely found elsewhere, and so it is a pleasing result that the most finished tablets exhibit the most features unique to the administrative genre.

The implications of the editorial history are subtle but important. A flat editorial hierarchy, where every copy was a “final” copy, would have meant multiple end users of the documents. This would imply the involvement of several cuneiform-literate professionals—professional, since reading cuneiform was a vocational skill not lightly acquired. And if the texts were not revisions of each other, the radically different styles would suggest several different authors. The end result would match a “classical” view of Bronze Age territorial states: big projects carried out by big bureaucracies.⁵⁵ But the deep editorial hierarchy recovered alleviates

⁵⁵ This view finds its home especially in the (truly) massive administrations of Egypt and Mesopotamia. For an introduction to administration in contemporary Egypt, see Chapter 4 “The Bureaucratic Mind” and Chapter 6 “New Kingdom Egypt: the mature state” in Barry J. Kemp *Ancient Egypt: Anatomy of a Civilization* (2nd ed.) (New York: Routledge, 2006). In Pierre Grandet, “The Ramesside State,” in *Ancient Egyptian Administration*, ed. Juan Carlos Moreno García (Leiden: Brill, 2013), 863 to the Egyptian state is ascribed an “...ambition to monitor all human activities, and the concomitant need to record all acts for purposes of periodical verification by a higher authority.” This included the requirement that each administrative agency keep a daily log, a journal, of its activities (ibid., 864). For contemporary Assyria, see Stefan Jakob, *Mittelassyrische Verwaltung und Sozialstruktur: Untersuchungen* (Leiden: Brill, 2003). This book can be read in conjunction with the ten-volume(!) series by Helmut Freydank and Barbara Feller, ed., *Mittelassyrische Rechtsurkunden und Verwaltungstexte* (Wiesbaden: Harrassowitz, 1976-2011). Contemporary Babylon has yet to receive such attention, though some 12,000 administrative tablets from Nippur (of which 15% have been published) and a few hundred from Babylon, Dur-Kurigalzu, and Ur are known to exist (Jonathan S. Tenney, *Life at the Bottom of Babylonian Society* (Leiden: Brill, 2011), 139). A comprehensive comparison of Late Bronze Age bureaucracies in the Ancient Near East has yet to emerge, primarily due to the enormity of the task but also the need for more primary research for many of the states.

the need for such a reconstruction. The multiple revisions show a development and pruning that suggest the craft of a small group of scribes, perhaps even a single individual.

The structure of the text reveals its purpose. It is insufficiently abstract to be an account or ledger, where one would expect to find sums and totals. Instead it is quite particular throughout its multiple revisions.⁵⁶ The chests and contents are recorded in concrete detail, and never combined or quantified. This makes sense if the document was an index, a tool to help the user find a real object in a real place. Most likely the KASKAL series was created to keep the objects (mostly small and purloinable preciosities) under administrative control while they were being prepared for transport. But even as an index the text is not self-sufficient. There is no perceptible system of numbering or location, and the descriptions of the containers are generic enough that even if a person—say, the modern scholar—could read the cuneiform, they would still be unable to recover the original organization of the chests. Thus for the text to fulfill its administrative function, the author's presence was required.

Inferences can also be made about the physical disposition of the chests and contents of the KASKAL series. If the scribe used no explicit organizational scheme,⁵⁷ it means an implicit one was already available to him. The order of the chests in the tablet must have reflected the order of the chests in the storeroom; otherwise the scribe would have to keep a mental concordance between the dozens of chests on the tablets and their location in the real world. As a consequence, any revisions must have been matched by or followed a physical reorganization of

⁵⁶ Siegelová, *Hethitische Verwaltungspraxis*, 397 already noted, in the context of arguing against reading the KASKAL texts as a ledger of tax incomes, that “Die Urkunde behandelt ihren Stoff auf eine systematische und gründliche Weise, als ob sie auf ein einmaliges, bedeutsames Geschehen zurückginge.” She does not go so far as to speculate what these meaningful events might be.

⁵⁷ Even if their meaning could be deciphered, the “post-paragraph numbers” in texts D and F(+)G(+)H seem too infrequent to form a useful system.

the chests. Thus the editorial process, with its layers of drafts, was a physical as much as a textual process. The production of the KASKAL main text must have been an event that took weeks, maybe months, with goods packed into chests and gathered into one place where they were recorded in an evolving inventory. The scribe, no doubt assisted by laborers, would organize and reorganize these chests by contents, and remove (or note the removal of) articles of goods and metal as needed. The simplification of form in the tablets reflected a reduction of complexity in the real world.

The importance of the scribe to the KASKAL project elevates him to something more than just an observer. Instead, he was the indispensable curator and maybe even administrator of the chests in the KASKAL series.⁵⁸ It must be emphasized how different this is from the contemporary Bronze Age kingdoms. In Mesopotamia and Egypt, the bureaucracy wrestles with staples of grain and livestock, sometimes measuring in the tons. Their documents conform to more modern conceptions of “paperwork”: figures and sums. The scribes who recorded the economic activity were removed from the event itself, because their job was to *abstract* the bulk into manageable numbers.⁵⁹ But as discussed in the Chapter 2, the Hittite government was concerned with recording precious goods, and not staple products. The reduced bulk of the objects, and the specificity needed in recording them, allowed the Hittite scribe a hands-on

⁵⁸ Even if the scribe was not in charge of the chests, and instead only assisting the actual administrator, the scribe would still need to be present anytime the KASKAL main text needed to be consulted. Deciding between the titles “administrator” and “assistant” depends on how one wishes to view the social importance of the scribe. I personally subscribe to the view that the scribes of Hattusa were fewer in number, and more important, than their Mesopotamian colleagues. But in many ways this begs the question of this dissertation, which aims to resolve questions about the Hittite bureaucracy through the administrative documents themselves.

⁵⁹ See Piotr Steinkeller, “The Function of Written Documentation in the Administrative Praxis of Early Babylonia,” in *Creating Economic Order: Record-Keeping, Standardization, and the Development of Accounting in the Ancient Near East*, eds. M. Hudson and C. Wunsch (Bethesda, Maryland: CDL, 2004), 65-88. Here, the scribe was not involved in the administrative action *per se*, but recorded the events after the fact.

approach to his work yielding a decidedly concrete, even “artisanal” bureaucracy. This approach can be seen everywhere in the administrative genres, and leads to a larger point: that the Hittites had different economic needs from their agro-state contemporaries, which created a different kind of bureaucracy and resulted in a different kind of record. There was an immanence to the Hittite bureaucracy that is revealed in the concreteness of its products. And so the specificity of the descriptions in the KASKAL series, far from being superfluous, reflects a way of thinking that is at the core of the entire Hittite political economy.

CHAPTER 4

CONTENTS OF THE KASKAL MAIN TEXT

The content of the KASKAL series can only be understood by measuring it against contemporary documents, and herein lies a conflict of methodology. As argued in the conclusions on structure, the KASKAL series is unusual in that it is primarily concerned with *indexing*. The purpose of the tablets was to recover real objects from real chests and to keep them under administrative control. The written structure reflected this by maintaining the separate identities of the objects, without any attempt to add up totals. Many of the other inventories in the Palace Administrative Corpus, and especially those from the Egyptian-Hittite marriage correspondences, focus on weights and quantities. They differ from the KASKAL series in that their purpose is *evaluation*—that is, to provide a value for the recorded objects for accounting (internal administration) or politics (foreign gift-exchange). The end result is a quantity of gold or silver, weighed out in shekels, or a total number of textiles. Because of the differences in purpose and structure, the indexical KASKAL series is directly incommensurable with the evaluative inventories. The task of the scholar is to bridge the divide by grouping the items of the KASKAL series into intelligible categories and quantifying them, in essence converting the indexical text into an evaluative one, and to do this without allowing his or her categories to become projections onto, and not reflections of, the data at hand.

Fortunately, despite the cross-purposes of the original scribe and the modern scholar, the text offers a compromise. A basic categorization by material is available in the text itself: in addition to the major division between textiles and durable goods, the durable goods tend to cluster into groups of gold, iron, silver, etc., revealing that the scribe, even as he was concerned with indexing, applied an organizational structure to the chests around him. While the scholar

might wish for the refinement of weights and measures, adopting the material categories at least has the advantage that the objects are easy to count. In many cases, even when the meaning of the Hittite word for an object is imprecisely known, the material of the objects is quite clear due to the use of a Sumerographic determinative.

Even without precise measurements the materials are decent proxies for determining the value of the entries, because the size of the objects is fairly constant. The majority are “people-sized”: they are personal objects like knives, jewelry, cups, and shirts, and thus their size is constrained by human needs. Though their exact dimensions are rarely preserved, the goods will all be roughly “hand-held” for durable goods and “body-covering” for cloths. And because the objects are all of a similar size, the material will determine most of the difference in value. To put it another way, when comparing one-hundred copper knives of varying size with one-hundred pieces of assorted silver jewelry, the length and weight of the knives will matter far less than the fact they are made of base metal. The outsized objects in the KASKAL series, which do have their dimensions preserved, such as the forty-seven mina of gold ingots and 125 cubits of tapestry, are few enough to be considered separately. Thus, while the reconstruction of the wealth documented in the KASKAL series makes use of broad categories, the large quantities and personal-sized nature of the objects allow these categories to be sufficient for comparison with the other, evaluative inventories.

In this section, the preserved contents will be presented in tables divided into categories by material. An estimate of the completeness for each tablet will be made based on the number of preserved lines of text. The estimate will then be combined with the tabulated data to offer a calculation of the amount of objects originally contained in the KASKAL main text. The final

result will be a reconstructed quantity of objects which will form the basis for comparison with other collections of wealth mentioned in texts of the Ancient Near East.

4.1 Reconstructing the Goods of the KASKAL Main Text

Beyond the lack of precise measurements, the major challenge in evaluating the contents of the KASKAL series is the incomplete preservation of the tablets. It is not just that columns are broken and lines are missing, but sometimes individual entries are broken away just where a vital number or item would be. Thus the information preserved in the tablets is only a fraction of what was originally there. Determining the size of this fraction, and presenting a coherent estimation, is the first step towards evaluation of the tablet contents.

It is assumed that the original text was two tablets long in its final form, with no “hidden” tablets in between. Every durable good had its home in the first tablet, and every textile in the second. The best representatives of these two tablets is text A and F(+)G(+)H. When an entry is attested in another text and does not also appear in these two tablets, it must be assumed that the entry was located in a portion of these tablets now broken away. In principle this means that the number of missing lines can be estimated by reconstructing the total number of lines on the original undamaged tablets A and F(+)G(+)H, subtracting the preserved lines on these tablets, then subtracting the unduplicated lines from the rest of the tablets of the main text.¹

¹ For the purposes of reconstruction, I will not include tablets J and K, two small fragments that due to their brevity and poor state of preservations cannot be securely located within the two original tablets. The details they provide, even if included, would not much affect the reconstructed total number of objects provided at the end of this chapter.

4.2 Tabulation of Durable Goods

Table 1: Durable Goods in KUB 42.11 (Siegelová 10.A)^a

Gold objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
[]	strung with pearls and gold	[]	obv. i 5'
PENKI (knob)	gold and lapis lazuli	[]	obv. i 6'
SIM (swallow (statue?))	gold	1	obv. i 10'
[]	gold inlay	[]	obv. i 15'
]x-ta-as	gold inlay	[]	obv. i 16'
]es	gold	[]	obv. i 19'
tiyawa[	(5 gold)	5	obv. ii 4'-6'
(ingots)	gold	38 MA.NA	obv. ii 21'
(ingots)	gold	3 MA.NA, 4 GÍN	obv. ii 22'
(ingots)	gold	4 MA.NA, 7 GÍN	obv. ii 25'
(ingots)	gold	2 MA.NA, 2 GÍN	obv. ii 26'
NÍG.GÍD.DA (spear)	gold	2	obv. ii 29'
	<i>Subtotal</i>	8+[5] pieces; 47 MA.NA, 13 GÍN ingots	

Silver objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
TÚG MASŁU (brocaded cloth)	silver inlay	1	obv. ii 7'
GÚ GU ₄ (cow rhyton)	silver	13	rev. v 24
GÚ UR.MAH (lion rhyton)	[silver] ^b	3	rev. v 24
GÚ Á ^{MUSEN} (eagle rhyton)	silver	5	rev. v 25
ŠU[.SI (finger(-shaped vessel?))	[silver] ^c	2	rev. v 25
GAL (cup)	silver	14	rev. v 26
ŠULPAT (tubes/drinking straws)	[silver] ^d	200	rev. v 27

Table 1, continued

^{GIS} hūpparallis (rack, stand)	silver	1	rev. v 28
^{GIS} marawiralis (a small seat??) ^e	silver	1	rev. v 29
	<i>Subtotal</i>	240 pieces	

Iron objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
□	black iron	□	obv. i 2'
HAR.GÚ (necklace)	black iron	8	obv. i 2'
piran pēdumas (libation arm)	black iron	□	obv. i 3'
INŠABTUM (earring)	black iron	□	obv. i 4'
UNQU (ring)	black iron	□	obv. i 11'
^{GIS} TUKUL (club)	[1 iron] ^t	1	rev. v 1
□	black iron	□	rev. v 3
NÍG.GÍD.DA (spear)	black iron	5	rev. v 3
EME GÍR.TUR (small knife blade)	black iron	5	rev. v 4
GÍR.TUR (small knife)	black iron	6	rev. v 4
EME GÍR (knife blade)	iron	10	rev. v 5
palzahas (statue base)	iron	7	rev. v 7
NÍG.GÍD.DA (spear)	black iron	81	rev. v 8
purias (offering tray)	1 ir[on]? ^g	3	rev. v 8
palzahas (statute base)	“good” iron	[x+1]	rev. v 9
□	assorted black iron	□	rev. v 14
NÍG.GÍD.DA (spear)	black iron	16	rev. v 15
	<i>Subtotal</i>	142+[17] pieces	

Precious stone or ivory objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
NA ₄ (stone)	IZZIHU stone	1	obv. i 9'
NA ₄ (stone)	KIBŠI stone	□	obv. i 9'
UNQU (ring)	Egyptian carnelian	26	obv. i 13'
tiyawa[	(8 ivory)	8	obv. ii 6'
NA ₄ (stone)	lapis lazuli	28	obv. ii 9'

Table 1, continued

SAG.DU kinuhis (dagger pommel)	[precious stone?] ^h	1	obv. ii 10'
AŠ.ME (sun disk)	lapis lazuli	16	obv. ii 12'
UNQU (ring)	lapis lazuli	178	obv. ii 13'
NUNUZ (pearls)		(2 bagfuls)	obv. ii 19'
[] (rings?)	lapis lazuli	179	rev. v 19
	<i>Subtotal</i>	437+[1] pieces; 2 bags of pearls	

Base metal objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
^{GIS} TUKUL (club)	(2 not iron)	2	rev. v 1
EME GÍR (knife blade)	bronze	6	rev. v 5
EME GÍR.GAL (large knife blade)		18	rev. v 6
GÍR GAMRU (finished knife)		81 ¹	rev. v 10
^{GIS} BUNÍN (mixing trough)	tin inlay	40	rev. v 22
^{URUDU} ANKURINU GAL AMAR	copper	2	rev. vi 4', 5'
	<i>Subtotal</i>	149 pieces	

Cloth

<i>Item</i>	<i>Material/Color</i>	<i>Quantity</i>	<i>Citation</i>
HAR.ŠU ^{KUR} mizri (armband)	red linen	[]	obv. i 7'
	<i>Subtotal</i>	[1] piece	

Miscellaneous

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
^{GIS} LE'U (writing tablet)		2	obv. ii 3'
sūtariš (piece of a musical instrument?)		1	obv. ii 11'
^{GIS} hūpparallis (rack, stand)		1	rev. v 27

Table 1, continued
Unknown

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
kuwappar[		1	obv. ii 2'

^a Note on format: a pair of brackets [] indicates the information is broken away on the tablet. For calculating quantities, an empty bracket [] is given a value of 1 to represent the minimal restoration possible. When subtotals are added, the value of the empty brackets is given after the total (e.g. 5 iron knives + [] bronze knife + [] copper knife = 5 + [1] + [1] = 5+[2]). A blank space means it was not included in the original text. Because many of the items have no translation, they are presented in transcription with translations added in parentheses where possible. The materials and colors, the meanings of which are better known, are presented in translation.

^b Material inferred from neighboring items, viz. rhyta.

^c Material inferred from the neighboring items.

^d The Palace Administration Corpus has one other text in which *ŠULPAT* are mentioned along with the material of their construction, where they are mostly made of silver (KBo 16.83+KBo 23.86 obv. i 3', obv. ii 4', 6', 8', 9', obv. iii 11), with one gold example attested (KBo 16.83+KBo 23.86 obv. i 4'). The inclusion of the 200 *ŠULPAT* of the KASKAL series among the silver items argue for their being made of the same metal.

^e s.v. entry in Chicago *Hittite Dictionary* (Hans Güterbock and Harry Hoffner, ed., *The Hittite Dictionary* (Chicago: Oriental Institute, 1980-)), and preceding ^{Giš}*marau* entry.

^f Assuming that the following line, rev. v 2, reading ŠÀ.BA 1 AN.BAR G[E₆ refers to one of the three clubs. These clubs would probably have been quite ornate. Cf. the three ^{Giš}*hattalla* described in KUB 42.36, 5'-11', which have heads of precious stone and stocks of wood inlaid with gold and more precious stone.

^g Material inferred from neighboring items. The less likely restoration is AN.[NA "tin".

^h Cf. the dagger pommel in KBo 9.91 obv. 9, which is made out of ^{NA4}DU₈.ŠÚ.A "rock crystal(?)".

ⁱ This number includes fifty-seven GÍR ^{LÚ}MUHALDIM (cook's knife) and an unknown number of GÍR *gimras* (field knife).

Commentary

In the calculations below, each recoverable line has been weighted with a value of either full (=1), half (=0.5). A line is valued at "half" when it preserves at least one entry which appears in the above table, but is otherwise only partially complete (that is, there is a high probability that another entry was lost in the break). A line is valued at "full" when an entry can be recovered and a lost entry is unlikely. Blank lines at the end of paragraphs, which are often not given line

numbers in the hand-copies, are noted separately and added to the total of full-lines. The weighted values have been added for each column to give an idea of the tablet's completeness.

Obv. i

Approximately four lines are completely missing at the beginning of the tablet. Most of the objects in the first half of the tablet are iron, so one might safely assume the first lines also contain iron implements. The last eight lines are also completely missing. The lines immediately before the break mention golden statues and a number of inlaid objects, including something inlaid with carnelian. The first lines preserved after the break in the col. ii contain gold, silver, and precious stones. It is sensible then to restore objects of precious materials in the last eight lines of obv. i. In later calculations, the weighted value of these lines will be split evenly between the gold and precious stone categories.

<i>Preserved lines</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	obv. i 2'-9'	8
partially complete (half line)	obv. i 10'-13', 15', 16', 18', 19', 24'	4.5
	<i>Subtotal</i>	12.5

<i>Missing lines (by material)</i> ²	<i>Full lines</i>	<i>Half lines</i>	<i>Weighted Value</i>
iron	obv. i (-4')-1'		5
gold/precious stones	obv. i 14', 17', 20'-23', (+25'-+32')	obv. i 10'-13', 15', 16', 18', 19', 24'	18.5

Obv. ii

The first five lines of this column are broken away. Given the contents of the end of obv. i and the rest of obv. ii, these lines probably contained gold items accompanied by precious

² When restored lines are cited that fall outside of the handcopy's numbering range, they will be prefixed by a superscripted negative ⁻ if they are before the first line, or a positive ⁺ if they are after the last line. So -4' would be the fourth line before the start of the handcopy's line 1', and +2 would be two lines after its last numbered line.

stones. Most of the middle of obv. ii contains precious stones, but there could be some gold mixed in (see. obv. ii 5'). Starting at obv. ii 18', the text can be partially restored from text B.

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	obv. ii 18'-29'	12
partially complete (half line)	obv. ii 2'-17'	8
	<i>Subtotal</i>	20

<i>Missing lines (by material)</i>	<i>Full lines</i>	<i>Half lines</i>	<i>Weighted Value</i>
gold/precious stones	obv. ii (5')-1'	obv. ii 2'-17'	14

Obv. iii and Rev. iv

These columns are completely broken away. There is no clue as to the material of the objects they contained. In later calculations I will consider these lines to have contained base metal objects to provide the most conservative valuation possible.

Rev. v

This column is almost completely preserved. One or two lines are broken away in the middle, which, judging by the surrounding lines, probably contained weapons of iron. The final lines of the column concern small containers of silver objects.

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	rev. v 4-11, 14-29	24
partially complete (half line)	rev. v 1-3, 30, 31	2.5
	<i>Subtotal</i>	26.5

<i>Missing lines (by material)</i>	<i>Full lines</i>	<i>Half lines</i>	<i>Weighted Value</i>
iron	rev. v 12-13	rev. v 1-3	3.5
silver	rev. v 32-33	rev. v 30-31	3

Rev. vi

Only the last few words of five lines, appearing about three-quarters of the way down the tablet, are preserved in this column. These five lines seem to contain the colophon of the tablet, so no further text is expected. One could guess that about fifteen preceding lines are lost, but

there is no clue as to the quality of their contents, so I will again assume a default of base metal items.

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	rev. vi 1'-3' ³ , 4'- 5' (+ 2 blank)	7
	<i>Subtotal</i>	7

<i>Missing lines (by material)</i>	<i>Full lines</i>	<i>Half lines</i>	<i>Weighted Value</i>
base metal	rev. vi (1'-15')		15

KBo 18.173 (Siegelová 10.B)

This content of this text is completely duplicated by KUB 42.11 (Siegelová 10.A), and is accounted for there.

KBo 18.175a (Siegelová 10.C)

The content of this text is completely duplicated by KUB 42.11 (Siegelová 10.A) and KUB 42.14 (Siegelová 10.D), and is accounted for there.

KUB 42.14 (Siegelová 10.D)

With the exception of a five line interpolation (see discussion of Nexus 2 in Section 1.5), the durable goods on the obverse of this tablet are duplicated in KUB 42.11 (Siegelová 10.A), and have been treated there. The contents of five line interpolation are presented below.

³ Lines rev. vi 1'-3' are part of the colophon, and can be considered “reasonably complete” because one can predict that they do not contain any objects.

Table 2: Durable Goods in KUB 42.14 (Siegelová 10.D)Precious stone or ivory objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
NA ₄ (stone)	“Babylon” stone	[]	obv. i 6’
NA ₄ (stone)	“Life” stone	[]	obv. i 6’
NA ₄ (stone)	“True” stone	[]	obv. i 7’
	<i>Subtotal</i>	[3] objects	

Miscellaneous

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
^{GIS} hūpparallis (rack, stand)	red	[]	obv. i 4’
^{KUS} MARŠUM (strap)		27	obv. i 4’
^{SIG} pittulas ŠU-as (carrying straps)			obv. i 8’

Commentary

The content of the five lines unique to this tablet (and text C) deviate in theme from the surrounding text in A. The first entry (obv. i 4’-5’) and third entry (obv. i 8’) describe containers of fastening or carrying supplies: ^{KUS}MARŠUM “leather straps” and ^{SIG}pittulas ŠU-as “woolen carrying straps.” Because of their utilitarian nature, these have been categorized as durable goods and not textiles.

Obv. i

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	obv. i 4’-8’	5
	<i>Subtotal</i>	5

4.3 Estimated Original Contents of Durable Goods Tablet

There is no way to know for sure if the interpolation recorded in C and D was completely removed from the later draft represented by A, or if it was relocated to a part of that tablet that is

now broken away. But as explained in the section introduction, the latter will be assumed so as to provide the most conservative estimate possible of the wealth in the KASKAL series. Thus the total number of lines preserved can be found by adding the lines in tablet A to the interpolation of tablet D.

Judging by columns A obv. ii and rev. v, the tablet's most completely preserved, a full column in this text would contain around thirty-four lines of text. Column A obv. i is slightly longer at thirty-six lines because it has no paragraph breaks. Column A rev. vi ends about two-thirds of the way down the tablet, at around line 20' of rev. v. These numbers can be used to estimate how much of the tablet is missing:

Tablet A	obv. i	12.5/36
	obv. ii	20/34
	obv. iii	0/29 ⁴
	rev. iv	0/34
	rev. v	26.5/33
	rev. vi	7/22
Tablet D	obv. i	5/5
	Total Preserved	71/188 (=38%)

While not all of the lines missing would have contained entries of durable goods (as can be seen in the preserved portion of text A, some lines were KASKAL formulae or extended descriptions of certain objects), and some lines would have contained more entries than others, this does not diminish the conclusion that the goods tabulated above represent considerably less than half the durable goods originally recorded in the KASKAL main text.

⁴ I have arbitrarily placed the extra five lines from text D into A obv. iii for the purposes of calculation. Hence A obv. iii appears as if it were five lines shorter. As was argued in the introduction to this chapter, it is assumed that the extra materials in tablets like D and E were not removed, but shifted elsewhere in later drafts. This assumption was made so as to not double-count these items.

Having tabulated the preserved entries, and estimated the percentage of preserved lines, the next logical step is to extrapolate the total number of objects once contained in the KASKAL main text. More so than the previous steps, this is fraught with caveats and uncertainty because of the “lumpy” nature of the data: one entry may contain a few of gold-plated objects, and the next forty pounds of gold. If the data were more easily quantifiable, that is, if the objects could be reduced to integers that measure the same thing, the best statistical practice would be to account for the “lumpiness” using standard deviation. Standard deviation is a way of measuring the volatility of a data set, how close or far the data points are from the average. If the contents of the KASKAL series could be converted into the same units of measurement (for example, value in shekels of silver), one would see that some items were worth a lot more than others. The data set would be said to have a high standard deviation.⁵ But since the data for performing standard deviations is lacking, crude averages and common sense will have to suffice. Below will be presented the total number of objects for each material, divided by the number of lines they occupy (using the full/half line weighted method), yielding an average number of objects per line. The anomalously large entries will be excluded from this calculation. The resulting average will be applied to the number of missing lines estimated for each class of material.

The precise numbers that will be offered are ultimately educated guesses. This in fact can be said of the entire project: full appreciation of the KASKAL main text requires an honest attempt to restore it, and if the restoration requires guesses they should be as educated as

⁵ More advanced statistical methods could also be applied, allowing one to estimate how likely it is that a very large entry (like forty mina of gold) was lurking in a broken portion of the text. Breaks of a few lines would not be likely to contain these large entries, while in the cases like A obv. iii and rev. iv, where two consecutive columns are missing, would have a chance to contain at least one or two of these anomalous entries.

possible. Hence the exactness of the calculations, because even if the results are speculative starting with rounder numbers will not improve them.

Below is total number of objects preserved in the durable goods tablet, with exceptionally large entries noted separately:

Gold: 8+[5] objects, 47 mina 13 shekel gold ingots

Silver: 40 objects, 200 drinking straws

Iron: 142+[17] objects

Stone and ivory: 80+[4] objects, 178 rings, 179 (more rings?), 2 bags of pearls

Base metal: 149 objects

If the anomalous entries are excluded, the following estimations of the missing objects can be made (the number of weighted lines drawn from the *Missing lines* tables for each column):

Gold: 8+[5] objects / 5 weighted lines = 2.6 obj/line x 16.25 lines⁶ \approx 42 missing objects

Silver: 40 objects / 7.5 weighted lines = 5.3 obj/line x 3 lines \approx 16 missing objects

Iron: 142+[17] objects / 11.5 weighted lines = 13.8 obj/line x 8.5 lines \approx 118 missing objects

Stone and ivory: 80+[4] objects / 6 weighted lines = 14 obj/line x 16.25⁷ \approx 228 missing objects

Base metal: 149 objects / 6.5 weighted lines = 22.9 obj/line x 78 lines \approx 1,788 missing objects

⁶ This figure taken from half of the total of the gold/precious stone missing lines from obv. i and ii $(18.5 + 14) / 2 = 16.25$. See commentary under obv. i.

⁷ See preceding footnote.

The biggest contributor to the missing totals is the base metal category. This is because it was arbitrarily assumed that the broken columns A obv. iii, rev. iv, and the first half of rev. vi contained base metals. The intention was to restore base metals so as not to inflate the value of the columns, but the base metal goods turned out to have the densest entries. Yet substituting another material, or any combination of materials, would not lessen the value of the two-and-a-half missing columns, because by the ratios found above the density of objects per line inversely correlates with the preciousness of the material. The results should not be surprising: the more expensive objects will appear in fewer numbers⁸, and the wealth contained in two-and-a-half columns will be very great. Thus, the 1,788 missing base metal objects are a placeholder, an accounting fiction representing one possible distribution of goods for the missing columns, with other distributions of durable goods at their appropriate densities also allowed.

The combined estimation of the contents of the durable goods tablet is:

- **55 gold objects, and 47 mina 13 shekel of gold ingots**
- **256 silver objects** (including **200 silver tubes**)
- **277 iron objects**
- **669 stone and ivory objects** (including **357 rings**), and **2 bags of pearls**
- **1937 base metal objects**

⁸ Or maybe better, the more expensive objects receive a more thorough and individualized description, yielding fewer objects per line. This is probably the case in text A, where the entirety of obv. i, which records iron, gold, and precious stone jewelry, is devoted to a single container. This would make the container impossibly large if one does not assume a high detail/low density description. Alternatively, one could argue that highly individualized “show pieces”, which merit detailed description, are more likely to be made of precious materials than the utilitarian, base metal objects.

There were additionally some miscellaneous objects like the leather straps and storage racks, and of course the chests themselves, which were not inexpensive items.⁹

4.4 Tabulation of Textiles

The same process as above can be applied to the textile tablet, with the difference that there will be no attempt to discriminate by material category. The argument for this approach is moot: most of the textiles are listed without material. It is possible that the default material was wool (as it is never explicitly mentioned, yet the Hittite palace was known to receive vast quantities as tax and tribute), with a few linen garments mentioned by name. In any case the material of the textiles is mostly irrelevant. Textiles are premier examples of high value-added products, and what determines their worth is not so much their material, but the skill and quality of their manufacture.¹⁰ For example, in the Egyptian correspondences to be discussed in section 3, each piece of linen is graded on a scale from “kingly” quality at the top, then *miku* (meaning

⁹ Not to draw too mundane a comparison, but anyone who has packed and moved their own apartment knows how expensive even cardboard boxes can be, and how the best practice is to borrow and reuse boxes from friends or local businesses. For the Hittites, living in an era before cheap, mass-produced containers that could withstand the rigors of overland transport, a well-made chest would have been a valuable commodity in and of itself.

¹⁰ It is impossible to reconstruct exact values of garments in the Hittite context due to a paucity of data and uncertain terminologies, but cf. Matteo Vigo, “Linen in Hittite Inventory Texts,” in *Textile terminologies in the ancient Near East and Mediterranean from the third to the first millennia BC*, ed. Cécile Michel and Marie-Louise Nosch (Oxford: Oxbow, 2010), 290-322. The Hittites clearly calculated how much raw material was necessary for a finished garment, as can be seen by the “recipes” in the inventory text KBo XVIII 197(+) (Siegelová, *Hethitische Verwaltungspraxis*, 213-225), where weights of wool and linen are allotted for specified numbers of garments. Looking further afield, Old Assyrian merchants were keenly concerned with the variables of weight and quality in the textiles they imported during the Kaneš *Kārum* period (see Cécile Michel and Klaas R. Veenhof, “The Textiles Traded by the Assyrians in Anatolia (19th-18th centuries BC),” in *Textile terminologies in the ancient Near East and Mediterranean*, 210-271). Finally, texts from the Ur III period show that pieces of cloth could take anywhere from five to one hundred-and-fifty workdays to manufacture (see entry on *Leinen*, §4c, in *Reallexikon Assyriologie* (op. cit.), 586). The point is that there are many variables determining a garment’s worth, and material is only one of them.

unknown), “fine”, and regular quality at the bottom. Unfortunately, the KASKAL texts are not so precise. While cloths are occasionally noted as “fine” (SIG), such descriptors occur too infrequently to be of use. One can assume that the cloths of the KASKAL series must have had a similar gradation of quality, and the concomitant differences in value, but the specifics remain unknown. Suffice it to say that the preserved textiles are all finished goods, many of them dyed and patterned, such as were worthy of being contained in a royal storehouse. This section will now continue with a tabulation of the contents of the textile tablet.

KUB 42.14 (Siegelová 10.D) - Textiles

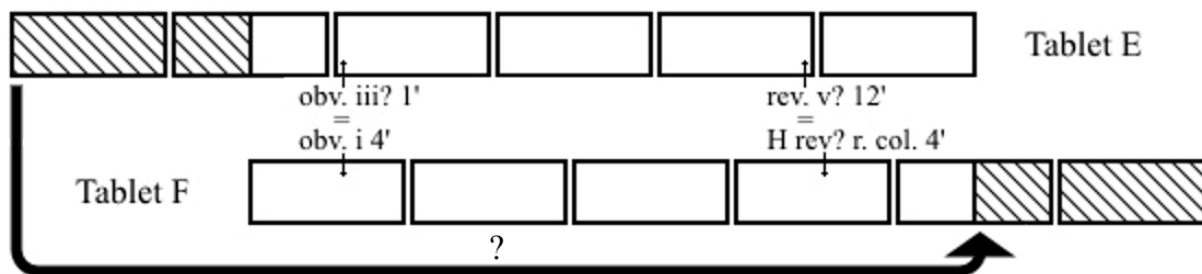
The reverse of tablet D is entirely duplicated in tablets E and H, and the contents will be tabulated there.

KUB 42.16 (Siegelová 10.E) and IBoT 3.110 (Siegelová 10.Ea)

Tablets E and F(+)G(+)H are duplicates, but their relationship is not straightforward. The problem is that the tablets seem to be offset by about one-and-a-half columns, with E starting and ending early compared to F(+)G(+)H.¹¹ The symmetry of start and end points suggest that E and F(+)G(+)H had roughly the same number of lines and line-spacing, but the poor state of preservation does not allow a full, line-by-line correspondence to be reconstructed.

¹¹ The first overlap occurs at F obv. i. 4' = E obv. iii? 1'. At this juncture, E obv. iii? 1' has two lines lost before the top of the tablet, whereas F obv. i' is at least a third of the way down the tablet. This leaves about one and two-thirds of a column in E unaccounted for at the beginning of F(+)G(+)H. The final overlap occurs at the end of tablet E's fifth column (E rev. v? 12' = H rev? r. col. 4'). The sixth column (E rev. vi?) is entirely missing. It can be established by deduction that fragment H, the last point of contact between E and F(+)G(+)H, should be placed in the lower half of F rev. iv (see Figure 3 below), which means that if E had a full column of text in its rev. vi?, then F ends with approximately an additional column and two-thirds beyond E.

Figure 2: Relationship of Tablets E and F(+)G(+)H



While there is no way to be sure that the missing information at the beginning of E is the same as the extra information at the end of F(+)G(+)H, I will assume so for the purposes of tabulation in order to provide the most conservative estimate possible. If the extra columns of information were not the same, then the KASKAL Main Text probably contained an additional, “hidden” tablet devoted to textiles. But as will be seen, the text is rich enough to compare well to other economic documents without positing additional tablets.

Table 3: Durable Goods and Textiles in KUB 42.16(+)IBoT 3.110 (Siegelová 10.E and 10.Ea)

Gold objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
DÙG.GAN (sheath)	gold	□	rev. iv? 16'
]it-ta-li	gold	□	rev. v? 4'
	<i>Subtotal</i>	[2] objects	

Base metal objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
GÍR gimras (field knife)		1	rev. iv? 15'
	<i>Subtotal</i>	1 object	

Table 3, continued
Precious stone or ivory objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
]x-is	lapis lazuli	[]	rev. v? 3'
	<i>Subtotal</i>	[1] object	

Cloth

<i>Item</i>	<i>Material/Color</i>	<i>Quantity</i>	<i>Citation</i>
TÚG ikkuwaniya (Iconian cloth)	<i>marusames</i>	2	obv. ii? 2
[]	wool	[]	obv. ii? 3
TUG ^{massias} (waist- band)	blue-green	2	obv. ii? 3
[]	<i>marusames</i>	[]	obv. ii? 4
TUG ^{pussaimes} (felt cloth?)		6	obv. ii? 4
[]	wool	[]	obv. ii? 5
TUG ^{GÚ} (shirt)	fine wool	2	obv. ii? 5
TÚG ikkuwaniya sarrumas (“Iconian cloth for cutting”)		[]	obv. ii? 9
TUG ^{GÚ.Ē.A HURRI} (Hurrian shirt)		4	obv. ii? 10
TUG ^{GAB} (chest-band)	white	1	obv. ii? 11
TUG ^{E.ÍB} (belt)	patterned, fine	[]	obv. ii? 12
TUG ^{pussaimes} (felt cloth?)		[]	obv. ii? 13
TÚG (cloth)	large, 1 <i>marusames</i>	2	rev. iv? 2'
TÚG (cloth)	(various types)	12	rev. iv? 2'
TUG ^{kapitasamna}		1	rev. iv? 4'
TÚG (cloth)	white wool	2	rev. iv? 4'
TÚG (cloth)	[]	2	rev. iv? 4'
TUG ^{GÚ HURRI} (Hurrian shirt)	green	1	rev. iv? 5'
TUG ^{GÚ HURRI} (Hurrian shirt)	<i>marusames</i>	1	rev. iv? 5'
TUG ^{GAB QADU GAD} (chest-band)	blue-green	2	rev. iv? 6'
TUG ^{GAB} (chest-band)	<i>marusames</i>	2	rev. iv? 6'
TUG ^{GÚ andurias} (“indoors”-shirt)	white	3	rev. iv? 7'
TUG ^{SAG.DUL} (cap)	[]	7	rev. iv? 7'

Table 3, continued

^{TUG} SAG.DUL (cap)	linen	5	rev. iv? 8'
^{TUG} E.ĪB (belt)	patterned, fine	4	rev. iv? 8'
^{TUG} BAR.DUL ₅ (mantel)	blue-green	2	rev. iv? 9'
^{TUG} (cloth)	□	1	rev. iv? 9'
^{TUG} BAR.DUL ₅ (mantel)	white	2	rev. iv? 10'
□	□	1	rev. iv? 10'
<i>KARKU</i> (wrapping cloth)	blue-green	1	rev. iv? 11'
□	blue-green	2	rev. iv? 12'
□	□	2	rev. iv? 12'
^{TUG} E.ĪB (belt)	□	6	rev. iv? 13'
^{TUG} hapusam□	□	1	rev. iv? 14'
□	patterned	4	Ea 4'
□	□	4	Ea 5'
□	<i>marusama</i>	□	Ea 6'
^{TUG} GŪ (shirt)		20	Ea 8'
^{TUG} GŪ (shirt)	<i>marusama</i>	□	Ea 9'
□	red	□	rev. v? 1'
□	blue-green	2	rev. v? 2'
SAG.DUL (cap)		□	rev. v? 4'
^{GAD} ŠŪRU (“unshorn” linen)		□	rev. v? 7'
^{TUG} kusisi		2	rev. v? 7'
^{TUG} KUŠŠADI		□	rev. v? 7'
^{TUG} GŪ (shirt)	green	1	rev. v? 8'
^{TUG} HI.HI-natar	blue-green	[x+1]	rev. v? 8'
^{TUG} HI.HI-natar		1	rev. v? 9'
^{TUG} kapartasa		1	rev. v? 9'
^{TUG} tapispa		□	rev. v? 9'
^{GAD} ŠŪRU (“unshorn” linen)		1	rev. v? 9'
^{TUG} gapitasamna		1	rev. v? 9'
^{GAD} BAR.SI		1	rev. v? 10'
^{TUG} mazagannis	small, red	1	rev. v? 10'
^{TUG} irhis (belt)		5	rev. v? 10'
GAD.DAM (gaiter)	(various colors)	14	rev. v? 11'
	<i>Subtotal</i>	137+[24]	

Commentary

Tablet E is partially duplicated by tablets D, F, H, and I. Column obv. iii? will be accounted for under tablet F. Column rev. v?, which is partially duplicated by D, H, and I, will be accounted for below.

Obv. ii?

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
partially complete (half line)	obv. ii? 1'-16'	8
		8

Obv. iii?

Entirely duplicated by F obv. i, and tabulated there.

Rev. iv?

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	rev. iv? 1'-8'	8
partially complete (half line)	rev. iv? 9'-16'	4
		12

Ea + E rev. v?

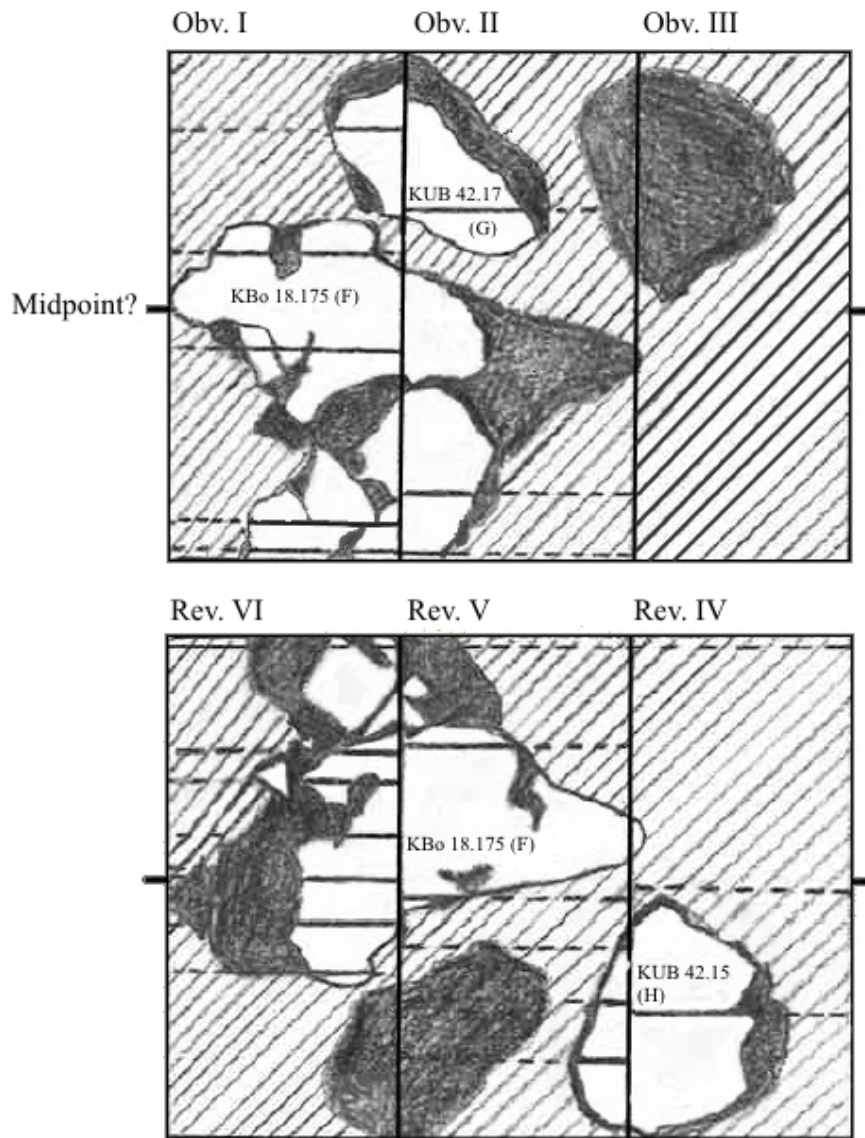
Siegelová places fragment Ea at the beginning of E rev. v?, so it is included here. E rev. v? can be partially restored from D, H, and I.

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	E rev. v? 6'-12'	6
partially complete (half line)	Ea 2'-4', 6', 8'-10'; E rev. v? 1'-5'	6
		12

KBo 18.175(+) (Siegelová 10.F(+)G(+)H)

The tablet fragments constituting text F(+)G(+)H were heavily damaged by fire in ancient times. In fact, the top-half of the tablet (as viewed from the obverse) shows evidence of having exploded from the heat: the clay is vitrified and peels outwards at the top edges, and small tablet fragments were found nearby:

Figure 3: Join Schematic for Tablet F(+)G(+)H



At the middle of the tablet, the clay is five to six centimeters thick and still expanding. Overall the impression is something like an unevenly baked cookie, with one side mostly intact and the other, closer to the heat source, swelling and bubbling. This state of preservation makes it impossible to determine the original dimensions of the tablet. The curvature of the reverse which would have normally indicated the mid-point of the tablet is gone. For this reason no complete column can be reconstructed, and hence the number of lines per column cannot be calculated. I

Additionally I discovered a join while collating the tablets at the Museum of Anatolian Civilizations in Ankara. The join is sketched below:

KBo 18.175

105/c, E+F

105/c, A

Rev. VI

8

9

10

10. ^d*IŠTAR* ^{URU}la-]wa-za-an-[ti-]¹³ya

165

11.]ma x[

Translation

8.]...[] Of the path.

9. 1 cor]d(?), 1 leather d[rap]e, 1 *ta[paspa]* cloth]

10. Ištar of La]wazan[ti]ya

11.]...[

Commentary

This small piece confirms the trend of the last columns of the textiles tablet, namely a shift away from clothing and towards larger household or cultic objects. The appearance of Ištar of Lawazantiya, the personal goddess of Puduhepa, helps date the text to the queenship of Puduhepa (See Chapter 6.1 Dating Criteria of Vows in Detail for more). The significance of this shift will be discussed in the final section on the identity and purpose of the KASKAL Main Text.

Table 4: Durable Goods and Textiles in KBo 18.175(+) (Siegelová F(+)G(+)H)

Gold objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
GÌR UR.MAH (lion's feet for bed)	gold inlay	4	rev. v 14
	<i>Subtotal</i>	4 objects	

Base metal objects

¹³ The break is a bit large to be filled just by a *-ti-* sign, but I can think of no other word ending in]*wa-za-an-*] *-ya*. It is also possible that the break was “stretched” by the violence of the tablet’s fragmentation, which as discussed above, seemed to have been caused by direct exposure to fire. Compare also to just a few lines earlier in KBo 18.175 rev. 2 “Ištar of Ninuwa”.

Table 4, continued

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
^{URUDU} HAŠINU (axe)		1	rev. vi 5
	<i>Subtotal</i>	1 object	

Precious stone or ivory objects

<i>Item</i>	<i>Material/Color</i>	<i>Qty.</i>	<i>Cit.</i>
^{GIS} NÁ, MAYALU ^d IŠKUR ^{URU} nerik (bed-frame of the Stormgod of Nerik)	ivory	1	rev. v 13-16
	<i>Subtotal</i>	1 ivory bed frame	

Cloth

<i>Item</i>	<i>Material/Color</i>	<i>Quantity</i>	<i>Citation</i>
^{TUG} GÚ HURRI (Hurrian shirt)	linen	40	obv. i 3'
^{TUG} GÚ (shirt)	red linen	39	obv. i 4'
^{GAD} ŠUHURU		1	obv. i 4'
GAD (linen)	wool	8	obv. i 5'
GÚ (shirt)	Cypriot linen	5	obv. i 5'
GAD LÚGUD.DA (short linen)		5	obv. i 6'
TÚG (cloth)	large, white	5	obv. i 8'
^{TUG} massias (waist- band)	white	7	obv. i 8'
^{TUG} ŠŪRU (“unshorn” cloth)		4	obv. i 9'
TÚG (cloth)	large, white	17	obv. i 9'
TÚG (cloth)	large, blue	2	obv. i 9'
^{TUG} KUŠŠADI		5	obv. i 10'
^{TUG} SAG.DUL (hat)		2	obv. i 10'
TÚG hurlisa (Hurrian cloth)	red	1	obv. i 10'
^{TUG} GÚ HURRI (Hurrian shirt)	white	2	obv. i 11'
^{TUG} GÚ HURRI (Hurrian shirt)	□	1	obv. i 11'
□	blue	□	obv. i 12'

Table 4, continued

lupanni (hood)	blue	□	obv. i 16'
le-es	small	□	obv. i 17'
^{TUG} KUŠŠADI		10	obv. i 20'
^{TUG} ERÍN ^{MES} ("soldier" cloth)		9	obv. i 21'
^{TUG} GÚ HURRI (Hurrian shirt)	variegated	1	obv. i 21'
□	raw ^a	3	obv. ii 2'
BAR.DUL ₅ (mantel)	variegated	2	obv. ii 5'
□	□	10	obv. ii 5'
GAD.DAM (gaiters)	blue-green	3	obv. ii 6'
GAD.DAM (gaiters)	red	2	obv. ii 7'
SAG.DUL QADU MARŠUM (hat with straps)		2	obv. ii 8'
KAR TUG (pointed cap)	white	5	obv. ii 9'
^{TUG} GÚ HURRI (Hurrian shirt)		□	obv. ii 10'
^{TUG} GÚ HURRI (Hurrian shirt)		9	obv. ii 11'
^{TUG} GÚ (shirt)		6	obv. ii 12'
^{TUG} GÚ (shirt)	red	3	obv. ii 13'
^{TUG} ŠUHRU		5	obv. ii 17'
^{TUG} kisame (worsted cloth)		8	obv. ii 18'
TUG (cloth)		39	obv. ii 19'
^{TUG} GUZ.ZA		6 pair	rev. v 6
TUG parnas (tapestry)	multiple colors	14 (125 cubits total)	rev. v 7-11
^{TUG} tapāspa QADU GAD	red	1	rev. v 11
ÍB.LÁ (belt)	patterned	1	rev. v 12
^{TUG} HI.HI-natar		□	rev. v 12
^{TUG} GÚ QADU GAD (shirt w/ linen)	red	2	rev. v 13
lakkusanzenzi GAD-ya (sheets)	white	1 set	rev. v 15
^{KUS} NÍG.BĀR (drape)		1	rev. vi 9
^{TUG} tapaspa		1	rev. vi 9
^{TUG} ERÍN ^{MES} (soldier's cloth)		□	rev. vi 13
^{TUG} ERÍN ^{MES} massayassis		7	rev. vi 15

Table 4, continued

TÚG ERÍN ^{MES} LÚ.MEŠ x-x-as		[]	rev. vi 17
TÚG ERÍN ^{MES} (soldier's cloth)		[]	rev. vi 19
	<i>Subtotal</i>	295+[8] objects; 125 cubits tapestry; 1 set of bed sheets, 1 leather curtain	

^a Siegelová does not restore anything for this line (F obv. ii 2'), but a careful reading of the sign traces, and comparison to the *dam* signs in F obv. ii 6' and 7', shows a likely restoration of 3 *da[m]-m[e-lu-us]*. Compare to E rev. iv? 3', where among a collection of cloths (TÚG), two are described as *d.* 'raw'.

Commentary

Obv. i

This column partially duplicated by E.

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	obv. i 2'-12' (+ 2 blank), 19'-21' (+ 1 blank)	17
partially complete (half line)	obv. i 16'-18'	1.5
		18.5

Obv. ii

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	(1 blank)	1
partially complete (half line)	obv. ii 2'-19'	9
		10

Obv. iii

(completely broken away)

Rev. iv

Only the very beginning of three lines is preserved, and nothing can be recovered from these.

Rev. v

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
------------------------------	-----------------	-----------------------

reasonably complete (full line)	rev. v. 5-16 (+ 4 blank)	16
		16

Rev. vi

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	(5 blank)	5
partially complete (half line)	rev. vi. 5', 9', 10', 13', 15'-18'	4
		9

KUB 42.17 (Siegelová 10.G)

This tablet fragment should be located in the top half of tablet F, with G obv. l. col. = F obv. i, and G obv. r. col. = F obv. ii. The information in G obv. l. col. would thus duplicate what would have been the lower half of E obv. ii?.

Table 5: Textiles in KUB 42.17 (Siegelová 10.G)

Cloth

<i>Item</i>	<i>Material/Color</i>	<i>Quantity</i>	<i>Citation</i>
TUG ^{massias} (waist-band)	white	27	obv. l. col. 2'
GAD (linen)		□	obv. l. col. 4'
GAD.DAM (gaiter)	white	□	obv. l. col. 5'
□	patterned	□	obv. l. col. 7'
TUG		1	obv. r. col. 1'
TUG		1	obv. r. col. 2'
GAD.DAM (gaiter)		2	obv. r. col. 3'
TUG ^{GÚ ADUPLI}		10	obv. r. col. 5'
□	white	□	obv. r. col. 9'
TUG (cloth)	large, variegated	2	obv. r. col. 9'
TUG (cloth)	□	1	obv. r. col. 9'
TUG ^{massias} (waist-band)	blue-green	□	obv. r. col. 10'
TUG	□	2	obv. r. col. 10'
□	green	□	obv. r. col. 11'
	<i>Subtotal</i>	46+[6] objects	

Commentary

Obv. Left Column

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	(2 blank)	2
partially complete (half line)	obv. l. col. 2', 4', 5', 7'	2
		4

Obv. Right Column

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	obv. r. col. 7'	1
partially complete (half line)	obv. r. col. 1'-3', 5', 6', 8'-11'	4.5
		5.5

KUB 42.15 (Siegelová 10.H)

The rev. r. col of this fragment is partially duplicated by KUB 42.14 (10.D), KUB 42.16 (10.E), and IBoT 3.144 (Siegelová 10.I). Lines rev. r. col. 1'-4' have already been tabulated under E rev. v? 6'-10'. The remaining lines (with restorations from D), and the unique contents of the rev. l. col., are presented below.

Table 6: Textiles in KUB 42.15 (Siegelová 10.H)

Cloth

<i>Item</i>	<i>Material/Color</i>	<i>Quantity</i>	<i>Citation</i>
TÚG kapittasamna	blue-green wool	1	rev. r. col. 7'
TÚG kapittasamna	blue	1	rev. r. col. 8'
^{TUG} GÚ HUR(RI) (Hurrian shirt)	white	1	rev. r. col. 8'
^{TUG} tapispa	white	1	rev. r. col. 9'
[]	[]	1	rev. r. col. 9'
^{TUG} GÚ HURRI (Hurrian shirt)	green	1	rev. r. col. 10'
^{TUG} GÚ HURRI (Hurrian shirt)		[]	rev. l. col. 1'
SÍG (wool)	blue-green	[]	rev. l. col. 4'
SÍG sarhanuwamis	green	[]	rev. l. col. 5'

Table 6, continued

GAD (linen)		[]	rev. l. col. 6'
	<i>Subtotal</i>	6+[4] objects	

*Commentary*Rev. Right Column

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	rev. r. col. 5'-10' (+ 2 blank)	8
		8

Rev. Left Column

<i>Level of preservation</i>	<i>Citation</i>	<i>Weighted Value</i>
reasonably complete (full line)	(4 blank)	4
partially complete (half line)	rev. l. col. 1', 4'-6'	2
		6

IBoT 3.144 (Siegelová 10.I)

The content of this fragment is entirely duplicated by KUB 42.14 (10.D), KUB 42.16 (10.E), and KUB 42.15 (Siegelová 10.H), with the exception of a few signs at the very end of the rev. l. col., which are not presented here.

4.5 Estimated Original Contents of Textiles Tablet

Because of the problems relating tablets E and F(+)G(+)H, and the inability to reconstruct a complete column from the latter, the estimation of the original contents of the textiles tablet will be less precise than that of the durable goods. For lack of alternative, I will assume that the textiles tablet had the same number of lines as the durable goods tablet: 188. Adding together the weighted values of the preserved lines yields 109 recoverable lines, and thus

a percentage of 58% (a number which matches well my impression, having examined the tablets in person, that a bit over half of the text has been preserved).

Textiles tablet (58% complete)

Gold:	4+[2] objects
Base metal:	2 objects
Stone and ivory:	[1] object, 1 ivory bed frame
Textiles:	484+[43] garments, 125 cubits of tapestry, 1 set of bed sheets, 1 leather curtain

If this represents 58% of the total, the original contents of the textiles tablet would have been around **907 textiles**, plus a few gold and base metal objects, as well as a collection of bulky household objects like bed frames, tapestries, and curtains.

CHAPTER 5

RELATIVE VALUE OF THE KASKAL MAIN TEXT

There are a number of sources extrinsic to Hittite administration that illuminate the wealth in the KASKAL Main Text. Gifts from Egypt are found listed in the Egyptian-Hittite correspondence, and treaties levy tribute with certain Hittite vassals. The sources contain many of the same materials, gold and cloth especially, which enable a direct comparison with the KASKAL series. But a similarity of contents, while necessary, is not sufficient if the goal is to contextualize; rather, the most precious feature of the extrinsic sources is that they are political documents.

Why is the political angle so important? The question is one of hermeneutic need. The modern scholar lacks enough hard data about the Hittite economy to estimate the impact of the KASKAL wealth in absolute terms. There is no way to tell if the amounts reconstructed in the previous section are a little or a lot in relation to the yearly income of the Hittite palace. But the *relative* impact of the wealth can be gauged by comparing the amounts to other politically significant exchanges of wealth involving the Hittites. If the contents of the main text are near the same size as, say, the bridal gifts of Ramses II to Hattusili III—part of a marriage negotiation that bound two superpowers of the Ancient Near East into a long-lasting friendship—then one can be assured that the beneficiary of the KASKAL text was of similar importance to the Hittite Palace. The operative concept is opportunity cost, that whatever the value of the wealth in the KASKAL main text, it could have been used for, and was thus “worth”, a royal marriage, or the wartime contributions of a vassal, or a similar political statement. By measuring against a contemporary benchmark the modern scholar can translate the numbers of the KASKAL texts into meaning.

5.1 Gifts in the Egyptian-Hittite Correspondences

The most comparable texts to the KASKAL series in terms of contents (gold and textiles), time period (Late New Hittite), and size (roughly speaking), are the Egyptian-Hittite correspondences of Hattusili III/Puduhepa and Ramses II.¹ There are two major dossiers that will be examined. The first comprises the letters of the “Eternal Treaty” negotiations, which secured peace between the Hittites and Egyptians in the 21st year of Ramses II, and the second the marriage correspondence that sent a Hittite bride to Egypt in the 34th year of Ramses II.

Within these two dossiers, there are multiple passages mentioning gifts. The passages can be broken down into three types. The first are general descriptions, such as in E2 (KUB 3.51) obv.² 16’-21, 31’-35’, rev.² 2’-8’ and E3 (KUB 3.52) obv. 1’-8’. These are usually located towards the beginning of the texts, and seem to be part of the diplomatic formula of royal letters, serving as an overview of the gifts and a signal that a detailed inventory will follow. The second type of gift passage occurs at the very end of a letter and describes the routine gifts that seem to have accompanied most diplomatic exchanges. The quantities are usually very small, and in some cases could be quite cursory. The last type is the gift inventory. These occupy entire letters and analytically detail the entire shipment of gifts accompanying a major diplomatic embassy. They seem to be used especially when dowries or bride-prices are involved, as can be seen in letter E92 (KBo 28.33) of the marriage correspondence dossier from the 34th year of Ramses II, but also in the Amarna letters such as EA22² recording the gifts of Tušratta of Mittanni to

¹ These have been edited by Elmar Edel, *Die Ägyptisch-hethitische Korrespondenz aus Boghazköi in babylonischer und hethitischer Sprache*. 2 vols. (Opladen: Westdeutscher Verlag, 1994). In the following discussion, I will refer to the letters edited therein by the number under which they were edited in Edel’s book (their “E-number”, e.g. E1 for the first letter of his book).

² William L. Moran, *The Amarna Letters* (Baltimore: Johns Hopkins, 1992), 51-61.

Amenhotep III. In terms of usefulness for comparison with the KASKAL series, the inventories are the most desirable, followed by the routine gift lists. The general descriptions can be used to aid restorations, but otherwise will not be included in the tables presented below.

Table 7: The Eternal Treaty Dossier (Letters from the 21st year of Ramses II)^a

Durable goods

<i>Recipient</i>	<i>Item</i>	<i>Material</i>	<i>Quantity</i>	<i>Weight</i>	<i>Citation</i>
Hattusili	<i>kasu</i> (cup)	good gold	(1)	(48 s.)	E7 rev. [1']
“	<i>kasu</i> (cup)	good gold	1	(48 s.)	E7 rev. 4'
“	GAL <i>ša šetê ina pani</i> GUD.MAH SI.MEŠ- <i>šu</i> (drinking cup in shape of a bull's head)	gold, white stone horns, black stone eyes	1	93 s. of good gold	E9 rev. 11
“	<i>kasu</i> (cup)	good gold	1	(48 s.)	E10 rev. 3'
Puduhepa	<i>ša tikki</i> (necklace)	good gold, colorful	1	88 s.	E12 obv. 25
(A Hittite Prince?)	[]	gold inlaid	[1]	[48 s. ?]	E15 rev. 1'
Tešsub-šarruma	GAL <i>ša šetê</i> , GUD... <i>ina šapti=šu</i> (drinking cup, a cow(-shaped spout?) on its lip)	gold, inlaid with stones	1	(93 s.) ^b	E16 obv. 12
“	^{GIS} GIGIR <i>ša</i> ^{GIS} [(chariot made of <i>x</i> -wood)	inlaid with gold	1	[96 s. ?] ^c	E16 obv. 15
“	<i>šimittu ša</i> ANŠE.KUR.RA.MEŠ (team of horses)		1		E16 obv. 17
Tašmi-šarruma	<i>kasu</i> (cup)	good gold	1	49 s.	E17 obv. 13

Textiles

<i>Recipient</i>	<i>Item</i>	<i>Material</i>	<i>Qty.</i>	<i>Citation</i>
Hattusili	^{GAD.TUG} <i>maklalu</i>	kingly linen	(1)	E7 rev. [0']
“	^{GAD} TUG.GÜD.DU (tunic)	kingly linen	(1)	E7 rev. 1'
“	^{GAD.TUG} <i>maklalu</i>	kingly linen	1	E7 rev. 5'
“	^{GAD} TUG.GÜD.DU (tunic)	kingly linen	1	E7 rev. 6'
“	]-<i>ti</i>	good, new, fine linen	(1)	E9 rev. 15
“	^{GAD.TUG} <i>tunsu ša</i> ^{GIS} NÁ (bed blanket)	good, new, fine linen	(1)	E9 rev. 16
“	^{GAD} TUG (cloth)	kingly linen	1	E10 rev. 4'
“	^{GAD} TUG.GÜD.DU (tunic)	kingly linen	1	E10 rev. 5'
Puduhepa	^{GAD.TUG} <i>maklalu</i>	kingly linen, colorful	1	E12 obv. 27

Table 7, continued

“	^{GAD} TÚG.MEŠ.GÚ.UD.DU (tunic)	kingly linen, colorful	1	E12 rev. 1
“	^{GAD} TUG (cloth)	good, fine linen, colorful	5	E12 rev. 2
“	^{GAD} TÚG.GÚ.UD.DU (tunic)	good, fine linen, colorful	5	E12 rev. 3
(A Hittite Prince?)	^{GAD} TÚG.GÚ.UD.DU (tunic)	(good) kingly linen, (colorful)	(1)	E15 rev. 3’
“	^{GAD} TÚG.GÚ.UD.DU (tunic)	kingly linen, colorful	(1)	E15 rev. 4’
“	^{GAD.TUG} <i>birnu</i> (garment with multi-colored trim)	good, fine linen	[2+]	E15 rev. 5’
“	^{GAD.TUG} <i>tunsu</i> (blanket)	good, fine linen, two-sided	(1)	E15 rev. 6’
“	^{GAD} TUG (cloth)	good, fine linen, colorful	[2+]	E15 rev. 7’
“	]-ta ^{MES}	good, fine linen, colorful	[2+]	E15 rev. 8’
Teššub-šarruma	^{GAD} TUG (cloth)	kingly linen, colorful	(4)	E16 rev. [0’]
“	^{GAD.TUG} <i>maklalu</i>	kingly linen, colorful	4	E16 rev. 1’
“	^{GAD} TÚG.GÚ.UD.DU (tunic)	kingly linen, colorful	4	E16 rev. 2’
Tašmi-šarruma	^{GAD.TUG} <i>maklalu</i>	kingly linen, colorful	2	E17 obv. 15
“	^{GAD} TÚG.GÚ.UD.DU (tunic)	kingly linen, colorful	2	E17 obv. 16

^a When number for objects can safely be restored, either because of a close parallel, or because it can be subtracted from a total, or because the object is grammatically singular, it will be placed in parentheses () instead of the brackets [] used for less certain restorations. These numbers will be added as if they were fully preserved numbers to the totals calculated at the end of each section. Less secure restorations will be kept separate from the final totals.

^b Weight restored following bull rhyton given to Hattusili.

^c It is difficult to guess how much gold was inlaid on the chariot. One point of comparison comes from a chariot found in an inventory of gifts from the Mittannian King Tušratta to Amenhotep III (EA 22 i 2-3; see Moran, *The Amarna Letters*, 51). The letter comes from the Amarna correspondence, some three-generations prior to the correspondences between Ramses II and Hattusili III. The chariot sent by Tušratta, a *quadriga*, is quite literally the headline item to the entire letter, being the first object (along with the team of four swift horses that draw it) mentioned. It was described as covered all over with 320 shekels of gold (=5⅓ mina, or around 2.6 kg). One might suspect that Prince Teššub-šarruma received a more modestly appointed chariot from Ramses. The horses and construction of the chariot would have been very expensive by themselves, and even without 320 shekels (more than six times the weight of the “standard” gold gift: see next ft. below) attached. Perhaps a guess of 96 shekels (a double standard gift) would be more in line with the twelve textiles also received by Teššub-šarruma.

Commentary

The letters concerning the “Eternal Treaty” are mostly complete. There are three major lacunae in the dossier, addressed below.

Gift of King Ramses to Hattusili

Letter E7 is addressed from King Ramses and his sons, Prince Šutahapšap and Prince Ramses, to Hattusili. The gifts from the princes are preserved on the tablet’s reverse, but the gifts from King Ramses are lost in the break at the end of the obverse and beginning of the reverse. Fortunately, the diplomatic gifts in the Egyptian-Hittite correspondence are fairly formulaic, and with a few reasonable assumptions a restoration can be attempted.

The standard diplomatic gift package was one cup made of gold, weighting about 48 shekels, and at least two garments of linen (and sometimes as many as four garments per gold object).³ This was the size of gift given by Egyptian Queen Mother Tūya to Hattusili (E10 rev. 3’-5’), and by Prince Šutahapšap (E7 rev. 3’-1’) and Prince Ramses (E7 rev. 4’-6’) to Hattusili. In other letters not related to the Eternal Treaty, sometimes the cup or the garments would be omitted (see E29, a letter about the Urhi-Tessub affair, where Ramses, perhaps as a sign of annoyance, sends only a cup with a spout, and E76 where Ramses sends four garments but no gold).

More important diplomatic exchanges involved multiples of this formula. Within the Eternal Treaty dossier, Prince Šutahapšap sends a letter to Hattusili as sole author, and with it a gold rhyton in the shape of a bull containing approximately twice as much gold as the usual cup

³ For the weight of the cup, see E17 obv. 13 (49 shekels), E45 rev. 5’ (ten cups weighing 480 shekels total), E46 rev. 15’ (two cups weighing 96 shekels total). Other sizes are mentioned: two cups weighing 60 shekels apiece in E93 rev. 7’ and 10’, and 21½ shekel cup (given by Naptera to Puduhepa) in E94 21’.

(E9 rev. 11). Compare this to the separate letters King Ramses sent to the Hittite princes Tessub-sarruma and Tasmi-sarruma. The former (the senior of the two brothers?) received a gold rhyton of a cow, a chariot and team of horses, and a total of twelve garments (E16 obv. 12-rev. 3). The latter received only a standard-sized cup and four garments (E17 obv. 13-17). Finally, Queen Naptera sent to Puduhepa a gold necklace weighing eighty-eight shekels and twelve garments (E12 obv. 25-rev. 4). The pattern of gifts between fifty to one-hundred shekels of gold, and two to twelve garments is well-established, with the ideal ratio of about four garments per forty-eight shekel cup.

So what does this mean for Ramses' gift to Hattusili? Because this was a gift between kings, one can assume that the size of the gift must have exceeded those given by the Egyptian princes to Hattusili. The gift was also probably on par with or greater than the gifts of the Egyptian queen Naptera to her counterpart Puduhepa. The contents might also have been more diversified: Ramses states in the introductory letter to the Eternal Treaty dossier that he is sending gifts of gold, silver, and linens to the Hittite court, ported by ninety Nubian men and ninety Nubian women,⁴ as well as eye balm for Hattusili (E2 obv.[?] 25'-35', rev.[?] 1'-12'). The silver and eye balm are not attested in any other letters, and might have been located in the broken portion of E7.

It is possible to derive a ratio of gifts for the Hittite royal couple from the marriage correspondences (see section 5.3 below) that might aid the restoration in the Eternal Treaty dossier. The work reads a bit like a math problem. Puduhepa receives one gold object, one ebony

⁴ There is no clear indication whether these individuals were meant to stay permanently. The Nubians are probably meant to correspond to the Kaskaens sent by the Hattusili to Ramses (see KUB 3.24+59). It seems that Ancient Near Eastern rulers attempted to maintain at least a fiction of parity in the types of gifts they exchanged, so even when the Hittites exported slaves and livestock for gold they also sent some gold, and when the Egyptians exported gold for slaves they also sent slaves.

chest, and twelve linens from Ramses (E94 1'-11'), and two gold objects and two linens from Naptera (E94 18'-22'). Hattusili receives twenty-five linens, forty ebony logs, and five boxes and twenty tubes of medicine from Ramses (E93 obv. 1'),⁵ and one gold necklace and eight linens from Naptera (E94 12'-17'). Here it seems that Ramses gives at least three times the gifts as his queen Naptera, and Puduhepa receives half as many gifts as Hattusili. Using the linens as a guide, this gives ratios of around $1_{N>P}: 3_{R>P}: 2_{N>H}: 6_{R>H}$. To put it in words, Hattusili receives twice as many gifts as Puduhepa, 75% of which come from Ramses, and 25% from Naptera. If this ratio is applied to the gifts of Naptera to Puduhepa in the “Eternal Treaty” letters—the only point of comparison since Ramses did not give directly to Puduhepa—the result would be around six gold objects and seventy-two linens (or the equivalent value) given by Ramses to Hattusili. This amount will be added to the total given below.

Gift of Vizier Pašiyara and the Egyptian Grandees to Hattusili

Letter E8 is addressed from the Egyptian Vizier Pašiyara and the “Grandees” (^{LÚ.MEŠ}GAL.MEŠ) to Hattusili. The gift section begins at the bottom of the obverse, but the last line of the obverse and first three lines of the reverse are damaged. Additionally, the reverse breaks off at what would have been line fourteen, leaving an unknown number of lines missing at the end of the tablet. Again, it is necessary to make an educated estimation of the missing gifts. All told there are around nine lines listing gold items (obv. 27-rev. 2'). Elsewhere in the Egyptian-Hittite correspondences, outside of the letters devoted exclusively to gift-lists, it can be seen that there is usually one gold item per line, and sometimes multiple lines for a single item.

⁵ There are probably also some gold items in this gift that are broken away. For the tortuous restoration of letters E45, E46, and E92 which all seem to be referring to the same gifts, see the section on the marriage correspondence below.

So as not to embarrass King Ramses' gift to Hattusili, where six gold items were estimated, no more than six gold items in the nine lines of E8 should be restored. For the textiles, lines rev. 4'-11' preserve only fragments of garment names which continue into the tablet break. There must have been a fairly large amount of textiles to match the nine lines of gold objects, and using again Ramses' gift to Hattusili as the upper bound, a number near seventy-two can be guessed.⁶

Gifts to the Wives(?) of Hittite Princes

Letter E15 is poorly preserved, with only part of the reverse legible. On the reverse is a list of goods, sender and recipient unknown, followed by the beginning of another list naming the (Egyptian) queen as the sender. Edel restores Ramses sending gifts to a Hittite prince for the first list, and Naptera sending gifts to the wife for the second (see his commentary in Edel 1994 vol. II p. 69). Another letter E16 also contains gifts for a Hittite prince, Teššub-šarruma, and his wife. Here the prince receives gold objects, a chariot, and twelve textiles, while the wife receives only textiles (Edel restores a minimum of eight). In other words the prince receives the twelve textiles for his wife's eight, a ratio of 3:2. Applying this logic to letter E15 where the prince received nine textiles, the wife would receive approximately six textiles. The eight textiles of E16 and six textiles of E15 will be added to the total given below.

Total

Adding the restorations discussed above and the amounts in the tables, the total wealth gifted in the Eternal Treaty dossier was:

⁶ I think it is no coincidence that the space on the tablet should suggest a gift of the same size as Ramses'. There a potent symmetry in this, and a political statement that Ramses' resources are equivalent to the rest of his court combined.

Gold

attested: 9+[1] gold objects, weighing around 562 shekels

restored: $6 + 6 = 12$ gold objects, at 48 s. per “standard” gift = 576 shekels

total: 1,138 shekels = **18 mina, 58 shekels gold.**

Textiles

attested: 39+[6] textiles

restored: $72 + 72 + 8 + 6 = 158$ textiles

total: **193 textiles**

These numbers are estimates, but it can be stated with confidence that the gifts accompanying the formalization of the Eternal Treaty were at least between 150 and 250 textiles and 15 to 20 minas of gold.

Table 8: The First Hittite-Egyptian Royal Marriage (the 34th year of Ramses II)

<i>Recipient</i>	<i>Item</i>	<i>Amount</i>
Hattusili and Puduhepa	gold	1779 shekels
“	silver	17 shekels
“	hawk(?) statues of precious stone	2
“	rings of precious stone	10
“	various fine linens	207
“	ebony logs	40
“	<i>kukubu</i> containers of excellent eye medication	5
“	reeds of excellent eye medication	20
Children of Hittite King and Queen	gold	1779 shekels

Table 8, continued

“	various fine linens	207
“	ebony logs	40
“	ebony chest	1

Commentary

Calculating the gifts exchanged in the letters surrounding the Hittite-Egyptian royal marriage is a more straightforward exercise. In the previous section, the goal of the letters surrounding the Eternal Treaty was to establish a diplomatic relationship between the Egyptian and Hittite courts, and this required the creation of as many bilateral connections as possible. The newfound relationship between the Hittite and Egyptian courts was constructed in kinship terms—gifts of the king to his “brother”, the queen to her “sister-in-law”, princes to their “cousins”, and every combination in between. The merging of two families into one was expressed by a thicket of binding gifts: there was no room, or no need, for a unitary gift celebrating the treaty itself.⁷ In contrast, the marriage letters have the concentrated goal of securing a Hittite bride for Ramses, transplanting her from her father’s house and to her new home in Egypt. The political impact is expressed through a large compensatory gift: the bride-price.

Dynasties in Ancient Near East were keenly aware of the convertibility of gifts and diplomatic power in the context of marriage, both for their own children and those of competing

⁷ If this feels dissatisfying to the modern reader, that such a momentous occasion as the first major treaty between equals regulating the peacetime interactions between two countries is commemorated piecemeal, one must keep in mind that Hatti and (especially) Egypt lacked precedent, and even the language and protocol, for such an event. See David Schloen, *House of the Father as Fact and Symbol* (Winona Lake: Eisenbrauns, 2001) for the phenomenological-hermeneutical explanation behind this use of family language.

courts.⁸ In practice this means that the strongest political signal of the marriage negotiations was the size of the bride-price. In this case, for the purposes of comparison to the KASKAL main text, the usual diplomatic gifts accompanying the marriage letters can safely be ignored, and will not be included in the total.⁹ This makes the calculations of the total significantly easier. Unlike the small gifts of the Eternal Treaty, which appeared in separate letters and in single copy, the bride-price was recorded in triplicate, appended to two parallel letters to Hattusili and Puduhepa, and once as a separate gift list. Between these three attestations very little is left to reconstruction. Moreover, and further underlining the importance of the bride-price to the negotiations, the gifts are presented analytically and with subtotals. Thus calculating the total amount of gold or textiles in the list is as simple as finding the relevant lines in the text and adding them up.

The letters concerning the bride price sent by Ramses begin with the near identical pair of E42 and E43, sent to Hattusili and Puduhepa respectively. These letters record Ramses' joyous response on hearing that his marriage proposal has been accepted, and end with a promise of a large gift to be sent to Hattusa.¹⁰ The follow-up letters E45 and E46 deal with roughly the same topic, recycling much of the phrasing from E42 and E43 on their obverses, but then continue with a large gift-list on their reverses, providing the first two attestations of the bride-price. This

⁸ cf. EA 1, Moran, *Amarna Letters*, 1-5 and Amenhotep III's sarcastic remark to the Babylonian king Kadašman-Enlil that he should not to ask for greeting gifts from Egypt if he won't give a daughter, and should instead get his diplomatic gifts from the other, supposedly "powerful" kings whom Kadašman-Enlil claims as son-in-laws.

⁹ Though I do not tabulate these gifts, which are few by comparison, I have included them for reference in Appendix 2. They include, for example, two golden cups (96 shekels) and 12 linens to the Chiefs of the Bodyguards of the Right and Left, and 2 leather cuirasses and a bronze helmet to an unnamed palace official. These are probably unrelated to the marriage, and perhaps belong instead to the topic of the sons of Masniyalli which was also being discussed in the body of the letter.

¹⁰ see E43 (KBo 28.23) obv. 30-43 for Ramses' reaction, and rev. 76-79 for the promise of gifts.

is supplemented by a separate letter E92 which consists entirely of a gift-list which parallels almost word for word the ends of the lists in E45 and E46, but then begins a new list (of near identical value) naming the children of the Hittite king and queen as the recipients.

Following Edel's analysis it seems that three versions of the bride-price letters were sent out: the "diplomatic" version of letters E42 and E43, which fully phrase Ramses' joy but give the bride-price in only general terms; the "condensed" version of E45 and E46, which combine celebratory language and a gift-list into one tablet; and the "master" list of E92 that enumerates the total gift to the Hittite court, including a gift to the children of the Hittite king and queen (and thus the siblings of the bride) who collectively received a gift equal to their parents.¹¹ It must be assumed that the royal children received "diplomatic" and "condensed" letters that are now lost.

There was thus a single gift of two halves sent to the Hittite court: this first half to be shared by Hattusili and Puduhepa (attested in E45 and E46, and the first paragraphs of E92), and a second half of nearly equal contents to be shared by the children of the Hittite king and queen (attested in the remainder of E92). The two halves are combined into the total below:

Total: **3558 shekels (=59 mina, 18 shekels)¹² gold**

 17 shekels silver

 414 textiles

 2 stone statues, 10 stone rings

 80 logs of ebony, 1 ebony chest

 25 containers of eye medications

¹¹ See Edel, *Die Ägyptisch-hethitische Korrespondenz* (vol. II), 300.

¹² Using the standard Babylonian shekel (1/60 of a mina) of the Egyptian court.

5.2 Tribute from Hittite Vassals

Treaties listing tribute are surprisingly rare in the Hittite corpus. Most treaties concern mutual military support, either defensive or offensive. Contributions were thus usually in terms of manpower and loyalty, especially reporting of sedition and extradition of fugitives, but occasionally financial.¹³ Of the treaties preserved, two vassals stand out for being required to send gold: Ugarit and Amurru.¹⁴

5.2.1 Ugarit

Ugarit is one of the best attested vassals of the Hittites, undoubtedly due to their importance within the empire, but also because the palace of the city of Ugarit has been

¹³ For an anatomical overview of such treaties, see *La contribution financière* in Guy Kestemont, *Diplomatique et droit international en asie occidentale (1600-1200 av. J.C.)* (Louvain: Institut orientaliste, 1974), 353-360.

¹⁴ Two other vassals are known to have been levied gold, but the amounts are broken away. A treaty between Suppiluliuma I and Tette of Nuhašše contains a clause concerning tribute (presumably gold) “weighed in the Hittite fashion” (KBo 1.4 obv. ii 1-3. Edition: Giuseppe del Monte, *Il trattato fra Mursili II di Hattusa e Niqmepa’ di Ugarit*, series: *Orientis antiqui collectio*, 18 (Rome: Centro per le antichità e la storia dell’arte del Vicino Oriente, 1986), 142-55. English translation: Gary Beckman, *Hittite Diplomatic Texts* (Atlanta: Society of Biblical Literature, 1999), 54-58). The land of Alašiya, located on or possibly comprising the island of Cyprus, was also tasked in the time of Tudhaliya IV and Suppiluliuma II with delivering a fixed amount of gold, as well as a very large amount of copper (4 talents = 240 mina) and a token amount of grain, to Hattusa to be distributed to various deities. Again, the amounts of gold are broken away, so there is no way to directly compare the tribute to the KASKAL series (estimating the exchange rate of copper would be difficult). The document listing the tribute, KBo 12.38, is not a treaty or letter, but rather a cuneiform copy of a monumental inscription, and has its own complicated history (see principle edition in Hans Güterbock, “The Hittite Conquest of Cyprus Reconsidered,” *Journal of Near Eastern Studies* 26 (1967):73-81). The “earmarking” of tribute for specific gods is also unprecedented, and might indicate a non-standard political relationship between Hatti and Cyprus. Fragments of a treaty between Suppiluliuma II and Alašiya (CTH 141) confirm the relationship, but are too broken to clarify the matter (edition: Matteo Vigo, “Tradurre e non tradire’ il problema delle integrazioni. Il caso di KBo XII 39,” in *Traduzioni di tradizioni e tradizioni di traduzione. Atti del quarto incontro “Orientalisti”* (Pavia, 19-21 aprile 2007), ed. Benedetta Bellucci, et al. (Milan: Qu.A.S.A.R S.r.l., 2008), 191-248).

discovered, excavated, and well published.¹⁵ The importance of Ugarit's contribution to understanding the Hittite vassal system cannot be overstated, as the city's palace archives provide a view on the vassal relationship from the perspective of the lesser partner. What is revealed is a relationship more fluid and negotiable than the stipulations of the treaties would suggest.

Even without the perspective afforded by the Ugarit archives, it is clear from the Hittite evidence that the city-state occupied a special place in the system of vassals. Along with Amurru, its neighbor to the south, Ugarit came more or less voluntarily under Hittite rule during Suppiluliuma's Great Syrian War, and for its compliance was rewarded with territory and favor.¹⁶ Again like Amurru, it retained its native dynasty until the end, and intermarried extensively with the Hittite royal family. In economic terms, Ugarit took advantage of its

¹⁵ See the *Mission de Ras Shamra* series. The epigraphic volumes are:

- PRU II:* Charles Virolleaud, *Le palais royal d'Ugarit II: Textes en cunéiformes alphabétiques des archives est, ouest et centrales*, series: Mission de Ras Shamra, Tome VII (Paris: Klincksieck, 1957)
- PRU III:* Jean Nougayrol, *Le palais royal d'Ugarit. IV: Textes accadiens des archives sud (archives internationales)*, series: Mission de Ras Shamra, Tome IX (Paris: Klincksieck, 1956)
- PRU IV:* Jean Nougayrol, *Le palais royal d'Ugarit III: Textes accadiens et hourrites des archives est, ouest et centrales*, series: Mission de Ras Shamra, Tome VI (Paris: Klincksieck, 1955)
- PRU V:* Charles Virolleaud, *Le palais royal d'Ugarit V: Textes en cunéiformes alphabétiques des archives sud, sud-ouest et du petit palais*, series: Mission de Ras Shamra, Tome XI (Paris: Klincksieck, 1965)
- PRU VI:* Jean Nougayrol, *Le palais royal d'Ugarit VI: Textes en cunéiformes babyloniens des archives du grand palais et du palais sud d'Ugarit*, series: Mission de Ras Shamra, Tome XII (Paris: Klincksieck, 1970)
- Ugaritica V:* Jean Nougayrol, et al., *Ugaritica V: Nouveaux textes accadiens, hourrites et ugaritiques des archives et bibliothèques privées d'Ugarit; Commentaires des textes historiques (première partie)*, series: Mission de Ras Shamra, Tome XVI (Paris: Geuthner, 1968)

¹⁶ For a recent general overview of Ugarit's history, see Itamar Singer, "A Political History of Ugarit," in *Handbook of Ugaritic Studies*, ed. W.G.E. Watson, N. Wyatt (Leiden: Brill, 1999), 603-733.

position on the coast (on a promontory today called Ras Shamra ('Cape Fennel') just a few miles north of the modern Syrian port city of Latakia) to become a center of maritime trade in the northern Levant. Many documents recovered from the site show a deep involvement by the ruling family in trade agreements and disputes, including the famous edict concerning the Hittite merchants of Ura,¹⁷ and the provisioning of grain to Hattusa.¹⁸ Reflecting its commercial importance to the Hittites, Ugarit was at least in one case granted the privilege of contributing gold instead of troops to a campaign (see below). The impression given is Ugarit as a wealthy vassal kingdom trading in luxury goods, sheltered from the border conflicts that plagued the Hittite Empire, and profiting handsomely from the protection of its Hittite overlord—a captive maritime power serving a continental master.

However there is evidence that as memories of Suppiluliuma's conquest faded, Ugarit became less content with its tributary status to Hatti. Prior to the (re)assertion of Hittite power in Syria, Ugarit was nominally under the protection of Egypt, though able to maintain an independent existence due to the distance between the two countries.¹⁹ Ugarit was removed from Egypt's influence with the coming of the Hittites and bound to a formal relationship and heavy tribute with its new overlord. This change in status was compensated for by expansion of Ugaritic territory to the east at the expense of the kingdoms of Mukiš, Nuhašši, and Niya.²⁰ When a portion of Ugarit's territory was removed by Mursili II, the tribute was reduced. But by

¹⁷ CTH 93 (RS 17.130, 17.461, 18.003, 34.179). Edition: RS 17.130 = Nougayrol, *PRU IV*, 103-5; RS 17.461 = *ibid.*, 154; RS 18.003 = *ibid.*, 102; RS 34.179 = Pierre Bordrueil, et al., *Une bibliothèque au sud de la ville. Les textes de la 34^e campagne (1973)* (Paris: Éditions Recherche sur les civilisations, 1991), 15. English translation: Beckman, *Hittite Diplomatic Texts*, 177.

¹⁸ RS 20.212. Edition: Nougayrol, et al., *Ugaritica V*, 105-7.

¹⁹ Singer, "A Political History of Ugarit", 621-7.

²⁰ Confirmed in the treaty between Suppiluliuma I and Niqmaddu II (CTH 46). Edition: Nougayrol, *PRU IV*, 51-2. Translation: Beckman, *Hittite Diplomatic Texts*, 34-6.

the time of Hattusili III and Tudhaliya IV it seems even the lighter tribute was resented, and the Hittites had a recurring problem of securing payment.

A series of four documents traces the evolution of the status of Ugarit. The first three concern the yearly delivery of tribute: its establishment by Suppiluliuma I, a voluntary augmentation of the amount by Ugarit, and a downwards revision by Mursili II. The fourth document is a letter sharing formal characteristics with a treaty or legal case, in which Tudhaliya IV accepts a payment in lieu of Ugarit's participation in a war against Assyria. This arrangement of contributing gold instead of troops is unparalleled in the Hittite corpus. While it confirms Ugarit's place as a commercial power in the Hittite Empire, it is not necessarily proof of an economic exceptionalism. In light of Ugarit's lukewarm loyalty, increasingly courted by Assyria and Egypt, and given Tudhaliya's abandonment by another vassal on the battlefield at Nihriya, the Hittites might have specifically requested hard cash instead of unreliable troops: at least gold cannot walk away when the going gets tough.

On the eve of the Hittite Empire's fall and the end of the Bronze Age, letters show that Ugarit needed extra encouragement to fulfill their yearly obligations to the Hittite court. A veritable sub-genre of complaints from the Hittite overlords has been discovered in Ugarit: cheap or unsatisfactory gifts; failure to visit the Hittite court for one, even two years; failure to visit the queen when visiting the king; snubbing particular officials with unsatisfactory gifts; delays in shipping grain to Hattusa—all of this in spite of the clear stipulations of the treaties.²¹ More worrisome was Ugarit's solicitation of gifts from foreign powers. The city is found resuming trade and political ties with Egypt, harking back to their days of near independence, by

²¹ For the citation, discussion, and scholarly apparatus of the specific letters (some of which have contested translations) see Singer, "A Political History of Ugarit," 693-6; 707-19.

requesting and receiving gifts for the restoration of a temple of Ba'al.²² The quantities are impressive: 102 linen garments, 50 logs of ebony, 1000 tiles (*lēhu*^{MEŠ}) of colored stone, 800 whips (whisks?), 1200 cubits of rope, and various other items. The Ugaritic king even requested Egyptian sculptors be sent to carve a statue of the Pharaoh to be placed in front of the image of Ba'al in recognition of the donation (which the Pharaoh politely declined).²³ The political implications of these gifts are more important still than their amount. They show Ugarit negotiating for independence well before the Hittite kingdom collapsed, and seeking at the very least normalized relations with other great powers, and perhaps even a return to the Egyptian fold. The gifts also confirm that the luxury goods discussed in the economic documents of this chapter were dangerous beyond their simple material value when used as political signals.

The evolution of Ugarit's yearly tribute obligations, with tabulation and commentary, are now presented below. These documents (along with parallels from Amurru and Cyprus) provide a glimpse into the yearly income of the Hittite palace, and deepen understanding of the wealth of the KASKAL main text by permitting its conversion into a period of time.

1.) Edict of Suppiluliuma I concerning Tribute of Ugarit (CTH 47)²⁴

²² RS 88.2158. Edition: Sylvie Lackenbacher, "Une lettre d'Égypte (n° 1)," in *Études ougaritiques: I. Travaux 1985-1995*, ed. M. Yon, D. Arnaud (Paris: Éditions recherche sur les civilisations, 2001), 239-48. Further discussed in Sylvie Lackenbacher, "Une correspondance entre l'administration du pharaon Merneptah et le roi d'Ougarit," in *Le Pays d'Ougarit autour de 1200 av. J.-C.: Histoire et archéologie. Actes du Colloque International; Paris, 28 juin-1^{er} juillet 1993*, ed. M. Yon, M. Sznycer, P. Bordreuil (Paris: Éditions recherche sur les civilisations, 1995), 77-83.

²³ RS 88.2158 obv. 10'-16'.

²⁴ Edition: Nougayrol, *PRU IV*, 40-44. English translation: Beckman, *Hittite Diplomatic Texts*, 166-7.

Table 9: Edict of Suppiluliuma I concerning Tribute of Ugarit (CTH 47)

<i>Recipient</i>	<i>Durable Goods</i>	<i>Textiles</i>
King	12 mina, 20 great (=Hittite) shekels of gold 1 gold cup (1 mina)	4 linen cloths 1 large linen cloth 500 shekels blue-purple wool 500 shekels red-purple wool
Queen	1 gold cup (30 shekels) ²⁵	1 linen cloth 100 shekels blue-purple wool 100 shekels red-purple wool
^{LU} <i>tartenu</i> (crown prince)	1 gold cup (30 shekels)	1 linen cloth 100 shekels blue-purple wool 100 shekels red-purple wool
^{LU} <i>tuppalanuri</i> (chief scribe)	1 gold cup (30 shekels)	1 linen cloth 100 shekels blue-purple wool 100 shekels red-purple wool
^{LU} <i>huburtanuri</i>	1 gold cup (30 shekels)	1 linen cloth 100 shekels blue-purple wool 100 shekels red-purple wool
^{LU} <i>huburtanuri šanû</i> (2 nd <i>huburtanuri</i>)	1 gold cup (30 shekels)	1 linen cloth 100 shekels blue-purple wool 100 shekels red-purple wool
^{LU} SUKKAL (vizier)	-	1 linen cloth 100 shekels blue-purple wool 100 shekels red-purple wool
^{LU} <i>antubšalli</i>	1 gold cup (30 shekels)	1 linen cloth 100 shekels blue-purple wool 100 shekels red-purple wool

Commentary

This document is appended to the first Hittite treaty with Ugarit²⁶ and establishes the details of Ugarit's tribute to the Hittite court. It is stipulated that Ugarit is not obliged to provide any other gifts. As will be clarified in the Edict of Mursili II (CTH 65), this was probably

²⁵ Note that the 30 Hittite shekel cup would weigh about 45 Babylonian shekels, which is very close to the 48 shekels standard "diplomatic" cup given in the Egyptian gifts of the previous section. This weight, about $\frac{3}{4}$ of a pound (375g) must have been a comfortable weight for drinking use. To give a modern comparison, the empty cup would weigh about the same as a full 12 oz. can of soda, and maybe twice that when filled.

²⁶ Again, see Beckman, *Hittite Diplomatic Texts*, 34-6.

designed to prevent visiting Hittite dignitaries from demanding extra gifts at the Ugaritic court. Additionally, the king of Ugarit is required to visit Hattusa once a year.

The tribute list shows structural parallels with the Egyptian diplomatic gifts discussed in the previous sections, specifically that the goods are not presented as a lump sum to the Hittite court, but rather earmarked for individual officials. Besides recognizing or confirming an idealized composition of power in the Hittite court, the gifts also open a line of communication between the king of Ugarit and the Hittite ministers who held so much power over his state.²⁷ The ratios of gifts are also very close to those seen in the Egyptian gifts: one half goes to the king and queen, and the other half is divided among everyone else.

Total (yearly):²⁸ **28 mina gold (14¼ mina to royal couple, 13¾ mina to officials)**
12 textiles
2400 shekels dyed wool (1200 to royal couple, 1200 to officials)

2.) (Revised) Inventory of Ugaritic Tribute (CTH 48)²⁹

²⁷ The ^{LU}*tuppalanuri* ‘Chief of Scribes’ in particular seemed to have an outsized influence on Ugarit’s finance, controlling as his did the tolls of the caravans from Egypt through Hittite Syria (Singer, “A Political History of Ugarit,” 708). The king of Ugarit complains in at least one case that the caravans were avoiding his state, instead traveling through inner Syria (*ibid.*, 694). Perhaps this is why the ^{LU}*tuppalanuri* was snubbed with sub-standard gifts on at least two occasions.

²⁸ All shekels are assumed to be great (Hittite) shekels.

²⁹ Edition: Nougayrol, *PRU IV*, 47-48. English translation: Beckman, *Hittite Diplomatic Texts*, 168.

Table 10: (Revised) Inventory of Ugaritic Tribute (CTH 48)

<i>Recipient</i>	<i>Additional Durable Goods</i>	<i>Additional Textiles</i>
[King]	Gold cup (50 shekels, instead of 40)	[unchanged]
[Queen]	1 silver cup (30 shekels)	[double amount] 2 linen cloths, 400 shekels of dyed wool
[^{LU} <i>tartenu</i>] (crown prince)	1 silver cup (30 shekels)	[double amount] 2 linen cloths, 400 shekels of dyed wool
^{LU} <i>tuppanuri</i> ³⁰ (chief scribe)	1 silver cup (30 shekels)	[unchanged]
[^{LU} <i>h</i>] <i>uburtanuri</i>	1 silver cup (30 shekels)	[unchanged]
^{LU} <i>huburtanuri</i>	1 silver cup (30 shekels)	[unchanged]
^{LU} SUKKAL (vizier)	1 silver cup (30 shekels)	[unchanged]
^{LU} EN É ^{ti} <i>abusi</i> ('lord of the storehouse' = <i>andubsalli</i>) ³¹	1 silver cup (30 shekels)	[unchanged]
^{LU} GAL ^{LU.MES} <i>qardabbi</i> (commander of the charioteers)	1 silver cup (30 shekels)	1 linen cloth 200 shekels of dyed wool

Commentary

In this text, an internal document from some period after the first treaty with Suppiluliuma but before the revision by Mursili II, one finds the curious case of Ugarit voluntarily exceeding its treaty obligations. This is strong support for an argument by Mario Liverani that the origins of tribute are voluntary gifts, designed to court favor, that become habitual and eventually mandatory.³² The mandatory nature of the extra gifts will be confirmed

³⁰ A variant spelling of *tuppalanuri*, see Nougayrol, *PRU IV*, 42 ft. 1.

³¹ See Nougayrol, *PRU IV*, 79 who only notes that the *BĒL É ABŪSI* (= ^{LU}EN É^{ti} *abusi*) has replaced the *andubšalli*. The two titles are equated by Manfred Dietrich and Oswald Loretz, "Der Vertrag zwischen Suppiluliuma und Niqmaddu: Eine philologische und kulturhistorische Studie," *Die Welt des Orients, Band 3* (1964-66): 240.

³² Mario Liverani, *Prestige and Interest* (Padova: sargon srl, 1990), 267-273. It should be noted that Liverani has a mistranslation on pp. 269-70 in the *Edict of Suppiluliuma concerning the Tribute of Ugarit (CTH 47)*, discussed above. Here he translates 12 *ma-na* 20 SÍG KU.GÌ.MEŠ 20 *at-ru* (RS 17.227 obv. 21) as "12 minas and 20 shekels of gold - the 20 being a supplement

in the next text from the Ugarit tribute dossier, where Mursili II levies a reduced tribute by picking and choosing from among the original and voluntary contributions.

The distribution of the extra gifts suggest that Ugarit had a different reading of the power structure of the Hittite court than Hattusa. The ^{LÚ}SUKKAL (vizier) gets an extra silver cup like the rest of the high officials, even though he is not entitled to a gold one in the original treaty. A new official, the ^{LÚ}GAL ^{LÚ.MEŠ}*qardabbi* (commander of the charioteers), receives gifts equal to the vizier despite not being mentioned in the first treaty at all. Finally, the queen and the ^{LÚ}*tartenu* (crown prince) are given double amounts of textiles, elevating them above the other court officials, previously their equals in gifts.

Total (yearly): **28¼ mina gold (14½ mina to royal couple, 13¾ mina to officials)**
6 mina silver (¾ mina to queen, 5¼ mina to officials)
15 textiles
3000 shekels dyed wool (1400 to royal couple, 1600 to officials)

3.) Edict of Mursili II concerning Tribute of Ugarit (CTH 65)³³

This edict is preserved in a fragmentary state, with the beginning of the tribute list being damaged. In the preamble, Mursili recounts how the service of the king of Šiyannu, formerly a vassal of the king of Ugarit, has been transferred to the Hittite viceroy at Carchemish. Niqmepa

(*atru*)”, when a translation of “large shekels”, i.e. Hittite shekels (corresponding to Ugaritic *tql kbd* ‘heavy shekel’, see Dietrich and Loretz, “Vertrag zwischen Suppiluliuma und Niqmaddu”, 219-20), is preferable. Liverani’s overall argument is sound, however, given the strong evidence for voluntary gifts becoming mandatory in the *Inventory of Ugaritic Tribute (CTH 48)* and *Edict of Mursili II concerning Tribute of Ugarit (CTH 65)*.

³³ Edition: Nougayrol, *PRU IV*, 80-83. English translation: Beckman, *Hittite Diplomatic Texts*, 175-6.

complains that his land has been reduced to two-thirds its former size and now the yearly tribute is too heavy. Mursili agrees, and the remainder of the text concerns the adjusted amount of tribute. What is interesting from the historical perspective is that the result is not a reduction of the gifts back to the original treaty (perhaps that was still too burdensome), but instead a hybrid list incorporating the voluntary gifts found in the internal Ugaritic documents. Some of the original gifts (the gold cups) are discarded from the treaty and voluntary gifts (silver cups) are kept, and some recipients keep their gains (the vizier holds on to his silver cup, though Mursili pointedly reduces his wool allotment by half) while others lose their status as gift recipients (the commander of the chariots is not mentioned at all).

The text is broken, but enough figures can be recovered to reconstruct a trend. The king probably receives the same amount of gold ingots given the mention of 500 Hittite shekels of gold, which is equal to the 12½ mina originally prescribed.³⁴ One might imagine he keeps his 40 shekel gold cup too. The gifts of the queen and crown prince are broken away (I will assume they were made equal with the other officials again). For the palace officials, insofar as they are preserved, the gold cups of the original treaty have been dropped, and the silver cups are now mandatory. The list ends at the vizier, and the chief of the chariots is not mentioned. Mursili affirms that the king of Ugarit does not have to provide for other officials, saying that he may give gifts to Hittite nobles who come to Ugarit “if it pleases him” (*ša hadî ŠÀ^{bi}*) but it is not an obligation (*lā rikiltu šūtu*).³⁵

Total (yearly): **13½ mina gold (to king)**

5¼ mina silver (¾ mina to queen, 4½ mina to officials)

³⁴ Following Beckman, *Hittite Diplomatic Texts*, 175.

³⁵ RS 17.382+380 rev. 52-59.

12 textiles

2300 shekels dyed wool (1200 to royal couple, 1100 to officials)

If these numbers are accurate, then given the reduction in gold Ugarit is probably paying considerably less than two-thirds of its original tribute obligations, suggesting a weakening grip of Hittite power in Syria after the terror of Suppiluluma's conquests had passed.

4.) Edict of Tudhaliya IV Releasing Ammištamru II of Ugarit from Participation in War with Assyria (CTH 108)³⁶

In a short statement written in the presence of the viceroy of Carchemish, Tudhaliya IV states that he does not require Ammištamru II of Ugarit to bring his troops and chariots to his aid, and will not bring a suit against him for this after the war is finished. Then it is declared that the king Ugarit has paid 50 minas of gold in ten shipments to Tudhaliya, which, by the assessment of Mursili II, would be the equivalent to just under four years worth of gold tribute.

Of interest for the present study is the phrasing of the payment clause:

RS 17.59

Rev.

1. LUGAL ^{KUR}ú-ga-ri-it 50 ma-na KU.GI
2. iš-tu 10 ha-ar-ra-ni ša ^Edu-up-pa-aš-ši[
3. a-na ^dUTU-ši it-ta-din

³⁶ RS 17.59. Edition: Nougayrol, *PRU IV*, 150-1. English translation: Beckman, *Hittite Diplomatic Texts*, 182-3.

“The king of Ugarit gave to his Majesty 50 mina gold by ten *harranu*
(‘caravans/shipments’) of the ^É*dupašši*.”

The Akkadian word *harranu* ‘path; caravan, shipment’ is equivalent to Sumerian KASKAL. Its usage here seems to be literal: Ugarit transferred the gold in ten shipments, perhaps in order to amortize the payment in ten installments. There is no way to decide based on grammar whether the ^É*duppašši*, translated by Beckman as “sealed storehouse”,³⁷ was located in Ugarit or Hattusa, though it is unlikely that Tudhaliya would care about the origin of the gold in Ugarit, so long as he receives it. If it is in Hattusa, it is tempting to connect it with the ^É*duppas* ‘(house of) chests’ that appears twice in the Palace Administrative Corpus. Both attestations involve quantities of wool, which might be connected with the dyed wool tribute from Ugarit. Siegelová proposes that the institution was involved with, but not limited to, textile production.³⁸ It is also attested as contributing garments for the *purulliya* Festival (KUB 30.32; CTH 674). There are hints that the institution might have had additional functions in the Hittite palatial economy, in one case being responsible for transferring deportees to the temple of Pirwa (KBo 12.53+KUB 48.105). The ^É*duppas* will be returned to in the conclusion of the present study, where it will play a crucial role in determining the identity and purpose of the KASKAL series.

³⁷ Beckman, *Hittite Diplomatic Texts*, 183. There is no consensus yet on the etymology or exact meaning of this word. See relevant entry in the *Etymological Dictionary of Akkadian: Supplement to the Akkadian Dictionaries*, published online by the Altorientalisches Institut at Universität Leipzig (www.uni-leipzig.de/altorient/etymd.html).

³⁸ Siegelová, *Hethitische Verwaltungspraxis*, 198-9.

5.2.2 Amurru

As mentioned in the discussion on Ugarit, Amurru also occupied a special place in the constellation of Hittite vassals, having voluntarily sought Hittite vassalage as a way of breaking away from Egypt, and as a reward being permitted to maintain a native dynasty until the end. Unfortunately the palace archives of Amurru have not been discovered, so its history must be reconstructed from texts preserved in Hattusa, Egypt, and Ugarit. Two treaties from the archives of Hattusa stand out for reconstructing its economic relations with Hatti. The first, between Suppiluliuma I and Aziru of Amurru (CTH 49),³⁹ sets a tribute of “300 shekels [gold, refined], first-class, and good,” weighed in the Hittite manner, to be delivered each year to Hatti.⁴⁰ A yearly appearance at the Hittite court in Hattusa is also required. The same amount is set in a later treaty between Mursili II and Tuppi-Teššup of Amurru (CTH 62): “300 shekels gold, refined and first-class.”⁴¹ Amurru was not required to present other diplomatic gifts like cups and textiles to other officials in the Hittite court. This is perhaps because Amurru had the privilege of hosting Hittite officials directly: the treaty stipulates that the king is to graciously provide for nobles and soldiers garrisoned in his territory, which must have given the king of Amurru many opportunities to make connections with important Hittite officials.⁴² Further details of Hittite-Amurru tribute will have to wait until the discovery of Amurru’s palace archives.

Total (yearly): **300 Hittite shekels (7.5 mina) gold**

³⁹ Edition: Giuseppe del Monte, *Il trattato fra Mursili II di Hattusa e Niqmepa’ di Ugarit*, series: *Oriens antiqui collectio*, 18 (Rome: Centro per le antichità e la storia dell’arte del Vicino Oriente, 1986), 116-41. English translation: Beckman, *Hittite Diplomatic Texts*, 36-41.

⁴⁰ KBo 10.12+, obv. 9-13 (Hittite version). KUB 3.19+48.71, obv. 9’-10’ (Akkadian version).

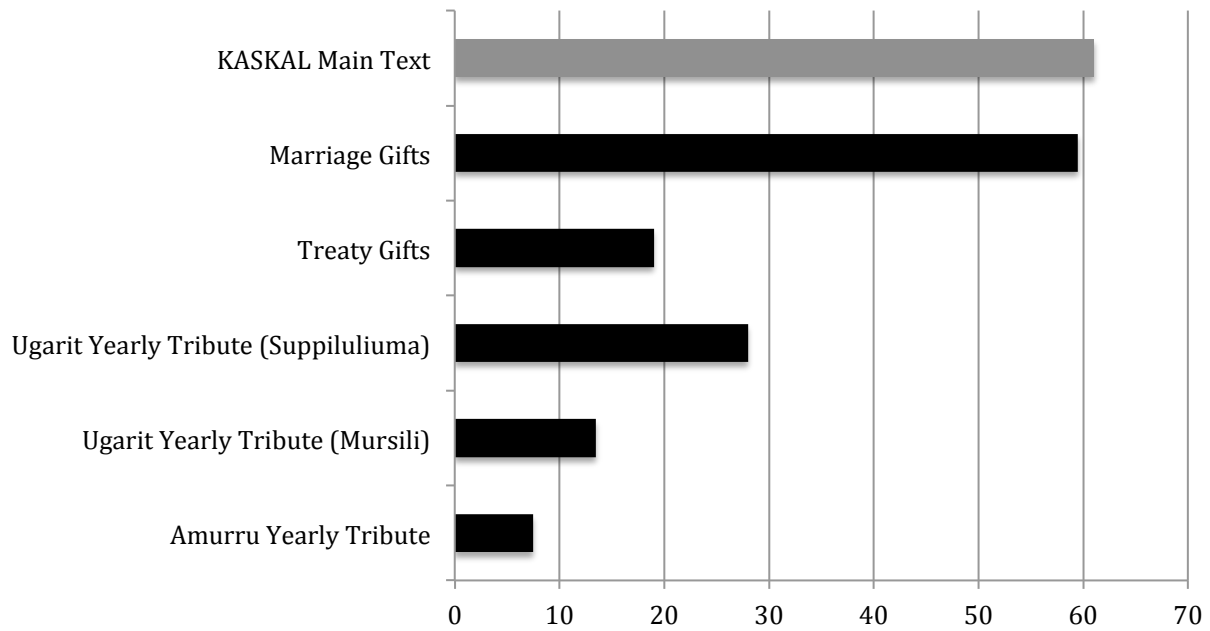
⁴¹ KBo 50.26(+), obv. 9-12 (Hittite version). KUB 3.14, obv. 9-11. Edition: del Monte, *Il trattato fra Mursili II*, 156-77. English translation: Beckman, *Hittite Diplomatic Texts*, 59-64.

⁴² KBo 5.9, obv. ii 30’-37’.

5.3 Comparative Magnitude of the KASKAL Main Text

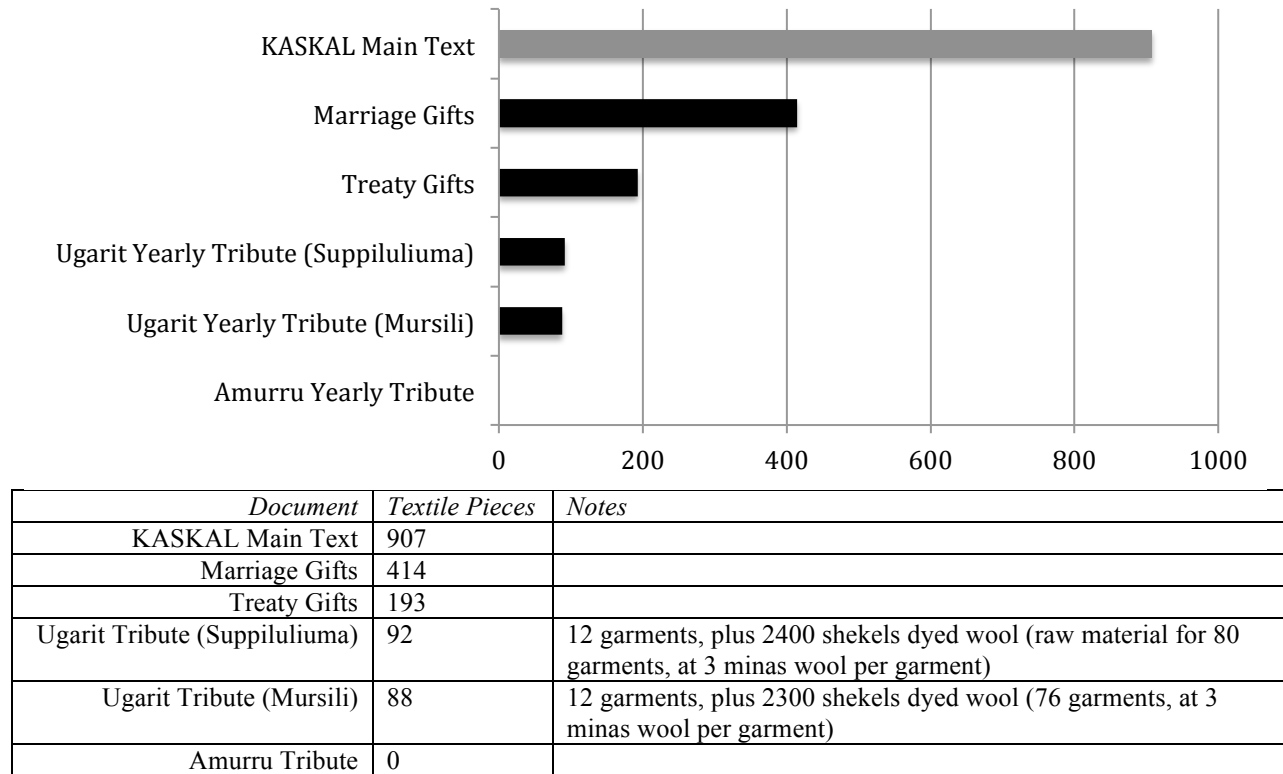
Comparing the totals extracted from the above documents and converting them to common units is no easy task. The differing levels of preservation, cursive descriptions, and variety of materials are all complicating factors, yet attempts have been made to address these. The levels of preservation were discussed in the individual subsections, where philological work revealed patterns in the texts allowing for educated restorations. For the brevity of descriptions, an argument was made that in large enough quantities the units of textiles and weights of gold are commensurable across texts. And for the variety of materials, the following section limits itself to presenting only the two most common categories, gold and textiles, with the caveat that the reader should return to the individual discussions to appreciate the true extent of the wealth. Admittedly this undervalues documents with a high diversity of durable goods, primarily the KASKAL Main Text, with the Egyptian marriage gifts a distant second. But in spite of this, a clear fact emerges in the graphs below: the KASKAL Main Text is unquestionably the largest single collection of movable wealth known in the Hittite world.

Figure 5: Comparison of Gold in KASKAL Main Text, Gifts, and Tribute



<i>Document</i>	<i>Amount of Gold</i>	<i>Notes</i>
KASKAL Main Text	61 mina, 3 Hittite shekel	47 m. 13 Hitt. s. gold ingots, plus 55 gold objects (estimated at ¼ mina per object)
Marriage Gifts	59 m. 18 shekel	
Treaty Gifts	18 m. 58 s.	
Ugarit Tribute (Suppiluliuma)	28 m.	yearly
Ugarit Tribute (Mursili)	13 m. 20 Hitt. s.	yearly
Amurru Tribute	7 m. 20 Hitt. s.	yearly

Figure 6: Comparison of Textiles in KASKAL Main Text, Gifts, and Tribute



In gold ingots and objects alone, even using the conservative estimation of $\frac{1}{4}$ mina (10 Hittite shekels) per object, the KASKAL text is equal to or greater than the marriage gifts of the Hittite-Egyptian royal marriage. It can be suspected that the true value of the durable goods in the KASKAL text is actually in line with its advantage in textiles—that is, over twice as much as the nearest competitor.

So how great was the wealth contained in the KASKAL Main Text? In the time of Hattusili III and Tudhaliya IV, the it could have paid the bride price for two daughters of Great Kings. It could have been used to secure six peace treaties with other great powers. It was equal to six years of revenue from the contemporary tribute of Ugarit and Amurru in gold, and ten years in textiles. The KASKAL text contained enough in gold ingots alone (47.25 mina) to pay

double the blood price (1400 Babylonian shekels = 23.3 mina) given by Ammištamru of Ugarit so that he could take vengeance on his disgraced wife, a sister of king Šaušgamuwa of Amurru and possible member of the Hittite royal family, whose actions nearly brought the two vassals to war in the reign of Tudhaliya IV.⁴³

Returning to the discussion at the beginning of this chapter, political documents offer a way to gauge the relative impact of the wealth in the KASKAL Main Text by rephrasing it in terms of contemporary acts. But the opportunity costs revealed by the rephrasing are meaningless if the opportunities were not there. Was a royal marriage with a Great King even possible at the end of the Hittite Kingdom, and were peace treaties to be had? Surely if the wealth of the KASKAL text could have secured long-term peace along the Assyrian border Tudhaliya would have considered it a bargain at twice the amount. But it seems that the Assyrians were not interested in peace and the Babylonians too weak to invest in; Ahhiyawa too fractious and Egypt already satisfied.

That the wealth of the KASKAL text was designed to influence someone is certain: the movement of so many finished goods from one place to another is unlikely without a transfer of ownership (or at the very least without distribution at the new location). For reasons that will be discussed in the final chapter, it is likely the destination is domestic rather than foreign. Deciding which among the possible sectors the kingdom's economy received the goods requires an understanding the scale and direction of domestic spending in the Late Hittite period.

Congruencies in the contents and scale of expenditure make the religious sphere, and specifically

⁴³ RS 17.228, Nougayrol, *PRU IV*, 141-3. See also Itamar Singer, "A Concise History of Amurru," in *Amurru Akkadian: A Linguistic Study*, vol. 2, by S. Izre'el (Atlanta: Scholars Press, 1991), 174-5. There is a question as to which wife of Ammištamru this document refers to. Beckman, *Hittite Diplomatic Texts*, 180 is not convinced that this letter must be connected to the *Edict of Tudhaliya IV concerning the Divorce of Ammistamru II of Ugarit (CTH 107)*.

the great temples of the northern frontier, the most likely destination of the goods in the
KASKAL Main Text.

CHAPTER 6

THE HITTITE VOW CORPUS

The Hittite vow corpus (CTH 583-590) discussed in this chapter consists of eighty-eight texts of varying size, almost all of which have been published in Johan de Roos' *Hittite Votive Texts*.¹ The vows in these texts usually take the form of a condition, termed the protasis, which the god can effect, and a promised action, called the apodosis, which the human supplicant offers as inducement for the god's favor. A typical vow looks thus:

KUB 15.1

3. nu-za-kán MUNUS.LUGAL ŠÀ Û-TI
4. A-NA ^dhé-pát ^{URU}u-da ki-is-sa-an IK-RU-UB
5. ma-a-an-wa DINIGIR-LUM GAŠAN-YA ^dUTU-ŠI TI-nu-an har-ti
6. HUL-u-i-wa-ra-an pa-ra-a ^ÚUL tar-na-at-ti

(Protasis:) The queen in a dream to Hepat (of) Uda vowed thus: "If you, the goddess, my lady keep His Majesty alive, (and) do not deliver him to evil,"

7. nu-wa A-NA ^dhé-pát ALAM KÙ.GI i-ya-mi
8. A-YA-RU KÙ.GI-ya-wa-as-si i-ya-mi
9. nu-wa-ra-at-za ŠA ^dhé-pát A-YA-RU hal-zi-is-sa-an-[z]i
10. ^{UZU}GABA-as-ma-wa-du-za TU-DÌ-TUM KÙ.GI i-ya-mi
11. nu-wa-ra-at-za TU-DÌ-TUM DINGIR-LIM hal-zi-is-sa-an-zi

¹ Johan de Roos, *Hittite Votive Texts* (Leiden: Nederlands Instituut voor het Nabije Oosten, 2007).

(Apodosis): “I will make for Hepat a gold statue. And I will make a gold rosette for it; they will call it the rosette of Hepat. And I will make a gold pectoral for your breast; they will call it the god’s pectoral.”

More or less contextual information, such as the location where the vow was made, or the general topic, can be written before the protasis. The weights of the objects to be given, the location where they will be donated, and whether or not the promised donation has been fulfilled can appear in the apodosis. In some vows, probably from the later stages of the administrative process, only the name of the god and the action promised by the human supplicant is written. Many of the vows appear in the context of a recounted dream, and some vows were modified or confirmed by oracles.²

The most salient feature of the genre from a historical viewpoint is that almost all the vows come from the era of Hattusili III and Puduhepa. The dating began as a circumspect observation by Leo Oppenheim based on KUB 15.1-30, who placed these texts broadly in the period from Muwatalli II to Hattusili III.³ It was followed by Heinrich Otten and Vladimir Souček in the introduction to their 1965 edition of the Vow of Puduhepa (CTH 585, an unusual text that goes into much more detail than is typical of the vow corpus).⁴ In a review of Otten and

² An example of oracle text dealing with vows is found in KUB 56.24. Following the oracle topics of *arkamman* ‘tribute’, *maskan* ‘propitiatory gift’, and *sarnikzel* ‘compensation’, a vow appears in rev. 17, where it is determined that a *tiwatassa* (= *sittar* ‘sundisk(?)’, per Rich Beal, review of *Hittite Votive Texts*, by Johan de Roos, *Journal of Near Eastern Studies* 73/2 (2014): 344) weighing 5 shekels silver should be given.

³ A. Leo Oppenheim, *The Interpretation of Dreams in the Ancient Near East, with a translation of an Assyrian Dream-Book* (Philadelphia: American Philosophical Society, 1956), 193.

⁴ Heinrich Otten and Vladimir Souček, *Das Gelübde der Königin Puduhepa an die Göttin Lelwani* (Wiesbaden: Harrassowitz, 1965), 1.

Souček's work, Annelies Kammerhuber was the first to suggest that the dating of the vows was more than just coincidence: she argued rather that the vow-genre was an *innovation* of Hattusili III, or more specifically his wife Puduhepa.⁵ Her view finds confirmation in de Roos' comprehensive edition of the votive texts, which shows that there are at most one or two vow texts, atypical in form, that can be dated prior to their reign. The last major tranche of votive texts was published in 1986,⁶ and all were confined to the same time period.

The significance of the vow genre's association with Hattusili and Puduhepa is still to be fully grasped. The most recent discussions of the vows, in de Roos' edition and Alice Mouton's work on Hittite dreams,⁷ emphasize the continuity of the vow-genre with previous traditions. de Roos traces the origins of the vows to the Hittite practice of the *maltešsar* offering, a kind of thanksgiving celebrated by Hittite kings at the conclusion of military campaigns.⁸ Mouton sees in KUB 15.5+, one of the anomalous texts dating to the period before Hattusili and Puduhepa, demonstration of a widespread, possibly popular, practice of vow-making in the Hittite court.⁹ Their arguments suggest that the genre had antecedents in Hittite culture and the votive texts were not foreign introductions.

The dwindling of the genre in the reign of Tudhaliya IV is made even more surprising if the vows are accepted as a native tradition. The votive corpus is administrative in nature in that it records obligations that require timely responses from a network of people associated with

⁵ See Annelies Kammerhuber, Review of *Das Gelübde der Königin Puduhepa an die Göttin Lelwani*, by Heinrich Otten and Vladimir Souček, *Zeitschrift für Assyriologie* 60 (1970): 222, and id., *Orakelpraxis, Träume und Vorzeichenschau bei den Hethitern* (Heidelberg: Winter, 1976), 25-26.

⁶ Horst Klengel, *Hethitische Gelübde und Traumtexte sowie Rituale und Festbeschreibungen* (Keilschrifturkunden aus Boghazköy, Heft 56. Berlin: Akademie-Verlag, 1986).

⁷ de Roos, Hittite Votive Texts, and Alice Mouton, *Rêves hittites: Contribution à une histoire et une anthropologie du rêve en Anatolie ancienne* (Leiden: Brill, 2007).

⁸ de Roos, *Hittite Votive Texts*, 38-41.

⁹ Mouton, *Rêves hittites*, 24-6.

Hittite central government. The great majority of Hittite administrative documents come from the very end of the Empire: it is assumed that chronological distribution of the administrative documents is because the tablets were recycled or destroyed when their information was no longer current.¹⁰ The presence of votive administrative texts from the time of Hattusili and Puduhepa, and the relative absence of the same texts from the reign of Tudhaliya IV, is opposite to the expected distribution. It suggests two things: one, the vows were kept because they were useful for a longer period of time than most administrative documents, and two, the distribution of vow texts is probably not an accident of preservation. It seems the practice of vow-making Tudhaliya inherited from his parents was changed or abandoned during his reign, though the records kept intact.

In light of the fluidity of Hittite administrative practice, which could be considered the theme of the present work, the flood of vows and their subsequent evaporation from the corpus should be seen as a shift in emphasis rather than a rupture of tradition. It is unlikely there was a major discontinuity at the Hittite court at the end of Hattusili's reign. Tudhaliya had been well groomed for succession, and Puduhepa outlived her husband and remained influential in her role as *tawananna* and almost certainly continued to sponsor votive texts during the early years of her son's reign. By her royal intervention, vow-making had been elevated from a personal act familiar to the Hittite court to an instrument of *government policy* under Hattusili and Puduhepa,

¹⁰ For the proposed life-cycle of administrative documents, see Theo van den Hout, "Administration and Writing in Hittite Society," in *Archivi, depositi, magazzini presso gli Ittiti: nuovi materiali e nuove ricerche / Archives, Depots and Storehouses in the Hittite World: New Evidence and New Research (Proceedings of the Workshop held in Pavia, June 18, 2009)*, edd. M. Balza, M. Giorgieri, C. Mora (Genoa: Italian University Press, 2012), 46-48. It is a matter of definition whether festival texts and their provisioning lists, which verge on texts of tradition, should be included as administrative documents. While the festival texts were used to coordinate government activity, they were (in theory) timeless and prescriptive as opposed to the short-term and descriptive texts of e.g. the Palace Administrative Corpus.

whereby the vows commanded, as will be seen, the resources of the Hittite state in their fulfillment. With the change in king then came a change in policy, evidencing the great latitude afforded to the royal person in how he chose to combine religious obligation with the running of the state. Rulers had different solutions, from the literature of Mursili II,¹¹ to the moving of the Hittite capital by Muwatalli II to his god's city of Tarhuntassa; from the vows of Hattusili and Puduhepa, to the cultic reorganization program of Tudhaliya IV (to be discussed in the next chapter). Modern scholars might see ulterior motives—a literary bent for Mursili or geopolitical strategy/religious reform for Muwatalli;¹² or as will be suggested, centralization and decentralization for Hattusili and Tudhaliya, respectively—but it should be remembered that from the emic viewpoint these are secondary to the enormous spiritual burden borne by the Hittite king as he guided the land of Hatti, and was guided in turn by the gods.

If the votive texts are to be interpreted in the context of governance, then an investigation of the economics of the vows is paramount. The remainder of this chapter will undertake this by first examining the dating criteria of the texts in detail, and then offering a method for estimating and restoring the magnitude of wealth expended on votive offerings during the reign of Hattusili and Puduhepa. The vows will be divided into categories by subject and discussed. Finally an attempt will be made to situate the vow corpus historically, and with regard to the KASKAL series from Part 1.

¹¹ The governmental impact of which I hope to further explore in a future article. The cost in terms of personal time and attention which the Mursili devoted to his literary projects should not be underestimated.

¹² For a discussion of the domestic, religious, and geopolitical considerations of Muwatalli II's move to Tarhuntassa, see Itamar Singer, "The Failed Reforms of Akhenaton and Muwatalli II," *British Museum Studies in Ancient Egypt and Sudan* 6 (2006): 37-58.

6.1 Dating Criteria of Vows in Detail

Because economic analysis of the vows depends so heavily on their belonging to a specific time period, it is useful to present a detailed account of the criteria by which the texts are dated.¹³ Most of the vows are anonymous, with the identity of the persons involved concealed behind generic titles of MUNUS.LUGAL ‘queen’ and ^dUTU-ŠI ‘His Majesty (i.e. the king)’, but there are certain criteria that can link the vast majority of the vows with Hattusili and Puduhepa.

It can be inferred that vows on the same tablet belong to roughly the same chronological stratum, so that the dating of one vow can be applied to the whole tablet. The votive corpus was the culmination of an administrative process that recorded the pronouncement and fulfillment of vow obligations. Vows could have very different time frames for their completion, sometimes measured in years, being ultimately dependent on the will of the gods. If it had been the case that only vows with outstanding obligations were kept in the corpus, regular recopying the tablets would be needed to prune the finished vows and consolidate the current vows. Unless the scribes were scrupulous to make a new tablet as soon as even one vow on it was fulfilled, and fastidious in discarding every old tablet, then the votive corpus would contain vows that appear multiple times. This is not so, and there are very few instances of repeated vows.¹⁴ Rather, the votive

¹³ This account is intended as a supplement to, not a replacement of, de Roos’ work in *Hittite Votive Texts*, 30-38 (see especially pp. 37-38 for the breakdown of his reasoning by text). de Roos’ list is not comprehensive of the texts edited in the book. The book is based on his dissertation written in 1984, and was revised and expanded in the version published in 2007 (completed with the assistance of Alice Mouton). While the number of texts was increased, the expositive portions of the introduction seem to be based still on the core texts from the dissertation.

¹⁴ There are only four cases of vows being repeated twice, and never exactly the same. These “doublets” are: the matter of the *auli* in ^{URU}Zithara (KUB 15.28+IBoT 3.125 obv. II 2’-5’ and KUB 48.123 obv. I 8’-11’); the statues of the king and queen for their lives (KUB 15.28+IBoT 3.125 obv. II 6’-10’ and KBo 55.217 4’-8’); the illness of the son of the king of Isuwa (KUB 15.1 rev. III 48’-53’ and

corpus was likely an archive with low turnover, as demonstrated by the many vows present in the corpus that must have been completed (for example all of the illness vows, and vows explicitly marked as “already done”, as discussed in the next section). Records of every vow pronounced were kept, even after they were fulfilled: the queen was saving all of her receipts as it were. Given the low amount of recopying implied in the system, and the potpourri of topics and gods within a tablet, vows were likely written down near the time they were made, and thus vows on the same tablets come from the same time.

The Illness Vows

The premier dating criterion for the corpus comes from the so-called ‘illness vows’, in which the queen pleads for the life and health of the king, often mentioning specific ailments and body parts. While in theory it could be any (New Hittite) queen making these vows for any king, Puduhepa and Hattusili are almost surely the only candidates. No other queen is known to have been as powerful as Puduhepa, and certainly none were as prolific in producing texts. She produced many prayers, many for the health of Hattusili, and authored numerous letters and diplomatic communications. Such was her influence that she is in fact the last Hittite queen to be known by name. All of this makes her *prima facie* the likeliest candidate for any time the queen appears in the votive corpus. At the same time her husband Hattusili was probably the New Hittite king most needing of divine intervention for his health. He was given as a sick child to the

KUB 15.3 rev. IV 5’-9’); and the matter of the eagle (KUB 48.126 3’-9’ and “Touristik” obv. 9-14). There are no cases of a vow being repeated three times.

care of Ištar and prone to malady all his life.¹⁵ Illnesses of the eyes seemed especially to have plagued him, as evidenced by Puduhepa's prayers and the numerous containers of eye medicine sent from Egypt as diplomatic gifts. Thus when His Majesty's eyes appear as one of the most frequent topics in the votive corpus, it is likely that Hattusili is the king in question.

It has been remarked that Puduhepa's unparalleled involvement in the Hittite state was perhaps due to her husband's chronic ill health, but her position was precarious and dependent on the continued support of her husband.¹⁶ She had ample opportunity and motive to make vows for Hattusili, and his need was greater than most kings, and so it can be said following de Roos that "[e]very time a vow is made in a text by the queen for the life or health of the king we may assume that that text dates from the reign of [Puduhepa and Hattusili]."¹⁷ Indeed whenever an illness vow can be dated by independent criteria, all date to theirs and no other reign. Thus de Roos' criteria for dating the illness vows will be adopted here, and those involving eye illnesses will be considered especially secure.

Ištar of Lawazantiya

The mention of Ištar of Lawazantiya, the personal goddess of Puduhepa (for whom she was a priestess before her marriage), can also be used as evidence for dating a text to her reign.¹⁸ The Lawazantiyan hypostasis of Ištar was obscure before Puduhepa came to the throne, with only a single attestation in the middle of a long list of regional gods of Kizzuwatna written

¹⁵ de Roos, *ibid.*, 37 implies that the succession of illnesses for his different body parts makes multiple illnesses likely, whereas Ünal's viewpoint is that Hattusili suffered the same chronic illness since his youth (Ahmet Ünal, *Hattusili III* (Heidelberg: Winter, 1973), 45).

¹⁶ Cf. Heinrich Otten, *Puduhepa: Eine hethitisch Königin in ihre Textzeugnissen* (Wiesbaden: Steiner, 1975).

¹⁷ de Roos, *Hittite Votive Texts*, 37.

¹⁸ Following de Roos, *Hittite Votive Texts*, 33, and Heinrich Otten, *Puduhepa: Eine hethitisch Königin in ihre Textzeugnissen* (Wiesbaden: Steiner, 1975), 13.

during the reign of Muwatalli II (KUB 48.87 rev. iii 6),¹⁹ compared to the dozens of attestations under Puduhepa.

Military Campaigns

There is an “Arzawa dossier” recording vows made in connection with Hattusili’s historically attested military campaign to the west. Five of the texts (KUB 15.6, 31.69, 48.123?²⁰, 56.15, 56.27, 56.31) can be positively dated to Puduhepa and Hattusili, and the sixth (KUB 56.18) should also be dated to this time based on the shared theme. Another subset of vows (KUB 15.21, 48.119) deals with a campaign (or campaigns) in the north of Anatolia, a region which formed the historic and religious power base of Hattusili yet was regularly threatened with violence by Kaskaen tribesmen.

Tudhaliya

The length of Hattusili’s reign is fairly well known (about thirty years, c. 1267-1237),²¹ but Puduhepa survived her husband for many years. How long did she continue to produce vows in an official capacity after her husband’s death? She remained politically active for some time,

¹⁹ For attestations see entry in Ben van Gessel, *Onomasticon of the Hittite Pantheon* (Leiden: Brill, 1998). For primary edition and discussion of KUB 48.87, see Itamar Singer, *Muwatalli’s Prayer to the Assembly of Gods through the Storm-God of Lightning (CTH 381)* (Atlanta: American School of Oriental Research, 1996), 165-167. It is unclear exactly when in the reign of Muwatalli the prayer and god-list was composed. It is possible that Hattusili had already married Puduhepa, giving her and her father, a priest of Ištar of Lawazantiya, influence in the Hittite court to argue for their goddess’ inclusion.

²⁰ Attribution based on appearance of INIM KUR ^{URU}A[r- ‘matter of the land of A[r-...’ (obv. II 13’). The text can be positively dated to Hattusili by the illness vows and mention of Hesni (a son of Hattusili who was implicated in a plot to usurp Tudhaliya’s throne). While it is conceivable that the military campaigns on rev. IV of the tablet could be date to the northern campaign instead of Arzawa, the INIM KUR ^{URU}A[r- tips the balance towards the latter.

²¹ All dates after those used in Bryce, *Kingdom of the Hittites*.

being likely attested in letter at the time of the Battle of Nihriya (c. 1234), and possibly still communicating with vassals as late as the reign of Niqmaddu III (c. 1220).²² Opaque terminology hinders an exact dating. Puduhepa continued to use the title MUNUS.LUGAL while her daughter-in-law, wife of the reigning king, had to settle for DUMU.MUNUS GAL ‘great princess.’²³ Because Puduhepa’s title did not change with her husband’s death, it may be that some of the vows made by the queen date from the reign of Tudhaliya.

Tudhaliya used the title ^dUTU-ŠI upon his father’s death (and perhaps in co-regency before),²⁴ but whether Puduhepa called him by this is an open question. Because the name Tudhaliya appears in the votive corpus, there are three possibilities: either she used his name and his title interchangeably when he became king; or she continued to refer to him as Tudhaliya even when he became king; or she referred to him in the vows as Tudhaliya when he was prince and ^dUTU-ŠI while king.²⁵ The first is unlikely given her consistency in using ^dUTU-ŠI for vows concerning Hattusili (she did not mix the name and title of her husband, so why for her son?), and given that no votive text can ^dUTU-ŠI be independently proven to refer to Tudhaliya. There

²² Itamar Singer, “The Battle of Nihriya and the End of the Hittite Empire,” *Zeitschrift für Assyriologie* 75 (1985): 116-118 sees Puduhepa as the queen addressed in letter concerning Išūwa betrayal in the events surrounding the battle of Nihriya. The text RS 17.434 is assumed by Nougayrol to have been written by Puduhepa to Niqmaddu III. Itamar Singer, “Dating the End of the Hittite Empire,” *Hethitica* 8 (1987): 415 places this around 1220. Bryce, *Kingdom of the Hittites*, 289 supposes that she might have lived to the age of 90.

²³ Itamar Singer, “The Title ‘Great Princess’ in the Hittite Empire,” *Ugarit-Forschungen* 23 (1991): 327-338.

²⁴ See Theo van den Hout, “Hethitische Thronbesteigungsorakel und die Inauguration Tudhalijas IV,” *Zeitschrift für Assyriologie* 81 (1991): 277-279.

²⁵ The matter is further confused by the existence Tašmi-Šarruma as a by-name for Tudhaliya. See J. David Hawkins’ discussion of the Tašmi-Šarruma seals (“Seals type 3”) where the hieroglyphic names of MONS+TU (= ‘Tudhaliya’) and L.418(I)-ŠARMA (= ‘Tašmi-Šarruma’) appear together. (J. David Hawkins, “VI. The Seals and the Dynasty,” in *Die Siegel der Grosskönige und Grossköniginnen auf Tonbullen aus dem Nişantepe-archiv in Hattusa*, by S. Herbordt, D. Bawanypeck, J.D. Hawkins (Mainz: Philipp von Zabern, 2011), 95, 99, 101-102. Following original proposal equating the two names by Sedat Alp, “Zur Datierung des Ulmitešup-Vertrages,” *Altorientalische Forschungen* 25 (1998): 54-60).

is also no evidence for the second possibility, as the four texts (KUB 15.15+56.30, 15.23, 56.28, and 56.31) that mention Tudhaliya by name all seem to date to his time as prince:

1.) KUB 56.31 has a string of six vows (rev. IV 8'-22') in which the queen asks for the gods to militarily support His Majesty. The queen makes one of these vows in line 13' in the town of Ialanda, which if it is the same as the town of Iyalanda would put her in western Anatolia and thus in the context of Hattusili's Arzawa campaign.²⁶ The next paragraph is separated by a double paragraph line (which usually indicates a change of topic), and Tudhaliya's name appears in a broken context, indicating at least he was receiving vows already by the time of the Arzawa campaign.

2.) KUB 15.23 has a vow mentioning the title ^dUTU-ŠI and the city of Nerik (obv. 3'), and then asking for military support for Tudhaliya (obv. 8'). It is unlikely Puduhepa would exchange the title and name within the same vow separated only by five lines. An 'illness vow' on the tablet's reverse (17'-21') further confirms that Hattusili is likely still alive. It is possible they are on a joint campaign: Tudhaliya was appointed governor of the region of Hakmis and Nerik in Hattusili's lifetime and gained military experience fighting the Kaskaens there, often in coordination with his father (see discussion under *Military Vows* below).

²⁶ It is quite possible that the spelling Ialanda is simply a scribal error. See de Roos, *Hittite Votive Texts*, 283 ft. 736, who guesses it is a "[c]urious spelling of Iyalanda located in the lands of Lukka?". The town of Iyalanda was where Hattusili arranged to meet Piyamaradu (see "the Tawagalawa letter" KUB 14.3) and was the location of battle of a resulting ambush which ended in a Hittite victory (as recounted in KBo 28.28, Ramses quoting a letter from Hattusili). Puduhepa took a keen interest in this campaign, especially in capturing Piyamaradu (cf. KUB 56.15, obv. II 15-29. Note the use of the first person in line 19: "he will not escape me"). Her presence in Ialanda indicates she may have followed Hattusili on campaign.

3.) KUB 15.15+56.30 also has the queen requesting military support for Tudhaliya (KUB 56.30 rev. 14'-24'). The obverse of the KUB 56.30 contains an extremely interesting but fragmentary set of vows involving a number of palace officials (obv. 4'-5') and large gifts of silver given by His Majesty (obv. 19'-22', 23'-26'). The title ^dUTU-ŠI appears in KUB 15.15 obv. I 9', which should indicate Hattusili is still king.

4.) The fourth text, KUB 56.28, obv. 5'-11' has apparently conflicting criteria. On the obverse is an 'illness vow' relating to His Majesty's eyes (or possibly nose), which would place it strongly in the time of Hattusili:

KUB 56.28 obv. 5'-8'

5'] ^dIŠTAR ^{URU}Sa-mu-ha <I-NA> ^{URU}U-ri-k[i-na
6']-at nu-za-kán [MUNUS].LUGAL A-NA ^dIŠ[TAR ^{URU}Sa-mu-ha
7' m]a-a-an-mu-kán DINGIR-LUM GAŠAN-YA x[
8']IGI ^dUTU-ŠI :ti-ti-ti-in[
9' -s]i ^{DUG}har-si-ya-al-li x[
10']ku-us UD.KAM sar-la-at-t[a
11'] UD-ti ^{DUG}har-si-ya-a[l-li

...] Ištar of Samuha <in> Urik[ina...] The [qu]een to Iš[tar of Samuha vowed thus: i]f for me the goddess, my lady [...] the eye (of) His Majesty, (its) pupil²⁷ [you heal?...] a *harsiyalli* vessel [I will institute?...] these daily praise-offeri[ngs...] on the day a *harsiya*[*lli* vessel...

The reverse of the tablet contains four vows (rev. 5'-28') concerning a military campaign in which the queen ask the gods to support Tudhaliya. The mention of the king of Isuwa in Kizzuwatna in rev. 6' suggests one historical context, as it was possibly this vassal who failed to support Tudhaliya against Assyria at the Battle of Nihriya.²⁸ Unfortunately the lines are broken and it cannot be determined whether the king of Isuwa is part of the topic or the context of the vow. But like many vassals and officials the king of Isuwa's importance bridged the reigns of Hattusili and Tudhaliya, a certainty in his case since he was married to Puduhepa's sister (or daughter, cf. commentary to the illness vows KUB 15.1 rev. III 48'-53' and KUB 15.3 rev. IV 5'-9' below), and so his presence is not decisive for the purposes of dating. The unusually vivid phrasing of the vow, where the gods are asked to "deliver the lands of the enemy to him" (rev. 9'), to "place in [Tudhaliy]a's hand" the enemy (rev. 14'), and to "spread a net for the enemies" (rev. 16'), furthermore suggests a campaign of conquest. Such rhetoric fits the northern campaigns to recover holy sites from the Kaskaens, but seems out of place in a war to preserve the status quo of some Hurrian buffer states against Assyrian aggression.

²⁷ Against de Roos' translation (p. 271), I prefer to read the word :*tititin* (note glossenkeil) as coming from Luw. *titit-* 'pupil' and not Hit. *titita-* 'nose' (see discussion of this passage under entry for ^(UZU)*titita*-in Tischler HED, Teil III, Lieferung 10, T,D/3, p. 394, where both possibilities are acknowledged). This would allow the sign IGI 'eye', which is transliterated but left untranslated by de Roos, to be read in apposition to :*tititin* in a double case construction of inalienable possession. Alternatively if the IGI sign were transliterated instead as -*si*, it could be read as the 3rd sg. dat. enclitic pronoun ("His Majesty, his :*tititin* (pupil/nose)"), or the 2nd sg. pres. ending of a preceding verb (which would create an asyndetic clause).

²⁸ Though the vassal is not mentioned by name, Bryce, *Kingdom of the Hittites*, 318 considers it "almost certainly the king of Isuwa," following Singer, "The Battle of Nihriya," 110-118.

The third possible nomenclature, that Puduhepa referred to Tudhaliya by his name as prince and by his title as king, is the most difficult to assess, but the distribution of vows made for Tudhaliya by name offers a key. Of the twelve vows made for his name, eleven are for his military success and one is for good tidings (Tašmi-Šarruma, if he is to be included, appears once in KUB 48.123 obv. I 19'-22' where it is determined for him to perform a certain ritual, but the context and purpose are unclear). In contrast, the vows for ^dUTU-ŠI tend overwhelmingly to be illness vows (55), with vows for military matters a distant second (13) followed by the topics of calamity (5), dreams and omens (3), and good tidings (2). It can be assumed that Tudhaliya garnered the same kinds of vows as prince as he would as king, as there is no reason to suppose Puduhepa would be less concerned for the well-being of Tudhaliya before his coronation. He was the chosen successor for most of Hattusili's reign, and the only prince to merit regular mention in the votive corpus even as other princes risk their lives in battle (his older brother Nerikkaili was *tukhanti*, a title translated as 'heir designate' or 'crown prince' that carried significant military responsibilities,²⁹ during earliest years of Hattusili's reign and was perhaps the same one found in the Tawagalwa letter in the Arzawa campaign).³⁰ If Tudhaliya had needed illness vows as prince, Puduhepa would hardly have denied him (unless there was a prohibition against making illness vows for anyone but the sitting king, though this is unlikely given the vows for the son of the King of Isuwa which will be seen in KUB 15.1 rev. III 48'-53' and KUB 15.3 rev. IV 5'-9'). Because Tudhaliya did not need illness vows as prince, being blessed perhaps with a stronger constitution than his father, it is unlikely required many as king.

²⁹ Cf. Oliver Gurney, "The Hittite Title *tukhanti*," *Anatolian Studies* 33 (1983): 97-101.

³⁰ It has been suggested that Nerikkaili may only be Tudhaliya's half-brother, and thus Puduhepa would be favoring her biological son. Cf. Bryce, *Kingdom of the Hittites*, 272 ft. 37 for the literature cited for and against this view. If so, this would only emphasize Tudhaliya's importance to Puduhepa.

To return to the original question, all of the vows by Puduhepa mentioning Tudhaliya by name come from his time as prince, and none of the vows for ^dUTU-ŠI can positively be assigned to him as king. This makes it unlikely that any of the vows for ^dUTU-ŠI date to Tudhaliya as king. Few if any of the illness vows do so given Tudhaliya's seeming healthiness as prince. Most of the military vows are also accounted for. Tudhaliya is not known to have campaigned in western Anatolia, making it unlikely any of the Arzawa vows are for him. Among the texts containing vows for northern Anatolia, KUB 48.119 can safely be assigned to Hattusili based on an illness vow for the eye, and KUB 15.21 mentions the town of Hatenzuwa which was captured by Tudhaliya prior to kingship.³¹ This leaves few opportunities in the remainder of the votive corpus for ^dUTU-ŠI to refer to Tudhaliya. It is possible some of the vows with damaged contexts could date to his reign, but given his marked lack of enthusiasm for making vows, with only one or maybe two attributable to him, the better explanation is that the votive program went into swift decline with his ascension to the throne.

Conclusions on Dating

Based on the above criteria, the eighty-eight vow texts under consideration have the following breakdown: two from the reign of Urhi-Teššub, one from Hattusili III's time as king in Hakmis, forty-six from the reign of Hattusili III and Puduhepa as king and queen in Hattusa, seven dateable only to Puduhepa, two from the reign of Tudhaliya IV, and thirty of insufficient

³¹ See de Roos, *Hittite Votive Texts*, 38. The minor settlement of Hatenzuwa was claimed by Hattusili to have been captured for him by a young Tudhaliya, who was perhaps only twelve years old at the time (see KUB 19.8/9, III 25-31), which should likely be read as propaganda designed to solidify Tudhaliya's position as successor. Given the size of gifts it is unlikely that the author of the vows in KUB 15.21 was anyone besides the king.

context to date. There are an additional nine texts edited in de Roos' volume that do not yield vows and are excluded from the total.

Vows Dateable to Urhi-Teššub

<i>Text</i>	<i>Criteria</i>
KUB 15.5+48.122+KBo 43.66	(see discussion of de Roos) ³²
MERZIFON 3	(possible indirect join to KUB 15.5+?)

Vows from Reign of Hattusili III in Hakmis

<i>Text</i>	<i>Criteria</i>
KBo 9.96(+KBo 41.60	campaign against Egypt and Amurru ³³

Vows Dateable to Reign of Hattusili III (and Puduhepa) in Hattusa

<i>Text</i>	<i>Criteria</i>
KUB 15.1	illness vow
KUB 15.3	illness vow
KUB 15.4	illness vow
KUB 15.6	illness vow (eye), Arzawa campaign
KUB 15.8	illness vow (probable eye illness) ³⁴
KUB 15.9	illness vow
KUB 15.11+KBo 60.99	illness vow
KUB 15.15+56.30	queen, Tudhaliya
KUB 15.18	illness vow (eye) ³⁵
KUB 15.19	illness vow
KUB 15.21	capture of Hatenzuwa
KUB 15.22	illness vow (though queen not preserved)
KUB 15.23	illness vow, Tudhaliya
KUB 15.24	illness vow
KUB 15.28+IBoT 3.125	illness vow
KUB 15.30	illness vow
KUB 31.69	illness vow, Ištar of Lawazantiya, Arzawa campaign
KUB 31.77+48.126	mention of Puduhepa by name, queen vowing for His Majesty
KUB 48.119	illness vow (eye)
KUB 48.123	illness vow, Ištar of Lawazantiya, Arzawa campaign?
KUB 56.12	illness vow
KUB 56.13	illness vow (eye)
KUB 56.15	Arzawa campaign (Piyamaradu)
KUB 56.18	Arzawa campaign
KUB 56.20	prayer of the king for the queen in childbirth? ³⁶

³² See de Roos, *Hittite Votive Texts*, 33-36 for dating and discussion of this interesting text, and again Mouton, *Rêves hittites*, 24-26 for its implications.

³³ See de Roos, *Hittite Votive Texts*, 31-33.

³⁴ Based on the gift of "eyes" as votive objects.

³⁵ Illness mentioned in a fragmentary context in Rs. III, 9'-14'.

KUB 56.21	illness vow (eye)
KUB 56.23	illness vow
KUB 56.27	Arzawa campaign (town of Waliwanda) ³⁷
KUB 56.28	queen, Tudhaliya, Northern Campaign?
KUB 56.31	Arzawa campaign, Tudhaliya
KBo 8.61	illness vow (eye)
KBo 27.60	illness vow (eye)
KBo 55.208	illness vow (probable eye illness)
KBo 55.213	queen interceding for His Majesty
KBo 55.217	illness vow
KBo 55.221	illness vow (eye)
KBo 55.223	illness vow (eye)
IBoT 3.123	illness vow
FHL 186	(topic of É ^d U ^{URU} Manuziya parallel to KUB 15.11+ obv. 2, 12)
Liv. 49-47-42	illness vow
“Touristik”	Ištar of Lawazantiya, eagle statue parallel to KUB 48.126 3’-9’
(CTH 585)	“The Vow of Puduhepa”

Probably Dateable to Hattusili but too fragmentary to use

<i>Text</i>	<i>Criteria</i>
KBo 27.25	illness vow (eye)
KBo 53.112	mention of Babylonian doctor makes dating to Hattusili likely ³⁸
KBo 55.219	illness vow (eye)
Bo 6102	illness vow

Vow Dateable only to Puduhepa (but likely also Hattusili)³⁹

KUB 15.10	queen
KUB 15.26	Ištar of Lawazantiya
KUB 15.29	queen
KUB 56.25+KUB 60.118	Ištar of Lawazantiya
KBo 8.63	Ištar of Lawazantiya
KBo 55.216	queen

³⁶ There are two possibilities for the king and queen, either Hattusili and Puduhepa or Tudhaliya and his unnamed wife. Since Tudhaliya does not seem to make vows independent of Puduhepa, and since Puduhepa retained the title of queen her whole life, and since Puduhepa is unlikely to be giving birth to children after her husband’s death, the king should be identified with Hattusili.

³⁷ The town of Waliwanda appears in the Tawagalawa Letter (KUB 14.3, I 16) as a place where Hattusili stopped to arrange a meeting with Piyamaradu (in Iyalanda) during his campaign to the west. The appearance of this town in the context of a campaign to Arzawa makes it very likely KUB 56.27 belongs to the reign of Hattusili.

³⁸ Following de Roos, *Hittite Votive Texts*, 154 ft. 345.

³⁹ Three texts (KUB 15.10, 15.29, VBoT 75) contain vows made by an anonymous queen for matters other than the health of His Majesty. Though they cannot be corroborated by other criteria to the time of Puduhepa, they will also be dated to her reign given the absence of any other viable candidates.

dependent entries in which a topic is resumed in an abbreviated form, usually with the phrase *kedani=pat INIM-ni ser* ‘because of precisely this matter’. This can lead to chains of dependent entries with unpredictably high concentrations of gifts per line (e.g. KUB 15.21, 1’-17’ for an extreme example).

Even if the individual tablets were restored, the dynamics of the corpus as an administrative archive remains unknown. The very fact the vows are written down means that they were mediated by a scribal bureaucracy (there is no evidence for actively literate Hittite rulers, even one as involved as Puduhepa). But it is impossible to reconstruct a division of labor for the vows between the scribes of the temple and palace because, as de Roos noted in his introduction to the votive texts, most of the tablets were recovered in the early excavations of Hugo Winckler and the findspots are now lost.⁴²

As with all administrative documents there is also the question of how many were retained and how many were discarded. The lack of an internal dating system in Hittite documents is again keenly felt. On the one hand, vows could be kept for some time: at least one text dates from when Hattusili was a local king in Hakmis (KBo 9.96(+)KBo 41.60), with the tablet presumably carried with him to Hattusa or recopied. But are these old vows the exception or the rule? Administrative “metadata” suggests that the survival of older vows was probably not an isolated incident. Some vows are marked as completed (*karū* ‘already’), instead of being erased, which means the administration had reasons for maintaining a record even after the transaction with the gods was fulfilled,⁴³ and the very fact that the corpus survived to be

⁴² de Roos, *Hittite Votive Texts*, 6-7.

⁴³ de Roos, *Hittite Votive Texts*, 7, ft. 16, 17 provides a discussion and list of the attestations of *karū* and its counterpart *nawī* ‘not yet (fulfilled)’, but this list is only partially complete and does not seem to have been updated for the newly edited vows. Here is the full list:

entombed with the fall of the Empire also makes it likely that votive texts were not assiduously recycled. However, the survival of some of the vows does not guarantee that more were not lost, nor can every older vow be identified by internal criteria.

If exhaustive analysis is made difficult by the corpus' state of preservation, an episodic approach organizing vows by events ("episodes") in historical context can yield better results. Instead of estimating that a certain amount of vows made during Hattusili's reign, one would say that "during Hattusili's reign, a military campaign would precipitate this amount of vows, and his periodic illnesses would trigger that amount of vows by Puduhepa," and so forth. From the wealth expended on certain episodes one can get an idea of the *potential* vow budget for any given year in which similar events took place. This can then be measured against the other economic data points discussed in Chapter 2. The result is a series of relative comparisons, where one can weigh, for example, the wealth expended on the illness vows against the yearly tribute from Hittite vassals.

Though the episodic approach simplifies the problem of chronology, there still remains the question of measuring the wealth of the vows themselves. The uneven level of detail in the apodoses makes direct comparisons between vows difficult. Few of the objects mentioned are given with weights and dimensions that would allow for quantification of value. It is possible to see that in general terms gifts come in two sizes, "major" and "minor". Minor gifts usually consist of one or two votive objects made of precious metal and sometimes an offering of livestock amounting to one ox and six to eight sheep. When the dimensions of the votive objects are preserved, they are generally smaller than expected, perhaps being models rather than

karū: KUB 15.4, 15.11+KBo 60.99, 15.15, 15.19, 15.20, 15.23, 15.29, 56.12, 56.22, KBo 8.61, 55.208, 55.221, 55.226

nawī: KBo 9.96(+41.60, 55.219(?))

both: KUB 31.69, 48.119, KBo 34.145

functioning items.⁴⁴ The majority of the vows have apodoses belonging to the minor gift category. Major gifts are a much more heterogeneous group, ranging from the inauguration of a new festival, to the creation of a life-sized statue of the god, to a gift of 100 mina of precious metals, and they are less frequent than the minor gifts.⁴⁵

The size of the gifts are unpredictable from the protases, but in the following analysis of the vows it will be shown that Puduhepa tends to offer many minor gifts while Hattusili gives fewer but larger major gifts, and that the distribution has implications for the economic sectors of the Hittite state.

6.3 Vows Concerning Health and Wellness (The “Illness Vows”)

Vows by Puduhepa for Hattusili (Minor Gifts)

There are a total of fifty-five vows recoverable from the votive corpus in which Puduhepa intercedes on behalf of Hattusili’s health. Most of the vows ask the gods to keep His Majesty alive. Some concern specific body-parts such as the ear (KUB 15.9 rev. III 6’-8’; KBo 55.208 obv.? 6’-7’), the feet (KUB 15.3 obv. I 17-21), the neck (KUB 15.28+IBoT 3.125 obv. II 2’-5’; KUB 48.123 obv. I 8’-11’), the head (KBo 55.208 rev.?), and very frequently the eyes (KUB 15.6 obv. I 17’-19’; 48.119 obv.? 9’-13’, rev.? 8-10; 56.13 obv. 11’-14’, 15’-17’, rev. 9’-13’, 19’-22’; 56.21 7’-10’; 56.23 obv. 1-16; 56.28 obv. 6’-11’; KBo 8.61 5’-9’; 27.60 5’-10’; 55.223

⁴⁴ See de Roos, *Hittite Votive Texts*, 42-48 for discussion of the weights, and the comment that the object seem to be smaller than those from the Egyptian correspondences.

⁴⁵ Outside of the Illness Vows of Puduhepa for Hattusili, where they are treated separately, major and minor gifts will be presented in the same tables, with the major gifts distinguished by having their citations in bold. The criteria for a major gift is inexact, and the reader is invited to make their own evaluation, but in general festivals (but not rituals) are included, as are any large quantities of silver, gold, livestock or deportees, and objects with exceptional dimensions (like statues which are described as life-sized or wearing jewelry of their own; normal statues, which could be as small as the 1 mina of silver (KBo 34.145 6’), are excluded).

6'-15'). Other ailments include fever (KUB 48.123 rev. IV 1-3) and the demon DÌM.NUN.ME (KUB 15.11+KBo 60.99 rev. III 14'-18', 19'-25'). In one case the topic is “the illness of this year” (KBo 55.221 3'-5').

Forty-five of the vows contain what will be classified as “minor gifts”. Most of these gifts consist of one or two objects of metal or stone. Some include livestock, usually one ox and eight sheep. Where weights of the objects are specified they are modest amounts.

Table 11: Minor Gifts (Puduhepa for Hattusili)

Text	Protasis	Apodosis
KUB 15.1 obv. II 13-24	[T]hese oaths, each as determined by oracle—since I am at present not able to fulfill them, while I am behind there, and while I am offering them, if you, Šarruma[] my lord [keep?] His Majesty [from] evil [... and i]f to Hepat, your mother [you... and for] His [Majesty] nothing evil reaches hi[s] body, (and) in no way does it go badly for us, (obv. II 13-23)	For Šarruma, my lord, [1 sh]ield of silver with gold inlay, weight unspecified, I will give. (obv. II 23-24)
KUB 15.1 obv. II 25-27	(see above) And [i]f Šarruma, my lord, lends his [ear] to this word of mine, (and) hears me, (obv. II 25-27)	1 ear weighing 10 shekels of gold, 1 ear weighing 1 mina of silver I will [gi]ve to Šarruma. (obv. II 27)
KUB 15.1 obv. II 28-36	(see above) And if for me you two Šarrumanni deities and one Allanzunni deity who are sprung from the loins of the god, if you hear this my word, and you mention it across to Šarruma, and no evil word finds His Majesty, while his fulfills these oaths, (obv. II 28-34)	“To the two Šarrumanni deities and one Allanzunni diety, for each I will make 1 gold ear (and) 1 silver ear. Weight [not specifi]ed. (obv. II 35-36)
KUB 15.3 obv. I 17-21	Dream of the queen. “In a dream someone says to me: ‘vow thus to NIN.GAL: “If for His Majesty that fire of his feet becomes well soon, (obv. I 17-19)	“For N[IN.GAL] I will make a [t]alla of gold inlaid with lapis lazuli, a whole <i>talla</i> .” [T]o the l[and] of Egypt [they] will send true words. (obv. I 19-21)
KUB 15.4 obv. I 1'-11'	...the queen?] vowed: “If[...] you do not deliver, [...] I will make. But that later [...] If you [keep] His Majesty alive,” (obv. I 1'-4')	...] Strong [weapon]s for him/her/it [...] “But in the tower [...] I will make. [...] I will make. [...] Already (given). (obv. I 5'-11')
KUB 15.6 obv. I 17'-19'	If[...] you make the eyes live, (obv. I 17')	...al]ready standing [...a <i>harsiy</i>]alli vessel of silver I will make. (obv. I 18'-19')
KUB 15.8 obv. I 4'-7'	The queen to the Stormgod of Heaven, (according to) Ms. Zamuwa[t]ti's advice thus] vowed: If the god, my lord, [keeps His] Maj[esty alive], (obv. I 4'-5')	For the god 1 soul of gold, 3 shekels [... 1 p]air silver eyes of 6 sh[ekels] I will make.] (obv. I 6'-7')

Table 11, continued

KUB 15.9 obv. II 1'-11'	"If...you keep him] alive [(obv. II 1')	] and strong weapons [I will make...] he will sate himself [...] because of <i>usantarai</i> [...] from the borders [...] but of that for him [...] And for the god, my lord, [...] For 1 sun-disk [...] but [for 1] sun-disk [...] But that then [...] for the go]d, my lord, 1 bord[er... (obv. II 2'-11')
KUB 15.9 rev. III 6'-8'	the ear [...became s]ick. The queen [vowed thus: "if you heal his ear..."] (rev. III 6')	1 gold ear weighing 10 shekels, [...] and a gold [ear]ring weighing 3 shekels. (rev. III 7'-8')
KUB 15.11+KBo 60.99 obv. II 3-5	...the queen? v]owed [...]I [...] for the life of His Majesty" (obv. II 3)	vowed 1 pair of breasts, gold [...] weighing] 1 mina. Already (given). (obv. II 4-5)
KUB 15.11+KBo 60.99 rev. III 6'-7'	The que]en for the life of His Majesty to (the goddess) Išhara [(rev. III 6')	rev. III 7': an object of gold?, its we]ight not specified, vowed. Already Mr. Kat[apaili
KUB 15.11+KBo 60.99 rev. III 14'-18'	The queen in town of Hurma to the god DÌM.N[UN.ME of] Kumman(ni) vowed: If DÌM.NUN.ME [...] does not seize His Majesty, (rev. III 14'-15')	1 silver <i>huganni</i> , 1 go[ld] <i>hutanni</i> , filled with fine oil [...] His Majesty[...] of gold, 1 mina I will make beforehand. Al[ready] gi[ven.] (rev. III 16'-18')
KUB 15.11+KBo 60.99 rev. III 19'-25'	[I]f DÌM.NUN.<ME> does not further [seize] His Majesty, and does not [r]eturn to him, (rev. III 19'-20')	I will come to Kummanni, and [...] offer to the god. With a finger [...] And His Majesty for you gold [...] I will make beforehand. [...] Already (given). (rev. III 21'-25')
KUB 15.19 obv. 4'-5'	[Saumat]ari of Kaittana. The queen to Saumatari [of Kaittana vowed thus: If the go]d, my lord, will keep his Majesty alive, while[...] (obv. 4')	I will come and [give] to the god, my lord, 1 soul of gold weighing 1 mina. (obv. 5')
KUB 15.23 rev. 17'-19'	The queen to the Sungod of Heaven of Huhana [th]us vowed: If the god, my lord, makes His Majesty live for [year]s, (rev. 17'-19')	I will invoke the god, and for him a [gold/silver?] statue [o]f His Majesty [...] I will make, its weight not specified. [Al]rea[dy given.] (rev. 19')
KUB 15.28+IBoT 3.125 obv. II 2'-5'	...the queen? vowed concerning the <i>a]uli</i> in the town of Zithar[a... if] the <i>auli</i> is fixed, [...] (obv. II 2'-3') ^a	...] of silver (and) gold I will make. [...] its weight I will take to heart. (obv. II 4'-5')
KUB 15.28+IBoT 3.125 obv. II 6'-10'	...for Ištar of] Samuha (he/she) vowed: [if the king and queen?] are alive, [...] (obv. II 6'-7')	...for the goddess?] statues of silver [of the king and queen? I will make. Their eye]s (and) their hands [will be made of gold?, and] it for Ištar of Samuha [...] (obv. II 8'-10') ^b
KUB 15.28+IBoT 3.125 obv. II 11'-15'	The queen? for] Ištar of Samuha vowed thus: [if the goddess my lady f]or His Majesty on this journey/campaign [...], (obv. II 11'-12')	For the goddess, my lady, a hand [...] I will give. The great assem[bly...] they will give. (obv. II 13'-15')
KUB 15.30 rev. III 1'-7' ^c	[...]	"...[silver...] comes. [A breas]t of lapis lazuli and [...]jes of lapis lazuli for the Goddess of the Night [...] they will make in it. Thus Tatti to the queen: "Walwaziti said to me: 'I hope His Majesty recovers: give this breast, as is, to Ištar of Samuha.'" (rev. III 1'-7')

Table 11, continued

KUB 31.69 rev.? 7'-9'	The queen? i]n the town of Uda to Ištar of [Lawazantiya thus vowed: If Hi]s Majesty the illness of this year [... (rev.? 7')	[For the godde]ss 1 year of silver, 1 silver statue (of the) king [I will give. is al]ready (given). The year (and) statue (of the) ki[ng] no[t yet]. (rev.? 8'-9')
KUB 48.119 obv.? 9'-13'	And [if] now they bring the god, my lord, [awa]y from Utruna to Nerik, they will offer [fort]h 1000 sheep to him in the <i>dahanga</i> . And on whichever day for His Majesty the <i>kammara</i> -disease departs from [the eyes], (obv.? 9'-12')	(On that day) I will offer to the god 1 fat ox (and) 8 sheep. [...] Already (given). (In?) the town of Partaparta. (obv.? 12'-13')
KUB 48.119 rev.? 8-10	... after the <i>purulli</i> ya [fe]stival [...] health I will make. And the right eye, when [...] likewise becomes healthy, (rev.? 8-9)	"For the god 1 lion rhyton of gold, [its weight u]nspecified I will make." (rev.? 9-10)
KUB 48.123 obv. I 8'-11'	Whe]n in the town of Zithara (it) struck the <i>auli</i> . [The queen] vowed to Ištar of Lawazantiya: [if the goddess,] my [lady,] makes soft the hand of Pihatarhunta, the doctor, (obv. I 8'-10') ^d	For the goddess, my lady, [a..., it we]ight not specified, I will make. (obv. I 10'-11')
KUB 48.123 obv. II 18'-25'	The queen in the t[own of... vowed: if you keep] His Majesty alive [... (obv. II 18'-19')	1 cow of si[lver/gold (obv. II 25')
KUB 48.123, obv. II 14-18	The queen in the town of Hasa[...] to Ištar of Lawazan[tiya vowed thus: "if His Majesty] becomes healthy," (obv. II 14-16)	then t[o...] desired. Now it [...] separately a <i>kusisi</i> -garment[...] (obv. II 16-18)
KUB 48.123 rev. IV 1-3	...y]early the fever [... (rev. IV 1)	...1 soul of gold [and...so much will be] its weight, I will give. (rev. IV 2-3)
KUB 56.13 obv. 5'-7'	[...] (obv. 5') ^c	1 pa]ir of eyes of lapis lazuli weighing 1 mina, [...] of gold and lapis lazuli <i>hurlaimant</i> [...] (obv. 5'-7')
KUB 56.13 obv. 8'-10'	The queen? to... for His Majesty (in) Tarhuntassa vowed: (obv. 8')	... of silver, 1 <i>uppiyas</i> of gold [...] I will [gi]ve. (obv. 9'-10')
KUB 56.13 obv. 11'-14'	The queen fo]r the sickness of the eyes for the sake of His Majesty vowed: (obv. 11')	... I myself will bring [...] I will [ma]ke, and him first [...] for him/her 1 oil-loaf I will begin to give regularly. (obv. 12'-14')
KUB 56.13 rev. 1'-8'	... "And [...] if for that [...] for the god Pihas]assi of Tarhuntassa vo[wed...] you will make(?)[...]f for His Majesty [...] (rev. 1'-5')	... 1 dream of silver, weighing 2 mina [...an object of go]ld, and breads of gold [...]ed in [...] 1 night of gold, its weight not specified, to the god I will give. (rev. 6'-8')
KUB 56.13 rev. 9'-13'	"...on the advice of?] Mr. Tuttu, lord of the É <i>ABUZI</i> [...] is sick. For his eye [...] If that dream the kneeling [...] (rev. 9'-12')	...1 dream of silver weighing 2 mina, 1 dream of gold weighing 1 mina I will give. (rev. 13')
KUB 56.13 rev. 16'-17'	... but if for His Majesty [...] (rev. 16')	1 ox?] and 8 sheep? of silver I will give. (rev. 17')
KUB 56.13 rev. 19'-22'	...a]rrived at. The queen [vowed thus: "if] the gods, my lords make better His Majesty's eyes," (rev. 19'-20')	[...] 1 pair of eyes of silver (of?) the king [I will make]. (rev. 21'-22')
KUB 56.21 7'-10'	... for His Majesty's life [...] if his] eyes become well, (7'-8')	...a <i>hutl</i>]a ornament[ed...] I will give [(9'-10')

Table 11, continued

KUB 56.28 obv. 6'-11'	The [qu]een to I[š]tar of Samuha vowed thus: i]f the goddess, my lady for me [...] the eye (of) His Majesty, (its) pupil ^f [...] (obv. 6'-8')	... a <i>harsiyalli</i> vessel [...] daily [...] on the day a <i>harsiya[lli]</i> vessel [(obv. 9'-11')
KBo 8.61 5'-9'	i]f the god [heals?] His Majesty's eyes, (5')	... I will [g]ive, and to the god [... 1 p]air of eyes, silver, (weighing) 2 mina [... (6'-9')
KBo 27.60 5'-10'	The queen? in the to]wn of Utruna in a dream to I[š]tar of the <i>hasta[ri]</i> vowed: "if you, the goddess, my lady, for me] sh[ow] justice, [and the eye]s of His Majesty you make fast [... and] you [...], (5'-8')	For the goddess 6 oxen [...] inlaid, 1 silver axe of I[š]tar[...] 1 ox, 8 sheep for the women I will give [... (8'-10')
KBo 55.208 obv.? 6'-7'	When [His M]ajesty had an illness of the ear, (obv.? 6')	1 s]ilver ear, 1 gold ear, weight [unspecified...to t]his god for H[is Majesty (obv.? 7')
KBo 55.208 rev.? 11'-15'	When His Majesty's he[ad was ill. The queen?] thus vowed: "If [...] goes healthily, (and) the illn[ess...]" (rev.? 11'-13')	Eyes of gold (weighing) 1 mina, eye[s of silver? weighing 1? mina], 1 soul of lapis lazuli, eyes [of...] (rev.? 14'-15')
KBo 55.208 rev.? 16'-18'	[The que]en for the life [of His Majesty made a vow] (rev.? 16')	"...harv[est] festival [...] sheep [I will g]ive. (rev.? 17'-18')
KBo 55.217 4'-8'	The queen? to I[š]tar of Samuha thus vowed: ["if the king] and queen (stay) living, (4'-5')	Before [the goddess s]tatues of silver of the king and queen we will make. [...] its eyes (and) its hands of gold [...] the doctor knew. (5'-8')
KBo 55.221 3'-5'	The queen? in the town of ... to] NIN.GAL (of) Kumma[n]ni thus vowed: [...] the illness of this year [(3')	For the sake of His Majesty 2 years of silver, 3 statues of silver [...] in their temple I will bring. Alre[ady (done). (4'-5')
KBo 55.223 6'-15'	...i]n the town of Ussa to the god [...]i]f this which [...]in which month [...] I will see. But the god <i>SĪN</i> [...] If in whi[ch...] of His Majesty, of the right eye [...]i]f whichever matter down [...] but if it for me [...] (6'-14')	I will decorate [...] 1 ox, 2 sheep for <i>ambašši</i> , 1 [...] (14'-15')
IBoT 3.123 1-5	The queen to Kun[iyawanni thus vowed:] if you Kunniyawanni [...] (and) for him that illness you the goddess, my lady [...] (and) you the goddess, my lady, justic[e... (1-4)	1 head of lapis lazuli, 1 soul [of... I will give.] (5)
Liv. 49-47-42 5'-6'	And [i]f you the god, my lord, keep His Majesty alive, (his) healt[h f]ull good, (5'-6')	For the god a ritual [... (6')

^a Cf. KUB 48.123 obv. I 8'-11'.

^b Cf. KBo 55.217 4'-8' for a similar apodosi.

^c That the queen is the probably author of this vow can be inferred from the apodosi. Lines 1'-3' contain the end of an offering for the Goddess of the Night. Lines 4'-7' contain a message from Mr. Tatti, on behalf of Mr Walwaziti, asking the queen to donate a breast to I[š]tar of Samuha for the sake of His Majesty's recovery. There is no paragraph line between lines 1'-3' and 4'-7', so all seven lines probably concern the same topic, namely His Majesty recovering from an illness. The first three lines contain the tail-end of an offering by the main author of the vow. The last four lines can be read as a supplementary gift that Mr. Walwaziti asked Mr. Tatti to pass on to the queen. It is logical that the main author of the vow and the queen are one and the same.

^d Cf. KUB 15.28+IBoT 3.125, obv. II 2'-3'.

^e From the gift of a pair of eyes in the apodosis it can be inferred the topic is probably an eye illness of His Majesty.

^f Against de Roos' translation (p. 271), I prefer to read the word :*tititin* (note glossenkeil!) as coming from Luw. *titit*- 'pupil' and not Hit. *titita*- 'nose' (see discussion of this passage under entry for ^(UZU)*titita*-in Johannes Tischler *Hethitisches etymologische Glossar* (Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, 1977-) where both possibilities are acknowledged).

Vows by Puduhepa for Hattusili (Major Gifts)

Eleven illness vows by Puduhepa for Hattusili contain larger gifts. The protases of these “major vows” are not discernably different from the minor vows, though perhaps skewed towards general prayers for His Majesty's long life and rather than specific illnesses. Four of the vows are large gifts of precious metals:

Table 12: Major Gifts (Precious Metals)

Text	Protasis	Apodosis
KUB 15.1 obv. I 5-10	Hepat (of) Uda. Dream of the queen. The matter of the neck [she] deliver[ed], while in (the dream) ⁴⁶ . The queen in the dream to Hepat (of) Uda vowed thus: “If you, the goddess, my lady keep His Majesty alive, (and) do not deliver him to evil,” (obv. I 5-6)	“I will make for Hepat a gold statue. And I will make a gold rosette for it; they will call it the rosette of Hepat. And I will make a gold pectoral for your breast; they will call it the god's pectoral.” (obv. I 7-10)
KUB 15.1 rev. III 32'-35'	The q[ueen for her? p]erson vowed thus: i[f ... in] a dream already forth [...] my l[ady] in a house [...] you make (and) His Majesty lives, (rev. III 32'-35')	F[or] I[š]tar a stat[ue] of gold I will make. The statue will be equal to I[š]tar of Sahpina. ⁴⁷ I will plate the weapons for her, either in silver or in gold. (rev. III 36'-38')
KUB 15.3 obv. I 5-16	The q[ueen to the god <i>SĠN</i> for the recovery thus vowe[d: “If] you, <i>SĠN</i> , my lord, [giv]e to His Majesty long years, (so that) His Majesty achieves the years which are promised by the god,” (obv. I 5-8)	To the god, my lord, yearly 1 silver cup, and to him 1 gold cup, its weight not specified, I will give. And because there are 12 months in a year, yearly I will begin making 1 year and 12 months of silver and gold. I will determine the weight by heart and commence giving them to the god. But whatever <i>SĠN</i> wills, to that I will be giving the months of silver and gold, whether (in) Urikina or wherever. (obv. I 8-16)

⁴⁶ As de Roos, *Hittite Votive Texts*, 97 ft. 118 notes, the translation of this line is difficult. I have interpreted the phrase *kuwapi anda* ‘while in’ (the dream) as right-dislocated from the main clause “she delivered the matter” (INIM GAM *maniyahta*, in the sense of entrusting the goddess with a petition), emphasizing that the entrusting took place within the dream. This is confirmed by the next clause that specifies the vow also took place within the dream.

⁴⁷ i.e. the statue will be life-sized? (per de Roos' translation, p. 95)

KUB 15.3 obv. I 5-16 is one of few examples of an open-ended or continuous gift. Presumably the queen would give the silver cup, the gold cup, and the year and month symbols (models of the Anatolian hieroglyphic signs?) for as long as Hattusili lived. It is actually surprising that more vows for the health of His Majesty do not take this contractual arrangement, as it seems a good way to guarantee the continued interest of the gods. It could be the problem lay with the attention span of mortals, and not the divine: in KUB 15.11+KBo 60.99 obv. II 13-19 Puduhepa offers a compensatory gift for neglecting the conditions of a similar yearly vow, and promises to begin the regular offerings forthwith. There are other examples in the vows and oracles of divine wrath at forgotten promises, so the pattern of frequent “one-off” gifts might have been safe for the devotee.

The two other vows promise substantial statues made of precious metal, both divine images. Dimensions for these statues are not given, but in KUB 15.1 rev. III 32’-35’ the phrase *ALAM ŠA^d IŠTAR^{URU} Sah-pi-na [ma-si]wa-an* “a statue [equ]al to Ištar of Sahpina” might indicate a life-sized (i.e., human-sized?) object.⁴⁸ A life-size gold statue, even hollow or made of lower quality gold, would be an immensely expensive undertaking. The other statue receives a rosette and pectoral as decoration, which means that even if it turned out not to be as large as the other statue it must also have commanded an extra level of time and resources than the typical votive gift. Judging by the paucity of examples in the votive corpus, they were not lightly promised.

⁴⁸ See entry *masiwant-* in the CHD, especially citation of KUB 21.27 III 39-41 (Prayer of Puduhepa) where a silver statue “as big as Hattusili, its head, hands, and feet of gold” is promised. The interpretation of “a statue [equ]al to Ištar of Sahpina” is not all clear. Perhaps it meant a copy of another, preexisting statue of the goddess?

Table 13 Major Gifts (Festivals and Rituals)

Text	Protasis	Apodosis
KUB 15.1 rev. III 7'-16'	[Dream of the quee]n, the matter (of) the god Gurwasu, when[.... Gu]rwasu while in the dream said [... t]o the queen: “That matter of your husband which you hold in your heart—he will live, and I will give him 100 years.” (rev. III 7'-12')	The queen in the dream vowed thus: “if you do thusly for me, and my husband the king lives, for the god I will establish three <i>harsiyalli</i> vessels, 1 of oil, 1 of honey, 1 of fruit.” (rev. III 12'-16')
KUB 15.24 obv. I 1-6	His Majesty [...] when from the land of Hatti [goes?...], and for them [...] regular festivals [celebrates?...] On whic[h da]y there i[s] the great assembly, [on the day] for the Stormgod of Hatti (the queen?) vowed thus: If [the god, my lord,] keeps alive [His Majesty, (obv. I 1-5)]	I will make a] <i>hal[entuwa]</i> house (for/of) the Stormgod of Hatti. But a gate the <i>hazqaraya</i> -women [...] (obv. I 5-6)
KUB 15.24 obv. I 7-8	(see above)	And the Stormgod of Hatti for precisely that mat[ter...] and [I] will invoke the <i>kaliman</i> . (obv. I 7-8)

The establishment of *harsiyalli* vessels (“pithoi”) in KUB 15.1 rev. III 7'-16' implies a commitment of resources beyond the supply of oil, fruit, and honey. The filling of the *harsiyalli* vessel in the Fall and opening in the Spring was a vital component of the Hittite cultic calendar, and Puduhepa's gift would probably entail compensation for temple staff to carry out the ritual. The verb *dai-/tiya-* ‘set, place, establish’ suggests a long-term (yearly?) commitment to the vow.

In KUB 15.24 obv. I 1-6 it is unclear what making a *halentuwa* house and gate means in terms of labor and materials. The invoking of the *kaliman* in obv. I 7-8 would at least require the personal time and attention of the queen, a precious resource in and of itself.

Table 14: Major Gifts (People and Settlements)

Text	Protasis	Apodosis
KUB 15.11+KBo 60.99 obv. II 13-19	And to (the goddess) Allani because of the House of the Stormgod of Manuziya, 6 [...]for the sake of His Majesty's life I have vowed: (obv. II 13)	I have begun to give [it t]o the goddess yearly, but now, because of that[...] I have never given it. But now[...] I have sent 25 people for the goddess. More[over] I already placed [7] people [here] and 7 people there. I will send it [...] to the goddess. Le[t] it be for the goddess a propitiation. (obv. II 13-19)
KUB 15.11+KBo 60.99 obv. II 19-23	(cont. from previous vow without break) And if His Majesty comes up well from campaign, and it is completely compl[ete] for him, (obv. II 19-20)	then too I will [s]end 6 pe[ople] to the goddess[...] 1 fat ox, 6 sheep, 1 golden soul for kings[hip], for the sake of His Majesty's life I will se[nd.] (obv. II 21-23)
KUB 56.13 obv. 15'-17'	The queen thus] vowed: if for the eye of His Majesty [...] the vows [...] (obv. 15'-16')	[...] I will, and with 1000 sheep. (obv. 17')
KUB 56.23 obv. 1-16	The queen to the Mother Goddess (of) [S]ahhaniya thus v[owed: if His Majes]ty's eyes you cool(?), and my son and daughters who were (there), [you...it...] (obv. 1-4)	I will invoke the goddess to an offering table, [...] inlaid with stone I will make. I will p[late] a column with silver for you, and I will plate an offering table with silver for you. And sons [...] I will [make], or I will make for all of them offering therein, and a column for you above [...] I will restore back. [...] the gods Ummeda, Kattarala, Tarumma, o goddess [...], if they are determined for plating it, [...] (for/in) the town of Siyatta (behind its) wall ^a , 20 horse, 300 deportees I will set[tle...] Who for you (or: who belonging to you) [...] they are [op]pressing [...] with silver, gold, iron, copper, bronze [...] and for you a [...] statue of the queen [...] they will finish. (obv. 4-16)

^a de Roos, *Hittite Votive Texts*, 261 translates the passage ...]^{URU}*Si-ya-at-ta* BÀD 20 ANŠE-*ma*? 3 ME NAM.RA *a-se-s[a-nu-mi]* as “(In) Šiyatta [I] will (build) a surrounding wall (and) settle (there) 300 civilian prisoners [“, apparently relying on a different parsing of the signs constituting “20 ANŠE-*ma*” for recovering a verb of building. My translation attempts to read BÀD ‘wall’ with the city of Siyatta, perhaps in partitive apposition (“the city of Siyatta, (its) wall, I will settle...”, i.e. settling the deportees within the walls of Siyatta and not the surrounding countryside). In the Middle Hittite *Instructions to the BĒL MADGALTI* (CTH 261), concerning the management of settlements on the Kaska frontier, every deportee settler is required to be within the walls by nightfall, and remain there until morning.

Deportees (^{LÜ}NAM.RA, lit. ‘booty’) were civilian prisoners captured by the Hittite army.⁴⁹ They were semi-free persons whose fate was solely determined by the king. Often they

⁴⁹ For overview of this topic, see Harry A. Hoffner, “The Treatment and Long-Term Use of Persons Captured in Battle according to the Mašat Corpus,” in *Recent Developments in Hittite*

were used to endow temples with servants, work royal estates, or settle new towns. From the above vows it appears that Puduhepa was granted control of at least some of His Majesty's deportees. While KUB 15.11+KBo 60.99 obv. II 13-23 uses the more neutral term SAG.DU.MEŠ 'persons', their being sent and placed with the goddess leaves no doubt as to their origins.

KUB 56.23 obv. 1-16 is possibly the most impressive vow of the entire votive corpus. It entails nothing less than the foundation (or enhancement) of a colony with 300 souls, an endowment of multiple offering tables, columns, various metals, and a statue of the queen. The settlement is walled for defense, and the twenty horses are probably destined for military service.

Other Illness Vows by Puduhepa

There are five vows concerning health made by Puduhepa for someone other than Hattusili (NOTE: in this and the remaining sections, major and minor gifts will not be treated separately, and instead major vows will be distinguished by having their citations in bold):

Puduhepa for Herself

Table 15: Other Illness Vows by Puduhepa

KUB 15.1 obv. II 2-4	The queen??] in a drea[m to...] Zababa (of) Urikina thus vowed: "If you, the god my lord, cause me to live," (obv. II 2-3)	"I will plate for you a stele and an offering table." (obv. II 3-4)
KUB 48.119 obv.? 3'-8'	And [if] you, god, make good this unknown disease for me, (obv.? 3')	For the god I will institute some new festival, and I will celebrate a <i>purulliya</i> [fes]tival for you in Hakmis, and [i]n Nerik I will celebrate it separately for you. And [i]f it is determined for me to celebrate it (all) in one place in Nerik, just there I will celebrate [i]t. (obv.? 4'-8')

Table 15, continued

KUB 56.15 obv. II 7-14	And if the god DÌM.NUN.ME [does not seize] me fu[rther (obv. II 7)	for the [...] and for the goddess, my lady, 1 ox, 8 sheep [as <i>ambašši</i>], and 1 ox, 8 sheep as <i>keldi</i> I will give [...] which place with oil fill[ed...] for the goddess, my lady, erected [...] 1 mina I will make. I will [es]tablish it with fine oil [filled], and I will give it to the goddess [(obv. II 8-14)
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Puduhepa seems to have been made of tougher stuff than her husband, and only three vows are preserved where she prays for her own health. KUB 48.119 obv.? 3'-8' would be classified as a "major vow" as it promises the establishment of a new festival (again with yearly connotations?) and the celebration of a *purulliya* festival. The god DÌM.NUN.ME in KUB 56.15 obv. II 7-14 is considered to be a demon of some sort, possibly associated with the difficulties of childbirth.⁵⁰ However this same demon afflicts His Majesty in KUB 15.11+KBo 60.99 rev. III 14'-25'.

Table 16: Puduhepa for Others

KUB 15.1 rev. III 48'-53'	[The queen?] for the [sake of the] son of the king of Isuwa vowed [thu]: if the son [...] comes alive from the [...] illness, (rev. III 48'-51')	I [will.... For the sake of the son] of the king of Isuwa I will give a [da]gger, a spindle, and 1 soul of silver, [its weight unsp]ecified, to the god. (rev. III 51'-53')
KUB 15.3 rev. IV 5'-9'	The queen on which day [...] The queen [made an oath on behalf of] the son of the king of [Isuwa.] "If he from that il[lness comes alive,] (rev. IV 5'-7')	... he will clothe. And for the god [...] I will give." Its weight no[t specified.] (rev. IV 8'-9')

Surprisingly the only child recorded in Puduhepa's illness vows is not her own. Perhaps her children were exceedingly lucky in avoiding the frequent illnesses of childhood, or perhaps her children had grown to adulthood before she was in a position to make vows on their behalf. The "son of the king of Isuwa" would have been important to the Hittite court, being most likely a family member (if the child was Kilušhepa, who was either the sister or daughter of

⁵⁰ Emmanuel Laroche, *Recherches sur les noms des dieux*. (Paris: Maisonneuve, 1947).

Puduhepa),⁵¹ and thereby a living link between the Kingdom of Hatti and a crucial vassal.

Though if the “son of the king of Isuwa” and Ehli-Šarruma, last king of Isuwa and contemporary of Tudhaliya IV, are the same person, Puduhepa’s vows might not have been enough to ensure his full loyalty (see discussion of the Assyrian campaign below).

Illness Vows by Hattusili for Puduhepa

There are only two illness vows by Hattusili, both for Puduhepa. The mention of the son in KUB 56.20 10 and the Mother Goddess in lines 17 and 21 suggest a topic of childbirth, but this would be difficult to square with chronology implied by the absence of vows against childhood illness by Puduhepa. Perhaps the queen and one of the adult royal children have been struck by the same illness. The gifts offered for their recovery are more numerous than usual, involving multiple votive objects, livestock, and the performance of a sacrifice or ritual.

Table 17: Hattusili for Puduhepa

KUB 56.20 7-16	When [His Majesty] in Ussa for the queen [...] offered a propitiatory gift. His Majesty [thus vowed: if the queen] comes away well [...] the son (is) well, (7-10)	1 sun[-disk of gold...] ox statue of gold, 1 day of gold [...] for the queen. 1 day of silver, 1 soul of g[old...] 1 ox, 8 sheep for the Stormgod of Heave[n...] he/she tended to [...] the god, an offer[ing...] he will fulfill. (10-16)
KUB 56.20 17-22	...i]n Ussa the Mother Goddess of the person of the queen[...] “but if the <i>pur[ulli]</i> festival [...] I omit, for me of the soul [...] if/when she c[omes] away well (17-20)	...] which [...] the Mother Goddess of [the person of the queen... (21-22)

Illness Vows – Conclusion

The similarity in size between the diplomatic gifts and the minor vows would allow Puduhepa to use her own funds for at least some of the vows. But the larger gifts, especially the ones involving deportees, show that Hattusili must have been aware of and even complicit in his

⁵¹ See de Roos, *Hittite Votive Texts*, 60-65 for discussion of this name as it appears in the votive corpus and elsewhere, and historical context of the same in Bryce, *Kingdom of the Hittites*, 268.

wife's "vow habit." One might wonder why the royal couple persisted in making vows despite the recurrence of Hattusili's illnesses. Confirmation bias, which can still affect medical treatment today, must have had some role: when Hattusili recovered the positive result would be attributed to the god's intervention. It would be imprudent in any case to withhold gifts to the gods if there was any chance it would help, and there was always the chance that *this* time the illness would be gone for good. Perhaps the many objects whose weights at the time of the vow were "not given" or "to be taken to heart" were enticements for exceptional and permanent results.

6.4 Vows Concerning Military Matters

The second most common topic in the votive corpus is war. Persons and place names give a historical context to most of the military vows and the limited possibilities allow the location of the remainder to be deduced. Hattusili was an experienced commander but he seemed to prefer diplomacy to battle, as evidenced by his peace treaty with Egypt. A secure southern border allowed him to concentrate on stabilizing Anatolia during his reign. His campaigning was restricted to two theaters. In the Lukka lands of western Anatolia, an area referred to somewhat anachronistically by the Hittites as Arzawa (named after a kingdom which had once threatened to supplant Hittite power in Anatolia), Hattusili moved to restore Hittite authority and quell the violence against Hittite subjects. He contested a long tradition of rebellion in the area where local rulers often accepted Hittite vassalage only to pursue their own interests with the collusion of outside powers. Hattusili's Arzawa campaign had a major goal of bringing one such provocateur, the notorious Piyamaradu, to justice. In northern Anatolia dwelled the Kaskaens, a dangerous people Hattusili knew well from his time as ruler of Hakmis. He took pride in wresting from them the holy city of Nerik, proof of his fitness to be Great King of Hatti, and control of the region became a matter of dynastic pride. He assigned a young Tudhaliya to gain experience by

governing the area. He undertook frequent police actions together with his son against the remaining Kaskaen tribes, which can be referred to collectively as the Northern Campaigns.

Hattusili is well represented in the military vows, authoring a total of eight vows (compared to his two for illness). But Puduhepa is deeply involved as well, actually exceeding this number with thirteen vows for her husband. She may have even accompanied her husband on his campaign to Arzawa (see discussion of ^{URU}Ialanda, KUB 56.31 rev. IV 14'-16', in *Dating Criteria* section above). Despite comparable representation in the military vows, the types of gifts promised by the royal couple are different. Puduhepa offers gifts similar to her illness vows, i.e. products of the palace economy: many objects of precious metals (KUB 15.23 obv. 8'-11', 12'-16'; 48.119 obv.? 15'-19'; 48.123 obv. II 11'-17', rev. IV 23-25, 26-28; 56.15 obv. II 25-29, 30-31; 56.28 rev. 5'-12', 13'-15', 16'-20'; 56.30 rev. 4'-7'; 56.31 rev. IV 14'-16'), some celebrations (KUB 31.69 obv.? 4'-11'; 48.119 rev.? 11-18; 56.15 obv. II 15-24), and the occasional livestock (KUB 48.119 obv.? 15'-19'). In the classification scheme of the illness vows most of these offerings are minor gifts. In contrast, Hattusili's offerings are what would be expected from the fruits of a successful campaign: deportees (KUB 15.21 4'-6', 7'-8'), large numbers of livestock (KUB 56.18 obv. 1'-7', 12'-14'), restoration of festivals and cults in conquered areas (KUB 15.21 1'-3', 4'-6', 9'-11', 12'-14', 15'-17'; 56.18 obv. 1'-7'), along with some precious objects (KUB 56.18 obv. 1'-7'; 56.27 3'-10'). Hattusili's gifts resonate with the classic *maltešsar* offering of thanks after returning safely from war, where gifts from the spoils were presented to the gods. In rural Anatolia this would overwhelmingly mean deportees, livestock, and land, but little in the way of gold and silver.

The Arzawa Campaign

The Arzawa campaign is primarily reconstructed from the “Tawagalawa Letter” (CTH 181) and the fragments of Hattusili’s Annals (CTH 82).⁵² In these sources a westerner named Piyamaradu establishes a power base in the lawless and peripheral Lukka lands of Anatolia (classical Lycia, and possibly parts of Caria, Psidia, and Lycaonia). With the encouragement of the Greek kingdom of Ahhiyawa in the Aegean he conducted raids in Hittite territory and captured many prisoners and livestock. Hattusili made an expedition to capture Piyamaradu, and his excursion to Arzawa had the wholesome effect of reassuring the vassal states and reaffirming Hittite sovereignty in the region. Piyamaradu evaded capture after some treacherous diplomacy and fled to the Aegean islands. Hattusili lacked a navy and could only stand at the seashore and compose a frustrated letter to the king of Ahhiyawa whom he believed to be complicit in the whole affair. Thus the campaign was a mixture of success and failure. It stopped the raids and stabilized the Hittite vassal system in western Anatolia (Tudhaliya would not need to campaign here during his reign), but it also left Piyamaradu a free man and failed to recover the people and booty he seized.

Table 18: Military Vows by Puduhepa (Arzawa)

Text	Protasis	Apodosis
KUB 15.6 obv. II 10’-13’	The queen in the town of Kat[apa to the god...] thus v[owed]: “If [...] for the campaign to the land of [A]rzaw[a...] the land of[...] (obv. II 10’-13’)	[...]
KUB 31.69 obv.? 4’-11’	[If you, Išta]r of Lawazantiya, my lady, [r]un [before] His Majesty in the l[and of Arzawa], (if) you dress your clothing like a man, [or if like a woman] you dress, your clothing on hi[s] body[...] (if) for His Majesty you strike forth the land of Arzawa. (obv.? 4’-7’)	“When they begin to dress a [man...], for you they will begin to dress your[...] And as a woman for you [...] they will begin to [...], and a festival for you a man (of?) god[...], or a ritual I will take to heart. (obv.? 8’-11’)
KUB 48.123 obv. II 11’-17’	The qu[een...] your [...] matter of the land of A[rzawa?...] tended to ^a [...] (obv. II 11’-14’)	... and weapons [of/to him...] a statue of silver [...] Mr. Pihatarhunta [...] (obv. II 15’- 17’)

⁵² For history of scholarship concerning the connection of these two texts, see Oliver Gurney, “The Annals of Hattusili III,” *Anatolian Studies* 47 (1997): 132-8

Table 18, continued

KUB 48.123 rev. IV 12-22	...the town of Manay]ara away, in the land of Kudupsassi [...] the queen in the town of Manayara [dreamt] and evil dream. [...] arrived. [The queen to Ištar of Lawaz]antiya vowed thus: if [you, the goddess, my lady, a bad death for His Majesty] and for the armies do not [allow, (and) in th]at field before His Majesty [you will run, and for him the enemy] you will slay. His Majesty and the armies [...] in front good fortune [... (rev. IV 13-20)	...] I will enact, [and...] I will [make]. (rev. IV 20-22)
KUB 48.123 rev. IV 23-25	...if in the midst of] the armies an ev[il deat]h [...] a shield[... (rev. IV 23)	...] for the god(dess) a shield, a lion [of gold on it I will em]boss[(rev. IV 24-25)
KUB 48.123 rev. IV 26-28	if [...]the armies of H[atti] and His Majesty [...] you [protect?], (rev. IV 26-27)	Fo[r the god(dess) a ...], its weight n[ot specified] I wi[ill make.] (rev. IV 27-28)
KUB 56.15 obv. II 15-24 ^b	The queen to the sea thus [vowed:...] if you the sea, my lord, for me to the gods [intercede?], you [...] Piyamaradu for me [...], he does not escape me [... (obv. II 15-19)	] which offering they are giving [...] which river is designated for the offering [...] and for which gods [...] was alive. For those ones[...] he/she will crumble a thick bread [(obv. II 20-24)
KUB 56.15 obv. II 25-29 ^c	...of] Kummani: if Piyamara[du...] from the region you siez[e... (obv. II 25-26)	...] of gold, a bird or gold, perio[d of gold...] and Piyamaradu [...] (obv. II 27-29)
KUB 56.15 obv. II 30-31	(see above) if...for the] s[ake] of [t]his matter precisely [...] (obv. 2, 30)	...] a period of gol[d (obv. 2, 31)
KUB 56.31 rev. IV 8'-11'	[The quee]n to the goddess GAZ.BA.A.A [th]us vowed: [if you, the goddess, my l]ad[y] run before His Majesty, because I have already vowed to the goddess, (and) I have been seeing the goddess by dream (about?) the matter... <text becomes corrupt after this point> (rev. IV 8'-11')	[...]
KUB 56.31 rev. IV 14'-16'	The qu[een] in the town of Ialanda [<i>sic</i>] to the River S[etarpu thus] vowed: If you, the River Setarpu, for me for [...] approach the god (and) run before His Majesty [...] (rev. IV 14'-15')	A silver statue (of) the god, its weight not specified, I will make [...] (rev. IV 16')

^a Or perhaps the literal meaning of “he went forth and back” in this case?

^b It is surprising that the queen uses the first person construction in “he does not escape me” (*UL-as=mu=kán isparzazi*). Could there be a nested quotation with the speaker actually the king?

^c Though it is likely the queen is still the speaker, KUB 15.1 rev. III 18'-31 shows that the king and queen can make vows, one after the other, on the same topics.

Puduhepa's vows for the Arzawa campaign are divided between those wishing for the general good fortune of the army (victory over the enemy, lack of sickness, etc.) and vows for a specific result: the capture of Piyamaradu. The success of general vows is difficult to measure.

How many soldiers can get sick, or how many can be lost to the enemy before a vow has failed? The vow maker would likely be hesitant to withhold gifts and risk the god's anger in the case of mixed results. However, the capture of Piyamaradu presents a clear binary: he is either caught or he is not by the end of the campaign. Given the historical evidence (it seems the Ahhiyawan king never got back to Hattusili), KUB 56.15 obv. II 15-24 and KUB 56.15 obv. II 25-29 are unambiguous failures. Of course the Hittites might have been hesitant to take these vows "off the books". Gods can work in mysterious ways, and there is always the chance Piyamaradu would fall into their hands at a later time.

Table 19: Military Vows by Hattusili (Arzawa)

KUB 56.18 obv. 1'-7'^a	[...] (obv. 1')	...”In the lan]d of Arzawa for me[... the land] of Hatti the temp[les...] but the city of Hupisna [...] that much gold [...] and the land of Arzawa for you [...] Yearly 10 ox, 100 sheep [...] (obv. 2'-7')
KUB 56.27 3'-10'	...to the Sungoddess o]f Ari[nna...]His Majesty[...] of the offering table [...] you hear (of?) the campaign of the land of Arzawa [...] I, His Majesty, will arrive in the town of Waliwanda [...] they do not find [...] who is [...] (3'-9')	...] I will give, but a horn which is inlaid with stone [...] I will give. (9'-10')

^a The assignment of this vow to Hattusili is based on his being the author of the next vow starting in KUB 56.18 obv. 8'.

KUB 56.18 obv. 1'-7', if it can be assigned to Hattusili, seems to involve the endowing of temples, possibly in Hupisna. The phrase “that much gold” (GUŠKIN *apinisuwanda*) in obv. 5' is a correlative, referring to an amount probably discussed in the break of the previous line. Given the military context, a reasonable restoration might be: “[however much gold I seize], that much gold [I will give to the temples/gods]”. The gold, the mention of “the land of Arzawa for you”, and yearly gifts of livestock fit the hypothesis that Hattusili is promising offerings of thanks after campaign.

Northern Campaign(s)

After Hattusili pacified northern Anatolia during his brother's reign, he began a program of resettlement of the towns with loyal Hittite subjects (cf. the settlement of Tiliura, CTH 89) and refurbishment of the temples, especially at Nerik (CTH 90). This process was likely incomplete by the time he took the throne in Hattusa, and so he assigned his son Tudhaliya to finish the task. Regular campaigns were necessary to subdue the Kaskaens and secure the borders, and Hattusili probably accompanied his son on these campaigns during the early years, though he was careful to ascribe the military victories to Tudhaliya.⁵³

Table 20: Military Vows by Puduhepa (Northern Campaign)

KUB 48.119 obv.? 15'-19'	...] dying was established. The queen to the Stormgod of Nerik [thus vowed: If] you, the god, my lord, listen to me, (and) in the midst of the army [there is no dying...?] (obv.? 15')	[Fo]r the god, my lord, 1 silver shield [... and another object of s]ilver, its weight not specified, 1 ox (and) 8 sheep I will give. [...in whi]chever place the queen wishes[... The in]voking is not yet (given). (obv.? 16'-19')
KUB 48.119 rev.? 11-18	But [no]w, (going back to) that, (namely) which armies Sahurunuwa and LUGAL-as- ^d LAMMA lead, if they subsequently come back safely, even if they do (i.e. accomplish) absolutely nothing, [...] but if they come back safely, (rev.? 11-13)	Sahurunuwa will invoke separately the Stormgod of Nerik of the Campaign, ^a and LUGAL-as- ^d LAMMA will invoke (him) separately while stopped. ^b But which officers and armies (are there), they will divide equally, and half will step behind Sahurunuwa, and half will step behind LUGAL-as- ^d LAMMA. (rev.? 13-18)

^a de Roos, *Hittite Votive Texts*, 212 translates “then for the sake of the campaign shall [Sa]hurunuwa the Stormgod of Nerik invoke separately...” while van Gessel, *Onomasticon* (Part II), p. 783 has ^dU^{URU} Nerik ŠA KASKAL-NI as a separate entry (only occurring in this text).

^b GUB-za “standing”, i.e. when the army is not moving. de Roos, *Hittite Votive Texts*, 212 translates as “after his arrival”, reading GUB-za as ablative. There seems to be a contrast between when the two commanders invoke the god. Sahurunuwa does so perhaps while the army is still on the road, and LUGAL-as-^dLAMMA while the army is camped.

Most of Puduhepa's vows involving the Northern campaigns concern her son Tudhaliya in a separate section below. Two military vows which do not specify Tudhaliya appear in KUB 48.119, a tablet with a strong northern Anatolian context. The appearance of illness vows in

⁵³ cf. Bryce, *Kingdom of the Hittites*, 296 and his discussion of KUB 19.8//9 and the conquest of Hatenzuwa which had eluded Hattusili.

KUB 48.119 obv.? 3'-8' and 9'-13', the former promising a the celebration of a festival in Hakmis and Nerik and the latter referring to the transplantation of a god from Utruna to Nerik, show that Nerik is fully under Hittite control thus dating the text Hattusili's reign as Great King (the appearance of Sahurunuwa, a well attested figure who spanned the reigns of Hattusili and Tudhaliya,⁵⁴ in KUB 48.119 rev.? 11-18 confirms the dating). The first military vow on the tablet is unremarkable: KUB 48.119 obv.? 15'-19' asks for protection against illness and offers a minor gift of silver objects and livestock. But the second vow, KUB 48.119 rev.? 11-18, has Puduhepa promising what is in essence a military parade. There is no indication that the speaker has changed between this vow and previous, which was authored by the queen, but can it be that Puduhepa was indeed so involved with the army that she could orchestrate a martial display, down to the grouping of the officers and the disposition of the troops? If so, taken with her presence deep in western Anatolia during the Arzawa campaign, and her request that the gods "not allow Piyamaradu to escape *me* (KUB 56.15 obv. II 15-24)", it seems Puduhepa was indispensable to her husband in more than just in the realm of diplomacy and religion

Table 21: Military Vows by Hattusili (Northern Campaign)^a

KUB 15.21 1'-3'	Because of precisely [this] matter: if I[štar...] (1')	... I will make. I will establish festivals for you. [...] festival of autumn, festival of spr[ing]. (2'-3')
KUB 15.21 4'-6'	Because of precisely [thi]s matter: if [I conquer] the enemy, (4')	For you statu]es I will make. Festivals of ol[d I will re]est[ablish, and de]portees for you I will give. (5'-6')
KUB 15.21 7'-8'	[Because] of precisely [this] matter: [(7')	...]and a deportee [I will give to you. (7'-8')
KUB 15.21 9'-11'	If] because of precisely [t]his matter: will I conquer the enemy? (9')	... and the statue of the god I will restore. [...] I will [a]sk. They will make it so. (10'-11')
KUB 15.21 12'-14'	And [if] because of precisely this [matte]r: will I conquer the enemy? (12')	[A statue of the god] I will make. 1 ox, 1 sheep, 1 he-goat, ½ <i>SUTU</i> porridge [I will give. A festival of a]utumn and festival of spring th[us (13'-14')
KUB 15.21 15'-17'	If in the town of] Hatenzuwa, [because of] precisely this matter: (15')	[A statue of the go]d I will make good, [...] I will make. For you festivals [I will] es[tablish. (16'-17')

⁵⁴ For prosopography see introductory materials to Fiorella Imparati, *Una Concessione di Terre da Parte di Tudhaliya IV* (Paris: Klincksieck, 1974), especially pp. 11-14.

^a The vows of KUB 15.21 1'-17' are linked together by the phrase “because of precisely this matter” (*kedani=pát INIM-ni ser*). The identification of the speaker as the Hittite king is based on the first person use of “will I conquer the enemy?” (^{LU}KÚR-*za tarhmi*) in 9' and 12'. The identification of the king as Hattusili is based on mention of the town of Hatenzuwa (see dating criteria of this text).

It is unclear whether the mention of Hatenzuwa as the possible location of festivals means that the vows of KUB 15.21 postdate, and were not occasioned by, the town's capture. Hattusili again offers celebrations, renovations, and deportees. The general theme of creating new festivals and resurrecting the old is especially poignant in the context of northern Anatolia. The region was the heartland of Hattic religion in the Old Hittite kingdom and its loss in the Middle Hittite period was still keenly felt two centuries later.

Military Vows mentioning Tudhaliya

The distribution of Tudhaliya's name in the votive corpus was remarked upon in the discussion of dating criteria. If the dating is correct, the twelve vows concerning Tudhaliya (and certainly the extra two concerning Tašmi-Šarruma) come from before he was king. All were made for him by Puduhepa and almost all concern military matters.⁵⁵ He is the only prince to receive military vows, confirming his unique importance in to Hattusili and Puduhepa. The vows are of the “minor gift” type offering small objects of precious metal.

Table 22: Military Vows Mentioning Tudhaliya (Puduhepa)

KUB 15.23 obv. 8'-11'	If you, the god, will run before Tudhaliya, (obv. 8'-9')	For the god I will make a Hurrian shirt of copper and gold, and later a golden earring. (obv. 10'-11')
KUB 15.23 obv. 12'-16'	(see above)	For the priestess of Kussara [...] for precisely that matte[r], for the sake of [...] a gold necklace I will make. (obv. 12'-16')

⁵⁵ The exception is KUB 56.31 rev. IV 23'-26', in which Puduhepa seems to ask to hear good tidings about Tudhaliya. However, it cannot be ruled out that these tidings are related to a military campaign.

Table 22, continued

KUB 56.28 rev. 5'-12'	[Dream of the queen.] "In a [d]ream the queen in the town of Anasip[a...] the king of the land of Isuwa in Kizzuwatna [...] I will be vowing for that one: [if the goddess, my la]dy for Tudhaliya you [run in front], (and) give over the lands of the enemy [...if you?...] the lands of the enemy (as if they were) bee : <i>tuwanta</i> 's [, (rev. 5'-10')	For the goddess silver : <i>tuwanta</i> 's [...] and] a : <i>helwati</i> of gold, its weight not specified, I will make. (rev. 11'-12')
KUB 56.28 rev. 13'-15'	[If the goddess, my lady] for the enemies you set a period, [and in Tudhaliy]a's hand you place (them), (rev. 13'-14')	[For the goddess 1 p]eriod of silver (and) a bird of gold, its weight not specified, I will make. (rev. 15')
KUB 56.28 rev. 16'-20'	[If the goddess, my lady] for the enemies you place a net, [and the enemie]s as if with a net [...] and if] my lady for Tudhaliya [you run in front, (rev. 16'-19')	[For] the goddess a net of silver [...] I will make. (rev. 19'-20')
KUB 56.30 rev. 1'-3'	[If...you] ru[n in front...] the god [...] good [(rev. 1'-2')	<i>kunz</i>]ikannahisa and implemen[ts I will give. (rev. 3')
KUB 56.30 rev. 4'-7'	(see above) [T]o Šarruma of Urikina [for the sake of precisely this matter?] (rev. 4')	1 hand of gold I will make [...] I will fasten it on the breast [...] for the god an offering [...] (rev. 5'-7')
KUB 56.30 rev. 10'-11'	(see above) [...] (rev. 10')	... <i>kun</i> [zikann]an[...] (rev. 11')
KUB 56.30 rev. 12'-13'	(see above) For Šar[rum]a of [...] (rev. 12')	<i>kunzikanna</i> [hisa (rev. 13')
KUB 56.30 rev. 14'-19'	The queen to [...thus vowed:] if Tudhali[ya...] on which campaign [...] you run [in front], (rev. 14'-17')	I will] offer [...] and for him anoth[er... (rev. 18'-19')
KUB 56.30 rev. 20'-24'	(see above) To Ištar the (morning) star [for the sake of precisely] t[his matter:] if Tudhali[ya...] of the queen [...] (rev. 20'-22')	[I will] offer [...] and for him anoth[er... (rev. 23'-24')

Other Military Vows of Puduhepa

There is one military vow that cannot be securely assigned to a specific campaign. If KUB 56.30 and 15.15 are joined, it is possible the vow concerns an army led by Tudhaliya, making a northern campaign the likely context. The type of gift suggests Puduhepa as its author.

Table 23: Other Military Vows of Puduhepa

KUB 15.15 rev. IV 4'-9'	...in the m]idst of the army [...]vowed: If [...]the bad] dying does not occu[r... (rev. IV 4'-6')	...]1 soul of silver, 1 justice [of silver...] and I will invoke the god, for who[m...] 1 ox, 8 sheep, (and) silver (and) gold. ^a Already (given). (rev. IV 7'-9')
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^a de Roos, *Hittite Votive Texts*, 172 translates “1 ox (and) 8 sheep (of) silver (and) gold,” but I am not sure that the silver and gold must modify the ox and sheep, being that an offering of 1 ox and 8 sheep (the living animals and not metal figurines) seems to be a customary gift in many vows.

Military Vows – Conclusion

The gift pattern seen in the illness vows is strengthened by the more numerous military vows by Hattusili. The king is quick to offer the products of the land and the results of its manpower to the gods, while Puduhepa deals in gold and silver. It was suggested that the source of these precious objects was her diplomatic and tributary income, but her growing number of vows stretches credulity that her personal funds were sufficient. It seems she is spending her husband’s diplomatic income too, regularly and not just for the major vows. Hattusili’s offering of livestock and festivals is beginning to look like no coincidence, but evidence of a conscious division of resources between the king and queen.

6.5 Vows Concerning Dreams and Omens

Dreams were a way of receiving direct communication from the gods, especially for requests or warnings, and were not just welcome but sought in rituals designed to encourage “good dreams” (a process termed incubation after parallels from the Classical world).⁵⁶ Incubation rituals for the queen are evidenced in two vows, one in which she asks for the god to cause her to sleep in bed (KUB 48.123 obv. II 19-21), and another in which Hattusili asks for a

⁵⁶ Cf. de Roos, *Hittite Votive Texts*, 19-21. For all thing dream-related, see introductory chapters and editions of Mouton, *Rêves Hittites*. Almost all of the passages in the votive texts involving dreams are discussed therein.

“pure bed” for the queen (KUB 15.15 obv. I 3-7).⁵⁷ The latter vow is in the context of “the seventh day”, which taken with the mention of EZEN₄ in the next vow means it probably belongs to a festival (fitting well with de Roos’ suggestions that stimulated dreams were a component of the festival calendar for the Hittite royals). Another pair of dreams in KUB 15.1 obv. II 47-52 and KUB 15.19 obv. 12’-13’ come from the “days of the Festival of the Torch.” In the vows Puduhepa asks that His Majesty not come to misfortune on her account. Was she afraid of making a mistake during the ritual?

In terms of gifts, Puduhepa again promises votive objects of precious metal and Hattusili offers deportees and buildings in addition to any gold and silver. Noteworthy is Puduhepa’s gift of a statue of His Majesty “under the wings of an eagle” (KUB 48.126 3’-9’; “Touristik” obv. 9-14: does this phrase refer to the winged sun-disk found above kings in Hittite iconography?), and the building and endowing of a temple(?) with forty deportees by Hattusili.

Table 24: Vows Concerning Dreams and Omens (Puduhepa)

Text	Protasis	Apodosis
KUB 15.1 obv. II 5-10	Šarruma of Urikina. When in a dream some young men were confining the queen in Iyamma in the back of the <i>tarnu</i> house. (obv. II 5-8)	The queen in the dream vowed 1 <i>tarnuza</i> house of gold to Šarruma of Urikina. (obv. II 8-10)
KUB 15.1 obv. II 37-41	Šarruma of Laiuna. When in a dream some young men were confining the queen in Laiuna in the back of the <i>tarnu</i> house. (obv. II 37-40)	The queen in the dream vowed 1 <i>tarnuza</i> house of gold to Šarruma of Laiuna. (obv. II 40-41)
KUB 15.1 obv. II 47-52	In a [d]ream the [qu]een in the days of the Festival of the Torch, to the divine Queen of Tarhuntassa made a plea [th]us: “If His Majesty does not come to misfortune by anything on my account,” (obv. II 47-48)	“I will [...] the divine Queen of Tarhuntassa, and for the divine [Queen of Tarhuntassa [... min]a silver, 1 [...] silver [...]ilver [...]” (obv. II 48-52)

⁵⁷ See the term *suppa ses-* ‘pure sleep’ in Mouton, *Rêves Hittites*, 27-28 and discussion of therapeutic incubation in *ibid.* 70-74. de Roos, *Hittite Votive Texts*, and Mouton, *Rêves Hittites*, 45

Table 24, continued

KUB 15.19 obv. 12'-13'	[In a dream] the queen for the days of the Festival of the Torch, to Saumatar[i] made [a prayer thus]: "If for His Majesty from nowh[ere] on my part [does it go unfavorably]" (obv. 12')	["T]o Saumatari I will give 1 soul of gold weighing 20 shekels." (obv. 13')
KUB 48.123 obv. II 9-13	The queen in the town [of...vowed:] if Talm[i-teššub...] and the statue of Urhi-teššu[b...] made. (obv. II 9-12)	But now[...] of silver I will make, and [...] (obv. II 12-13)
KUB 48.123 obv. II 19-21	And if you, the goddess, my lady, for me [...] you cause to sleep in bed, and (obv. II 19-20)	then (in the) bedroom bed[s they will...] (obv. II 21)
KUB 48.126 3'-9' ^a	[Dream] of the queen, matter of the eagle [...]while in (the dream). [...] "If for His Majesty [...] which ones the goddess Pirinkira [...] (3'-6')	With a <i>musnuwant</i> -stone[...] I will place, and which eagles[...]under the wings (of) the eagles, and a statue of the king[(7'-9')
KUB 56.31 obv. I?, 3'-7'	...for the divine] Earth-roads, for the sake of precisely this matter [...] (obv. I?, 3')	... I will give. To the male god (and) female god of the divinity[...an object of] colorful ^b gold I will make. At which moment [...] he begins to march [...] they will put in order, then [...] (obv. I?, 4'-7'):
"Touristik" obv. 9-14 ^c	Dream of the queen?] in a sitting bed [...the queen in the dre]am vowed thus: "if[...] Iš]tar of Lawazantiya which[...] (obv. 9-11)	"with a <i>mu[snuwant</i> stone[...] I will say. And whi[ch] eagles [...]w]ings of an eagle (and) a statue of the k[ing I will make. (obv. 12-14)

^a Cf. "Touristik" obv. 9-11.

^b Reading GÜN.A 'speckled, colorful' (see Mark Weeden, *Hittite Logograms and Hittite Scholarship* 54 (Wiesbaden: Harrassowitz, 2011), 506) instead of DAR.A=DAR.RA 'reduced' contra de Roos, *Hittite Votive Texts*, 282.

^c Cf. KUB 48.126 7'-9'

Table 25: Vows Concerning Dreams and Omens (Hattusili)

KBo 8.63 obv. I 3'-8'	Which matter His Majesty kne[w...] for the gods Ea and Al[...] but they will determine by oracle a place, and in which plac[e is designated? (obv. I 3'-5')	there?] I will build, and then it with deportee[s I will endow?...] 1 silver rhyton weighing 1 mina, 1 li[on] rhyton [...] 40 deportees I will give. I will ask the great <i>tapri</i> . (obv. I 6'-8')
KBo 8.63 obv. I 9'-15'	Which matter of the town of Sapla His Majesty knew, wh[ich...], that matter he will administer to. Ištar of La[wazantiya...]you will arrange (it) well. (obv. I 9'-11')	For Ištar of Lawaz[antiya...] I will build, and then with silv[er...]the <i>purapsi</i> -priest compensa[te...] determined [...] (obv. I 11'-15')
KUB 15.15 obv. I 3-7	[To] the Stormgod of Nerrik thus [vowed:] for the queen [...] a pure be[d... (obv. I 3-4)	On the 7 th day, [Išta]r, my lady [...] and a statue of the queen [...] to the god(dess) I will g[ive.] (obv. I 5-7)

6.6 Vows against Calamity

Some of the vows in the corpus concern calamities such as “dying” (probably from a plague: KUB 15.1 obv. I 19-28, 29-37; 56.12 5’-10’), fire (KUB 15.1 rev. III 18’-21’, 23’-26’, 27’-31’), famine (KUB 15.11+KBo 60.99 obv. II 5-9), and the hazards of travel (KUB 15.11+KBo 60.99 rev. III 1’-5’, 8’-12’; KUB 56.25+60.118 rev. IV 1’-7’, 8’-9’, 10’-13’). Instead of being for protection against famine or fire in general (which can threaten any time), the vows seem to be reactions to specific events or warnings and are thus fewer in number than one might otherwise expect for such dire matters.

There is a strong connection between the topic and gifts in the vows—a model of a city if Ankuwa is spared full destruction, a model of a team of horses and a chariot if the horses avoid damage, a *harsiyalli* vessel of grain if the earth is productive, and a shield for protection against illness and invasion. It is noteworthy that for the city of Ankuwa in KUB 15.1 rev. III 18’-31’ the gifts from the king and queen are exactly the same, and do not observe the usual distribution of precious metals and products of the land.

Table 26: Vows Concerning Calamity (Puduhepa)

Text	Protasis	Apodosis
KUB 15.1 obv. I 19-28	The queen to Šarruma (of) Uda [t]hus vowed: If the mountain [...], my lord, holds His Majesty alive, (and) life [...] (and) later nothing [...] in the midst of the lands, in the midst of the army, in the mi[dst of...] the dying becomes better, (and) you do not allow the bad dea[th, (obv. I 19-25)	For [Šarruma] a <i>harnai</i> ^a in Uda [...] Either a <i>harnai</i> of [...] or of (temple) person[nel... (obv. I 25-28)
KUB 15.1 obv. I 29-37	The queen for the sa[ke] of the dying [to the god...thus vowed:] “If [...] in the midst of the land [of ..., and in the midst of the light troops] and the midst of the heavy troops [...] the prince, the lord [there is no dying? ...] if of [...] arrives. But if [...] the evil death [...] nothing [...] (obv. I 29-37)	[...]

Table 26, continued

KUB 15.1 rev. III 23'-26'	The queen vowed thus to the Stormgod of Heaven: if the city of Ankuwa escapes, and does not burn down completely, (rev. III 23'-24')	For the Stormgod of Heaven I will make 1 silver city, its weight not specified. I will (also) give 1 cow and 8 sheep. (rev. III 25'-26')
KUB 15.11+KBo 60.99 obv. II 5-9	...the queen??]to (the goddess) Allani vowed: O goddess, my lady, because the [dark] earth is arrested, and the grain is bound, [i]f you, my lady, loose the dark earth (and) the grain becomes good, (obv. II 5-7)	For the goddess I will pour a <i>harsiyalli</i> vessel in Hattusa and Hakmis. "But the storage vessel I will take to heart." (i.e. I will determine) whether they should open from the palace, or they should send some lord. (obv. II 8-9)
KUB 15.11+KBo 60.99 rev. III 1'-5'	...]Fo[r (the goddess)] Allaziyas[i...vowed: if] the children from the land of Kummam[i...ar]rive (rev. III 1'-3')	For the goddess, my lady, 1 <i>pul</i> [<i>puli</i> of silver?, 1] <i>pulpuli</i> of gold, its weight not specified [I will give...] already Mr. Katapaili. (rev. III 3'-5')
KUB 15.11+KBo 60.99 rev. III 8'-12'	If/when?] we, His Majesty (and) the queen, from the land of Kummanni [...] arrive, (rev. III 8'-9')	for the goddess because [...] I was a <i>allinarali</i> -woman, [...] <i>allina(ra)li</i> -women I will designate, [...] to the goddess, my lady, I will give. (rev. III 9'-12')
KUB 15.22 3'-11'	...the queen?] in the town of Arinna to make a prayer [... thu]s vowed: Wanza, my lady, the [matter?] of taking to heart [...] you are taking to [h]eart. If for me for the Sungoddess of Arinna, my lady, [in the land]s of Hatti you do not allow the weapon of the enemy, (and) for the lands of Hatti [...by no such ev]ent arrives, and for them by no such event upend[s...] for the person of His Majesty the matter of dying comes no further, if the land [of...]the lands of Hatti, in the heart of the palace and for the person of His Majesty health[is allotted?... (and) if you the god]dess, my lady raise a shield against evil, (3'-10')	For the goddess, my lady, a sh[ield of silver?], a gate of silver I will make. Its weight I will take to heart. (10'-11')
KUB 56.12 5'-10'	The queen?? to L]elwani thus v[owed: ...]down from Hattusa [...if you, the goddess, hold up a] shield [agai]nst illness, (5')	[For] the goddess a shield of silver I will make. [...] 8 sheep in the temple [I will] purify. [...]likewise I will libate. [...]the <i>upititalla</i> -men a second time afterwards [... The shield? is] already (given). The sheep and <i>upititalla</i> -men [not yet?] (6'-10')
KUB 56.25+60.118 rev. IV 1'-7' ^b	...concerning the matter?] of the damage (to the) horses ^c [...] The queen to the god [...] of Arusna [vowed thus: "i]f you, the g[od], my [lor]d, cause me to live, [and] the damage (to) the hors[es] for His Majesty goes [...] far away, (rev. IV 1'-5')	For [the god] my lord a harnessed (team) of silver, [its weight] not specified in [Aru]sna I will give. [Alo]ngside I will [gi]ve 1 ox, 8 sheep. (rev. IV 5'-7')
KUB 56.25+60.118 rev. IV 8'-9'	(see above) But [i]f [you make] them healthy [and] for the sake of precisely this matter of the campaign [you... (rev. IV 8')	... I will give. (rev. IV 9')

Table 26, continued

KUB 56.25+60.118 rev. IV 10'-13'	(see above) ...the queen to Iš]tar of Lawazantiya for precisely [th]is matter, (rev. IV 10')	...] (of) gold, weighing 1 mina, 1 chariot (and) [harne]ssed (team) of silver [its weight] not specified, 1 ox and 8 sheep i[n] Lawazantiya [...] I will [gi]ve on the spot (or: I will give in its place). (rev. IV 11'-13')
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^a de Roos, *Hittite Votive Texts*, 98 ft. 125 offers a translation of “some kind of ointment?” Perhaps related to verb *harna-* ‘stir, churn, ferment, agitate, foment’? (s.v. Jaan Puhvel, *Hittite Etymological Dictionary*, (Berlin: de Gruyter, 1984-)).

^b Join mentioned, but not transliterated or translated, in de Roos, *Hittite Votive Texts*, 265 ft. 701. See transliteration of join in Beal, review of *Hittite Votive Texts*, 345.

^c Beal, review of *Hittite Votive Texts*, 345, plausibly translates *HI-IT-TI ANŠE.KUR.RA.MEŠ* here as “road accident (lit. misdeed of horses).” The scenario behind this vow could be reconstructed as follows. It seems three parties are involved: the queen (3') who is to be kept alive, the king (4') for whom the matter is to go away, and “them” (8'), probably the horses, who are to be kept healthy. One such scenario that puts all three parties at risk would indeed be a road accident where the horses pulling a chariot carrying the king and queen are hurt, and the resulting crash puts the queen's life in danger. The harnessed team offered of in the protasis might also offer a clue: perhaps the queen received warning in a dream that the god was going to take the horses in a crash, and the silver models were offered as a substitute.

Table 27: Vows Concerning Calamity (Hattusili)

KUB 15.1 rev. III 18'-21'	His Majesty vowed thus to Katahha: if the city of Ankuwa escapes, and does not burn down completely, (rev. III 18'-19')	For Katahha I will make 1 silver city, its weight not specified. I will (also) give 1 cow and 8 sheep. (rev. III 20'-21')
KUB 15.1 rev. III 27'-31'	[His Majesty? vo]wed [thus] to the Stormgod of Zippalanda: if the city of Ankuwa e[scapes, and does n]ot burn down completely, (rev. III 27'-29')	[For the Stormgod of Z]ippalanda [I will make] 1 silver city, [its weight not specified.] I will (also) give 1 cow and 8 sheep. (rev. III 30'-31')

6.7 Vows for Good Tidings

Similar to the Illness Vows, and perhaps even a sub-type, a number of vows are offered for good fortune and averting evil. The royal children make one of their few appearances in KUB 48.123 obv. I 12'-18', and Tudhaliya specifically in KUB 56.31 rev. IV 23'-26'. In KUB 15.28+IBoT 3.125 rev. III 6'-12' Hattusili makes the interesting offer to invoke his “former” Sungoddess of Arinna if he hears no evil words for a year (i.e. the time it takes to celebrate the

autumn and spring festivals). The import of offering to invoke a “former” personal god is unclear, but a year free of bad news was probably no light favor to ask.

Table 28: Vows for Good Tidings (Puduhepa)

Text	Protasis	Apodosis
KUB 48.123 obv. I 12'-18'	The queen] to Ištar of Alwazantiya [<i>sic</i>] [vowed thus: ...] who(ever) the evil [dreams...] thus for the dreams back to His Majesty [...] good. You, the goddess, are for me turning up [...] nothing of His Majesty and of the children. You, the goddess, are not allowing [...] evil to come near. (obv. I 12'-17')	[For the goddess] 1 Ištar of silver (weighing) 1 mina, 1 Ištar of gold (weighing) 20 shekels I will make. (obv. I 18')
KUB 48.123 obv. I 23'-27'	The queen to Ištar of Lawa]zantiya vowed: ["if you, the goddess, my lady,] protect well [His Majesty], (obv. I 23'-24')	for the goddes]s, my lady, 1 tabl[e...] they will [...] (obv. I 25'-27')
KUB 48.123 obv. II 2'-10'	...] evil [...], and it for me [...], (obv. II 2'-3')	Fo[r...] 3 pitchers [...] he will coun[t...] For Iš[ar...] 2 breasts of go[ld...] For the b[ody...] Fo[r...] (obv. II 4'-10')
KUB 48.123 rev. IV 4-10	The queen in the town of ... to]Ištar of Lawazantiya [vowed thus: if you from the s]oul the evil words [...] and i]f you the goddess, my lady, the <i>zarantiya</i> of the soul [...] and if the ev]il words no longer [...] (rev. IV 4-7)	...for the go]ddess 2 souls of gold joined together [...] the ba]ck I will pierce, [...] to the godd]ess I will give. (rev. IV 8-10)
KUB 56.31 rev. IV 17'-18'	To Hepat of Aleppo: if for the goddess [...] I hear good (things), (rev. IV 17')	For the goddess a festival [...] I will make. (rev. IV 18')
KUB 56.31 rev. IV 23'-26'	The queen?] to Ištar of Dupa thus [vowed: if...] Ištar for Tudhaliya [...and good things] I hear, (rev. IV 23'-25')	Fo[r...] (rev. IV 25'-26')

Table 29: Vows for Good Tidings (Hattusili)

KUB 15.28+IBoT 3.125 rev. III 6'-12'	...His Majesty? to the Sungoddess of Ar]inna, the former one of His Majesty. [...] t]o the Sungoddess of Arinna, the former one, he vowed: [if] because on my behalf vowing was determined, [...un]til the festivals of autumn and [of spring?] I complete, if no [evi]l word at all finds us, (rev. III 6'-11')	I will [inv]oke the former [Sungoddess of A]rinna of His Majesty. (rev. III 12')
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6.8 Vows for Political Matters

There are only two vows that deal with matters of the Hittite court, and both are of murky context. The protasis of the first vow is missing a crucial adjective (KUB 15.19 obv. 6'-7'): *A-NA* ^dUTU-ŠI *ku-i-e-es* [...-u]_s UKÙ.MEŠ-us *na-as-kán pí-an ar-ha du-wa-ar-na-at-ti* 'which men are ... for His Majesty, them you will break up'. This vow is immediately followed by another from "the days of the Festival of the Torch" (cf. KUB 15.1 obv. II 47-52). The verb (*duwarnai-*) and its object (UKÙ.MEŠ) are without parallel in the votive texts, and do not use the typical language for success against an external enemy.

The second political vow (comprising the obverse of KUB 56.30) contains a broad spectrum of the Hittite court officials and the verb 'oppressing/suppressing' (*tamas-*). Four dependent vows are attached, all by His Majesty, that include some of the most expensive gifts in the votive corpus: two gifts of 100 mina of silver and a collection of other votive objects for ^dNIN.GAL and ^dŠIN are promised. Whatever event occasioned the vows concerning the Hittite court and oppressing, it was of great personal importance to the king.

The mention of an "eighth day" in KUB 56.30 obv. 13' suggests a festival context for the delivery of the gifts. The promise of bulk silver recalls a similar passage from the administrative corpus, also from the time of Hattusili, which stands at the end of a packing list for festival in Arinna:

KBo 9.91 rev. A 6'-10'

6' HAR.ŠU KÙ.BABBAR *A-NA* ^dU URU-TÚL-na

7' ^dUTU{-ŠI} URU-TÚL-na LÚ.MEŠ KÙ.DÍM

8' KASKAL-ah-ha-an-zi

9' 1 ME GÍN KÙ.BABBAR ^dUTU-ŠI
 10' EZEN AN.TAH.ŠUM ^{URU}TÚL-na pí-da-i

A silver armband for the Stormgod of Arinna (and) the Sungoddess of Arinna the goldsmiths will transport. 100 shekels of silver His Majesty gave (for) the AN.TAH.ŠUM festival in Arinna.

It appears that a king's gift of silver bullion and some votive objects to a festival was a not unprecedented event. In another vow, KUB 15.9 rev. III 1'-5' (with an unfortunately damaged protasis), he promises 100 mina of silver and 100 mina total of a variety of other metals for a god. KUB 15.29 obv. I 2'-3' also has a promise of 100 mina of silver to Hepat of Kummanni, but it is not clear whether the king or queen is making the gift. Thus the votive and administrative corpora show that Hattusili gave large amounts of (unfinished) precious metals, always in the context of festivals or temple endowments, but less frequently compared to the steady stream of votive objects by Puduhepa.

Table 30: Vows for Political Matters (Hattusili)

Text	Protasis	Apodosis
KUB 15.19 obv. 6'-10'	[If] you the [g]od, my lord, stand beside (me) well, (and) whoever for His Majesty (are)[...] men, you break them up, and[...] (obv. 6'-7')	[If the weapons/statue?] of the god is established to be sufficient, then I will plate it complet[ely (with precious metal)...] but if it is not established, (then) for Saumatar[i...] the plated (object) I will build up. ^a Already (given). (obv. 8'-10')
KUB 56.30 obv.	N/A	<i>Note: the obverse of this tablet begins with fragments of what looks to be a substantial vow condition involving multiple actors (including a scribe, a "scribe on wood", a treasurer, and a table servant, obv. 4'-5'). The vow obligations include [1] ox and 8 sheep (3'), suppressing/oppressing something (6'), invoking (8'), and a golden hand (11'). The remainder of the obverse contains dependent vows naming a god and with the "for the sake of precisely this matter" formula, which are listed here (with format of recipient / gift):</i> obv. 12'-13': For the Great God / Him on the eight day... obv. 16'-18': For... / ...and a mother's breast obv. 19'-22' : For NIN.GAL / His Majesty, with 100 min[a silver ^b] 1 silver hand weighing 5 mina, 1 [hand of gold?] to the god I will give obv. 23'-26' : For the god <i>SĪN</i> / His Majesty, with 100 mina s[ilver] 1 silver hand weighing 5 mina, 1 ha[nd of gold?] to the god [I will give]

^a As de Roos, *Hittite Votive Texts*, 178, ft. 406 notes, the meaning of *awan šarā DÙ* is not clear. He translates the phrase as "make famous," but I prefer a more literal translation of "make (very) high", or "build up", referring to the improvement of the cultic object which was established as insufficient. As noted in Beal, review of *Hittite Votive Texts*, 343, the CHD (vol. Š: 222a) suggests: "I will make [...] plated from the sides up(?)."

^b It is assumed silver should be restored here, as 100 mina of gold would be an excessively large amount. Cf. also KUB 15.29 obv. I 2'-3'.

6.9 Unconditional Vows

Not every vow was conditional. Some were in response to direct requests from the gods (usually confirmed by oracle) or outright promises. In most cases it is the queen who is contacted, but KUB 15.1 obv. I 15-18 has the only known case of a prince being contacted.

Table 31: Unconditional Vows

Text	Protasis	Apodosis
KUB 15.1 obv. I 12-14	Dream of the queen. (obv. I 12)	“Through a dream Hepat requested of me a necklace of sun disks and lapis lazuli.” We took an oracle. Hepat (of) Uda was determined. (obv. I 12-14)
KUB 15.1 obv. I 15-18	Dream (of) the prince(?) ^a (obv. I 15)	“By dream the king said to me: ‘Hepat is saying: “In the land of Hatti let them make for me a <i>zizzahi</i> object. In the land of Mukis let them make wine for me.”’” They will take an oracle. (obv. I 15-18)
KUB 15.1 obv. II 11-12	N/A	The queen to Šarruma of Urikina vowed 1 soul of gold, its weight not specified, (and) 1 soul of silver weighing 10 shekels. (obv. II 11-12)
KUB 15.1 obv. II 42-44	Dream of the queen. (obv. II 42)	“Šarruma spoke to me in a dream: ‘Up in the mountains in 12 places give me to eat.’” They will take an oracle. (obv. II 42-44)
KUB 48.126 15’-18’	Ištar of Samuha through a dream to the queen [(15’)	...]”behold, for you a breastplate [...] I will offer, and you will come somewhere [...] and gold [I will] bring... (16’-18’)
KUB 56.31 rev. IV 19’	N/A	For Ištar of Aleppo 2 maces I will plate in gold. (rev. IV 19’)
KUB 56.31 rev. IV 20’	N/A	For Ištar of Musunipa 2 maces I will plate in gold. (rev. IV 20’)
KUB 56.31 rev. IV 21’-22’	N/A	And whichever Ištar of the land of Hurri there are all together, each of them I will give 1 ox and 1 sheep. (rev. IV 21’-22’)

^a de Roos, *Hittite Votive Texts*, 89 ft. 73 writes: “U.NUN mentioned by SL II/3, 880 no. 53 without further explanation. As translation: ‘Traum’.” I would offer instead a translation of NUN sign as “prince”.

6.10 Vows with Damaged or Lost Conditions

There are unfortunately many vows in which the protasis has been damaged to the extent that they cannot be classified into any of the categories discussed above: they are included here for reference. Notable major gifts include KUB 15.6 obv. II 5’-9’ (construction of a temple) KUB 15.9 rev. III 1’-5’ (100 mina silver, 100 mina other precious metals), KUB 15.29 obv. I 2’-3’ (100 mina of silver), and FHL 186 2’-7’ (construction and endowment of a temple with linens, gold, an offering table).

Table 32: Vows with Damaged or Lost Conditions

Text	Protasis	Apodosis
KUB 15.1 rev. III 2'-3'	[...] (rev. III 2')	for a deity] of L[aiuna... 1] soul of silver weighing 10 shekels [vowed (rev. III 2'-3')
KUB 15.1 rev. III 4'-6'	[...] (rev. III 4'-6')	for Sa]nda of Laiu[na... f]or the sake of [...] 1 statue of the god [...] vowed. (rev. III 4'-6')
KUB 15.1 rev. IV 18'-22'	And if [to me ... you lend] an ear [and hear me,] (rev. IV 18'-19')	1 silver ear [...] for which [...] I will give. (rev. IV 20'-22')
KUB 15.6 obv. II 5'-9'	The queen in the town [of... to Hurri] and to Šeri [...] if?] all nig[ht...] remained, (obv. II 5'-8')	For them [...] they will make a temple. Whe[re/which... (obv. II 8'-9')
KUB 15.9 rev. III 1'-5'	[...] you will let [...] (rev. III 1')	His Majesty, with 100 mina [...] silver, gold, iron, meteoritic iron, tin [...] all. Its weight is 100 mina. [...] to the god I will give. (rev. III 2'-5')
KUB 15.18 obv. II 1'-2'	[...] (obv. II 1')	1 s[ilver] day, 1 gol[d] day[...] (obv. II 2')
KUB 15.18 obv. II 6'	...in the town of]Tarhuntassa, (obv. II 6')	1 gol[d] soul[...] (obv. II 6')
KUB 15.18 obv. II 7'-11'	[...] in the town of Uda for Mr. [...] thus vowed: Whil[e ...] you will fear nothing [...] inside him [...] (obv. II 7'-10')	[...] I will give, and additionally 1 bull [...] he will [...]. (obv. II 11')
KUB 15.18 obv. II 2'-3'	...t]o the god, m[y] lord [...] (obv. II 2')	...(of) si]lver to the god [I will] g[ive]. (obv. II 3')
KUB 15.18 rev. III 6'-8'	[...]they came forward favorably. [...] determined for goodness by the god [...] (rev. III 6'-7')	]... I will give, and I will invoke the god. (rev. III 8')
KUB 15.22 1'-2'	...thus v]owed: if [for me... (1')	1 ox and 8 sheep I will give. (2')
KUB 15.26 7'-10'	And [i]f you, Ištar of Lawa[zantiya...] come and this <i>iparwas</i> [<i>han</i> do not?] throw [away], (7'-9')	For the goddess [...2] <i>iparwasha</i> 's, 1 of silver, 1 of gol[d I will make.] (9'-10')
KUB 15.28+IBoT 3.125 rev. III 2'-5'	If Ištar of the Field, my lady, [...] (rev. III 2'-3')	the goddess,] my [lad]y I will invoke. [...] I will [g]ive, and the queen [...] (rev. III 4'-5')
KUB 15.29 obv. I 2'-3'	[...]gui]ded favorably, and made it good for me[...] (obv. I 2')	Hepat of] Kummanni, with 100 mina of silver. (obv. I 3')
KUB 15.29 obv. I 5'-8'	...Mr. Ša]ušgaziti went. The queen [...]vowed:] If the goddess, my lady, for Mr. Šaušgaziti [...] <i>Huwaza</i> downwards [...] (obv. I 5'-6')	For the goddess a silver period and a silver city, [its weight not sp]ecified, I will give. Already (given). (obv. I 7'-8')
KUB 15.29 obv. I 9'-11'	...to He]pat of Kummanni vowed: [...] (obv. I 9'-10')	“For the goddess dreams of silver and gold [I will give. Al]ready (given). (obv. I 10'-11')
KUB 15.30 obv. II 1-7	“Or His Majesty [...], and by dream for me Ms. Tarhuntaradu (^f dU.IR) [...] sent favor. Clothing for me [...] she brought, and for His Majesty a bronze <i>UDDALU</i> [...] And if Ms. Kilušhepa later [...], (obv. II 1-5)	A <i>harnasalla</i> -container [...] I will enclose. (obv. II 6-7)

Table 32, continued

KUB 31.69 rev.? 1'-5'	[...] (rev.? 1'-3')	...] birds of silver and gold, [its weight u]nspecified, I will give. (rev.? 4'-5')
KUB 48.119 rev.? 1-6'	[...] (rev.? 1-4)	[I will] give [...] (and) 8 sheep, 1 ox (and) 8 sheep, [...an object] of silver, weight not specified. (rev.? 5-6)
KUB 48.123 obv. I 19'-22'	[...] (obv. I 19')	...] of a lion, Hesni and Tašmi-Šarruma did [...] And for [Ta]šmi-Šarruma [... for the goddess,] my [lad]y, the ritual of the weapon (of) the goddess, (and) the ritual of the bee [...] it was determined he perform on the [sp]ot. (obv. I 19'-22')
KUB 48.123 rev. IV 11-12	[...] (rev. IV 11)	...Ištar of Lawa]zantiya, a <i>pattankuran</i> heart [... of g]old, weight not specified, I will give. (rev. IV 11-12)
KUB 48.126 19'-23'	The king?] to Ištar of Samuha [... thu]s vo[we]d: "if you for m[e...]run [in front], (19'-21')	For I[štar....] 1 lion of silver weighing 20 shek[els...] 1 ox, 8 sheep before the god[... (21'-23')
KUB 56.13 obv. 1'-4'	[...] (obv. 1')	to the go]d I will give. [...] for the sake of [...Tašmi?]-Šarruma [...] 1 silver sun disk weighing 20 shekels, [...and an object, its weight] not specified, 1 cow (and) 8 sheep I will give. (obv. 1'-4')
KUB 56.13 obv. 18'-19'	...if?] you remove [awa]y, (obv. 18')	That <i>uppiyas</i> of his [... and? an object] of lapis lazuli I will give. (obv. 18'-19')
KUB 56.13 rev. 18'	for the sake of [...] (rev. 18')	1 ox, 8 sheep I will give. (rev. 18')
KUB 56.13 rev. 23'-26'	...] for the god <i>ŠIN</i> (of) Tarhuntassa vowed: [if...] you remove back [...] (rev. 23'-24')	...] 1 ox's neck of silver, its weight not specified, [and?] I will start [to give regularly]. (rev. 25'-26')
KUB 56.25+KUB 60.118 rev. IV 14'-19' ^a	...] the goddess, my lady, manfully[...] the person [...] for [...] in the time I am destroying[...] and if he/she does not say [...] (rev. IV 14'-17')	...]but I will dress myself manfully [...] I will destroy [...] (rev. IV 18'-19')
KUB 56.28 obv. 1'-4'	...]in front[...] (obv. 1'-2')	...a]n <i>uppiya</i> of gold, its weight [not specified...] I will [ma]ke, whether of gold [or of silver] (obv. 3'-4')
KUB 56.28 rev. 1'-4'	[...] (rev. 1'-2')	...] of silver for I[štar...] I will make. (rev. 3'-4')
KUB 56.31 obv. I?, 8'-10'	...] for the seed [...] ditto. [...] back [...] (obv. I?, 8'-9')	...and object of] silver (and) [co]lorful go[ld] I will make. (obv. I?, 10')
KUB 56.31 obv. I?, 11'-12'	... for the sake of] precisely that m[atter...] (obv. I?, 11')	the hous]es (of) the gods I will build. (obv. I?, 12')
KUB 56.31 rev. IV 2'-7'	[...] (rev. IV 2'-5')	...] 1 rhyton of gold f[or...] its weig]ht no[t specified, I will give. (rev. IV 6'-7')
KBo 8.61 3'-4'	[...] (3')	I]lion statue, silver, of 1 m[ina...]a sheep I will give. Already (given). (3'-4')
KBo 27.60 11'-13'	[...] (11')	...]gold from here [...] go]ld <i>wantiant</i> (=‘glowing?’), 1 [...] 1 ox, 8 sheep to the gods [I will give] (11'-13')
KBo 34.145 1'-3'	[...] (1')	...]a rhyton of gol[d... to] the Sungoddess of Arinna he/she prom[ised] (2'-3')
KBo 34.145 4'-5'	for the sake of [...] (4')	to the Stormgod of Lightning [...] its h]ead gold he/she promised. (4'-5')

Table 32, continued

KBo 34.145 6'	[...] (6')	...]1 statue of silver weighing 1 mina he/she promised. Not yet (given). (6')
KBo 34.145 7'-9'	[...] (7')	...for] the Stormgod of Kummanni 1 Morning Star of silver (weighing) 15 shekels, [...] in Zanzara he/she promised. [...] it is already given. (7'-9')
KBo 55.208 obv.? 1'-2'	[...] (obv.? 1')	...an object of] gold (weighing) 5 shekels [(obv.? 2')
KBo 55.208 obv.? 11'-15'	[The que]en to the god [...]I]f the god (for) His Majesty[...] (obv.? 11')	[F]or the god 1 set of [...] a b]ad [...] and the king will [...] a st[atue] for him, its [weig]ht [I will take] to heart. (obv.? 12'-15')
KBo 55.208 rev.? 6'-10'	Dream of the queen. By a dream... (rev.? 6')	60 <i>PARISU</i> of barley, 1 <i>hars[iyalli]</i> vessel] make. Bar[ns...] “For two jugs [...] let them bring [“(rev.? 7'-10')
KBo 55.213 5'-10'	...]Hepat His Majesty[...they] lick away[...] the god will unlucky [...] (5'-7')	for Hepat, my lady, 2 o[x... 1] of the right, one of the left [...] for the mountain sheep of the offering tab[le... (8'-10)
KBo 55.213 11'-12'	...]The queen to Hepat [...v]owed: (11'-12')	1 silver soul, weighing 2 mi[na (12')
KBo 55.216 1'-5'	...] for Mr. Tuttu[...for] His [Majesty you do] no[t allow in...] Ištar of Šamuha in[...] hang[s] from [...] (1'-4')	...]and a statue of silver before [the god(ess) (5')
KBo 55.217 left col. 1'-3'	...Ištar of Sa]muha, my lady, [...] (left col. 1')	...I will g]ive, and before the goddess a silver statue [...] (of) silver I will make. (left col. 2'-3')
KBo 55.223 1'-3'	...] for the goddess NI[N...vo]wed: if [...] (1'-2')	...]of silver, its weigh[t not specified I will give] (3')
FHL 186 2'-7'	...for] the Stormgod of Manuziya [...] you will not deliver[...] (2'-3')	]a temp[le] I will make. The god[...] of him, his linens, gold [...] moun[tain... of]fering table[(4'-7')
IBoT 3.123 6-7	And if for him for thi[s...] (6)	1 sheep of silver, its weight not[specified I will give.] (7)
VBoT 75 2'-8'	[...]	...]came in [...] the queen for/to the Stormgod (and) Hepat [...] heaven [...] By humanity [...]1] ox, 8 sheep for a <i>keldiya</i> ritual, [...]to?] Hepat 1 ox, 8 sheep for an <i>ambašši</i> ritual [...]to] the Sungod of Heaven I will give [...] (2'-8')
Liv. 49-47-42 1'-4'	...Šar]ruma requeste[d...] the town of Gallazz[uwa... (1'-2')	For you they will begin to give regularly [...] Fo]r you the god as well I will make a statue of the king. (3'-4')
Liv. 49-47-42 7'-9'	The q]ueen to Šarumma (of) [Ga]llazzuwa th[us vowed: if...] ... and if you the god, my lord, for me [...] (7'-8')	] I will make. A <i>harnai</i> of the hea[d] for you [...] (9')
Liv. 49-47-42 10'-12'	The queen?] in the town of Alalah to Ištar [vowed thus: if you] the goddess, my lady, [...] back what is covered, (10'-11')	...w]ith bread I will cover, and later [...] (12')
Liv. 49-47-42 13'-16'	...the go]ddess, my lady, for His Majesty [...] where [...] broken away in front [...] (13'-15')	...for the god]dess weapons of [...] (16')
“Touristik” obv. 4-8	...[to me someone sa[id...] “and thu[s...] his/her female servants has[ten(?)... (obv. 4-6)	for Ištar of Lawa]zantiya 1 <i>talla</i> -flask[of gold? I will give...] as in Egypt [...] (obv. 7-8)

^a Cf. dressing like a man, cf. KUB 31.69 obv.? 4'-11'.

6.11 Vows of Tudhaliya

In striking contrast to the bounty left by the Royal Couple there are only two texts in the votive corpus that can be assigned to Tudhaliya as king. Both are atypical in form and contents. KUB 56.19, the longer of the two, is written almost entirely in first-person and has a substantial non-votive interlude. Mention of “His Majesty” in obv. II 8 shows the author is a king, but it is not immediately obvious whether the text should be ascribed to Hattusili or Tudhaliya (the only two real possibilities given the general dating of the votive corpus). A lengthy historical passage in the non-votive interlude, in which the king asks for guidance from the Stormgod regarding a matter of a *tapri*-woman, decides the matter:

And because my father had placed his daughter for the Stormgod my lord as a *tapritas*[*si*] woman, (and) subsequently the matt[er...] precisely there [...] Some said: “for the Stormgod she was a *daniti*-woman” [] But others said: “for Šarruma she wa[s] a *daniti*-woman” [] Then my father sent me to the Hurri-land to question again the elders. The matter they [] did not resolve. Because my father died, the matter of the daughter of the *tapri* [] continues to be investigated by oracle, but in no way will it descend to a matter of presumptuousness (on my part). (KUB 56.19 obv. II 13-21⁵⁸)

The speaker then continues by promising to respect the word of the god and asks that the Stormgod enlighten him by speaking through a dream or letting it be determined by oracle. The fact that the matter is still unresolved at the time the text was written suggests that the father’s death was recent and the newly-crowned king is affirming an inherited obligation to the Stormgod. Since Hattusili’s father Mursili II passed away some twenty-five years prior to his

⁵⁸ Lines 13-16 also translated by Gary Beckman, *Hittite Birth Rituals* (Wiesbaden: Harrassowitz, 1983), 256-58.

inauguration, and twenty years prior to the appearance of the first votive texts in Urhi-Teššub's reign, Tudhaliya is the most likely candidate for author.⁵⁹

The vows of KUB 56.19 are all of a single, stylistically unusual type. They use sympathetic magic similar to the vows against catastrophe, but instead of offering imitative objects as *geld* for sparing the victim, they promise celebrations of an aspect of the god's beneficence. Thus cleansing of evil is rewarded with a Festival of Purity, and hearing of a petition (lit. "words") yields a Festival of Justice. Only one vow (obv. I 28-30) offers a material reward in the form of a statue. The *topos* of every vow is the person of the king. They ask for subjective, even psychological outcomes like expelling evil from the body, illumination of the mind, and purity. With the exception of a good campaign (obv. I 15-16) the results cannot be objectively measured.

It is clear from KUB 56.19 that Tudhaliya had a very different idea of vow-craft from his parents. It will be argued in the next chapter that Tudhaliya in his mature kingship chose to express piety through restoration of the local cults and festivals rather than votive gifts to the gods. If so, then KUB 56.19 might represent a transitional text, where Tudhaliya used the votive system of his parents but to achieve results anticipating the religious shift of his later reign.

Table 33: Personal Vows of Tudhaliya^a

obv. I 11-12	If... you will, and for me this [ev]il [you expel] (obv. I 11)	[For you the Fes]tival of the Soul I will celebrate. (obv. I 12)
obv. I 13-14	If...with a s]ubstitute you take, [and] you illuminate [and...] you do (obv. I 13-14)	I will celebrate the Festival of Illumination for you. (obv. I 14)
obv. I 15-16	If you allot for me a good campaign, and you support me well (obv. I 15)	I will celebrate the Festival of the Campaign for you. (obv. I 16)
obv. I 17-18	And [i]f which evils of mine, you the Stormgod my lord [...] (obv. I 17-18)	I will [ce]lebrate separately this festival too for you. (obv. I 18)

⁵⁹ de Roos, *Hittite Votive Texts*, does not offer a dating in his introduction for this or any of the texts that were published after his dissertation, but cf. Theo van den Hout, *The Purity of Kingship: An Edition of CTH 569 and Related Hittite Oracle Inquiries of Tudhaliya IV* (Leiden: Brill, 1998), 139, who also dates this text to Tudhaliya.

Table 33, continued

obv. I 19-20	But the Stormgod my lord, because I have grasped the knee, if you the Stormgod my lord cause me to live (obv. I 19)	I will celebrate the Festival of the Grasping of the Knee for you. (obv. I 20)
obv. I 21	And if you the Stormgod my lord purify me from evil (obv. I 21)	I will celebrate for you the Pure Festival. (obv. I 21)
obv. I 22-25	And if you the Stormgod my lord [...] my evil, and all these evils you expel completely (obv. I 22-23)	For you this festival too I will establish, and which house [...] I have [...]’ed, I will take even from there and I will establish it f[or the Stormgod]. (obv. I 23-24)
obv. I 28-30	But like a bird the god[...] I have gras[pe]d. If you the Stormgod my lord cause me to live (obv. I 28-29)	The right(hand side) [...for the Stormgod] my [lord] a sta[tue] I will make. For it/him a window [...] festival [...] I will establish.
obv. I 31-32	And if you the Stormgod my lord for me to these word[s...]	For you [I] will celebrate the Festival of Justice.

^a As with almost all the votive texts, some vows are too damaged to include. Only the clearest have been included here. The absence of obv. I 33-41 is especially regrettable, as it is a complex and interesting vow that is unfortunately missing key words. In it Tudhaliya seems to be praising the gods’ attentiveness to his well-being and offering the celebration of the Festival of Invoking.

The only other votive text dateable to Tudhaliya as Great King is KBo 33.216.⁶⁰ It contains a single military vow, written in first-person, concerning success against the king of Aššur (KBo 33.216 obv.? I 5’-9’). This vow and possibly one other in the preceding paragraph (obv.? I 2’-4’) are the only ones on the tablet. The remaining text concerns obligations towards the gods and an oracular inquiry, also written in first-person. The gift of the vow follows the *maltešsar* format of livestock, festivals, and infrastructure, but the disaster at the Battle of Nihriya means the vow was probably never fulfilled.

Table 34: Assyrian Campaign of Tudhaliya

KBo 33.216 obv.? I 5’-9’	[I]f you, Ninurta, Kumarbi [...] give me, (and) [I] conquer the king of Aššur, (obv.? I 5’-6’)	3 stele I will erect. [To each] god 1 ox 8 sheep I will give. [Festivals] I will establish, and [...] (obv.? I 7’-9’)
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⁶⁰ Also edited by de Roos, but in a separate article: Johan de Roos, “KBo 33-216. A Votive Text of Tuthalias IV,” *Journal of Ancient Civilizations* 4 (1989): 40-48.

KBo 33.216 is the last vow by any author that can be positively dated. Did the defeat in the Battle of Nihriya, which was the largest known loss of Hittite prestige since the “concentric invasion” suffered by Suppiluliuma I, cause Tudhaliya to become disenchanted with the votive system? The aftermath of the battle saw an inward turn in Hittite policy as Tudhaliya struggled with the fallout among his vassals and the ever present threat posed by Kuruntiya, brother of the rightful king deposed by Hattusili and now ruler of Tarhuntassa. In this light Tudhaliya’s discovery of a passion for cult restoration, and the consensual and distributive process it implies, was well-timed.

Tudhaliya’s treaties with Kuruntiya and Tarhuntassa (CTH 106) show a profound ambiguity and maybe even guilt about Hattusili’s usurpation, and it might be that the transition away from the votive system was a rejection in part of his parents’ legacy. Palace intrigue was also at work. Puduhepa, the system’s greatest proponent, fell out of favor sometime early in Tudhaliya’s reign, and a loss of access to palace funds would account for her silence in the vows. It appears the votive system was dismantled in her absence, and even when she returned to the court later in Tudhaliya’s reign the vows did not resume. The fact of the matter was that Hattusili and Puduhepa’s inclination for “endowment by fiat,” through vows that quite literally came to them in dreams, and emanating from the political center, was out of place in the new political order.

6.12 Vow Fulfillment in Practice

There is very little evidence of vow fulfillment attested in the votive texts themselves, beyond the occasional admission of a neglected vow (e.g. KUB 15.11+KBo 60.99 obv. II 13-19), and the sparse notation of *karū* and *nawi* (discussed in 4.2 *Using the Vows as Economic*

Documents).⁶¹ Yet the objects and actions promised by the vows must have imposed a substantial administrative and logistical burden on the Hittite Palace, so it can be reckoned that the monitoring of vow fulfillment took place outside the clay tablet administration. Whether the compliance process was monitored with wooden tablets or oral communication is a moot point, as there is no evidence for substantial interface with either in the votive corpus: there are no names or seal impressions of individuals responsible for the manufacture and delivery of the promised goods, nor any reference to the numerous terms for lists, inventories, or tags associated with wooden tablets.

The near absence of formal feedback between the systems of vow creation and vow fulfillment suggests that the systems interfaced along a narrow front, probably in the person of the scribe who produced the votive texts. As with the KASKAL series, the lack of metadata (names, dates, locations, stages of completion) in the votive corpus mean that the documents would circulate poorly among multiple users, especially if the vows were not rigorously updated to record new administrative action. In the context of the vow administration any miscommunication could mean a duplication of efforts or the perilous neglect of a vow. Without well developed administrative controls, the fewer users involved with the votive corpus the less chance for error. A single scribe directly answerable to the queen, with precise records and encyclopedic familiarity of the vows that he himself had recorded, could do the job an army of

⁶¹ The notations appear in eighteen texts, as presented in a footnote in section 6.2. However some of these texts are very small, and even in the larger ones the notations usually appear only once or twice. It can be estimated that less than 10%, perhaps even closer to 5% of all vows were thus annotated. This seems far too small a number to constitute a working system of monitoring vow fulfillment. It does show, however, that at the time of writing less than a tenth of the vows had their outcomes known, reinforcing the view that the vows were written down very close to the moment of their creation.

administrators working at a different pace and in different locations might fail.⁶² Such a reconstruction again raises the implication that the size of the bureaucracy is to be reduced and the authority and prestige of the scribes correspondingly increased in the model of Hittite government.

There is a single exceptional text, the Vow of Puduhepa (CTH 585),⁶³ which must be weighed against the “single scribe” hypothesis, as it appears to be an example of exactly the kind of sustained, written-on-clay description of vow compliance just argued to be missing from the corpus. The Vow of Puduhepa is year-by-year review of the fulfillment of a major vow, preserved in multiple copies overlapping as many as six layers deep in some places. The multiple copies might be explained by the episodic nature of the review: earlier years were created first then copied into each subsequent draft (by Year Five the overlaps are reduced to three copies, and it always possible that later years might have been lost). But the fact that the earlier drafts were kept suggests that the Vow was not written down solely for the scribe’s own use, but intended for perusal or review by multiple, cuneiform-literate individuals. The exact editorial history of the text, whether it yielded more than one finished “presentation” copy, would require a philological reevaluation that is beyond the scope of the present work.

The Vow begins with a formal version of the vows found in the rest of the votive corpus:

⁶² Deference must be shown to the old saw that “absence of evidence is not evidence of absence.” But if evidence for a substantial body of coordinate administrative documents on wood or otherwise were to be discovered for the votive corpus, it would not change the peculiar lack of logistical feedback within the votive texts themselves. If it were proven that an administration on wood existed for vow fulfillment, explaining the poor interface between vow promise and fulfillment would require a transference of authority from the scribe to the votive texts. The texts would effect, but not be affected by, administrative action, and the authority of the votive texts would be such that when their vows were fulfilled and the texts were no longer administratively active, they would be kept as a historical archive. Would the votive corpus be classified as “texts of tradition” in this scenario?

⁶³ For principle edition see again Otten and Souček, *Das Gelübde der Königin Puduhepa*.

Thus Puduhepa, Great Queen, queen of the l[and of] Hatti, daughter of the city of Kummanni: to Lelwani, my lady, for the sake of the life of the person of His Majesty I have vowed. “If you the goddess, my lady, keep His Majesty alive and healthy for long years, (and) he tends to you, goddess, for long years, for you the goddess yearly [I will give] years of silver and years of gold, months of silver and gold, days [of silver and days] of gold, a cup of silver and a cup of gold, one (statue of the) person of His Majesty of gold [and one of silver?⁶⁴ And year]ly if it is 100, (or) if it is 50 sheep, I will give (them), it [does not] matter.”

Its topic and contents are recognizable from the illness vows: the gold and silver “years”, “months”, and cups are exactly paralleled by the vow to *SîN* for the health, life and long years of His Majesty in KUB 15.3 obv. I 5-16,⁶⁵ and the person (or literally “head”) of His Majesty in gold recalls the offer of a statue for long years of His Majesty to the Sungod of Heaven of Huhana in KUB 15.23 rev. 17’-19’. Thus the Vow of Puduhepa is substantial—one of the largest besides KUB 56.23 obv. 1-16 (which offered a walled settlement with 300 deportees, 20 horses, quantities of metal, temple appointments in precious, and a statue of the queen)—but it is not an unprecedented votive act.

After the introduction the text proceeds with a description of the gifts actually given each year, for a total of five years. Surprisingly the practice of the vow diverges considerably from its description. Year One begins with a description of named households, formally recalling the Hittite land-grant documents (CTH 222), given into the service of Lelwani. Many of these households are headed by women, all contain small children and at least one deportee, are assigned economic specialties like milking (KUB 15.17 obv. I 16), baking (rev. III 39), and beekeeping (rev. III 50). The households are reported on again in later years with updated

⁶⁴ Otten and Souček do not restore the silver statue, but the gold/silver pairing of every other object, and the appearance of four statues in KUB 31.53 obv. 2 (instead of the expected two) and five statues in KUB 31.54 rev. 16’ (instead of two or three), make the restoration likely.

⁶⁵ The “days” promised in the Vow of Puduhepa are not the days of the month, but the ten or so extra (“epagomenal”) days it takes to reconcile a lunar calendar with a solar year. It is quite possible these days were implicit in KUB 15.3 obv. I 5-16.

demographics. The legal status and relationship of the persons in the households are unclear,⁶⁶ but they are counted as part of the Puduhepa's fulfillment of her vow to Lelwani (see KUB 31.51 obv. I 8'-9' "These person(s)[...] he/she gav[(e)] from the palace," and KUB 4.33 obv. II 3-5 "In total 48 persons of which Queen Puduhepa to Le[(lwani)], her lady, for the sake of the life of Hattusili, the Great King, her husband, has given each (of them)).

Why were these extra people given, and why did they not appear in the original vow? The simplest explanation, and one preserving the integrity of the original vow, is that they were implicit with the livestock. After all, sheep and goats need shepherds to tend them and households to process their secondary products. The livestock promised in the vow are not given until the third year, but then some 412 are given all at once (KUB 31.53 obv. I 4-10 has 8 cattle, 6 horse, 387 sheep, 11 goats). Of these only 1 cow, 5 sheep, and 3 goats seem to be explicitly designated for slaughter. The details of the Vow of Puduhepa thus call for a reassessment of offerings of livestock elsewhere in the votive corpus (such as the 1,000 sheep in KUB 56.13 obv. 15'-17'): it seems few of the animals were meant to be slaughtered and most were intended as capital for the god, and that a gift of livestock could imply a substantial gift of people to put that capital to work.

The silver and gold gifts are delivered irregularly and in amounts that only approximate the promises of the vow. The first mention of the silver and gold calendar objects come in Year Two, where a double amount appears to make up for the first year. The gift in this case is even more generous than necessary, perhaps because of the delay. Everything is as prescribed except instead of two statues of the person of His Majesty of gold and two of silver, all four are of gold, and likewise with the four years (KUB 31.53 obv. 2). The next delivery of gold and silver comes

⁶⁶ See discussion of Otten and Souček, *Das Gelübde der Königin Puduhepa*, especially 42-43.

in Year Five, which judging by the amounts given might be better described as Year Four-and-a-Half. Here there are three gold cups given but no silver cups, five (out of expected six) statues of the person of His Majesty, again all of gold, and with thirty months (out of thirty-six) of silver and thirty (of thirty-six) of gold (KUB 31.54 rev. 16'-17'; the silver and gold days may be lost in the break at the end of 17').

The final revelation of the text is that it was not only Puduhepa who contributed to the gift, but also individuals whom one might describe as among the "lords of Hatti." Twenty-three persons "of the campaign against the city of Zikessara" are given to Lelwani by Á^{MUŠEN}-LÚ-*is* (KUB 31.51 obv. II 6), and smaller contributions of six to eight persons were made by AMAR^{MUŠEN}-*is* the *urayanni*, by Pinaura, and by Alalimi the governor of Kaneš (KUB 31.51 obv. II 7-18). The only parallel to these (seemingly unforced) contributions to the queen's vow was the single, modest gift of a lapis lazuli model of a breast for the king's health by Walwaziti (KUB 15.30 rev. III 1'-7'). There is no way to know how common such "rider gifts" actually were, given that the contributions of the nobles cannot be guessed from the preamble of the Vow of Puduhepa, but the possibility of economic coercion should not be discounted for the votive system. Even if the coercion was only a positive pressure to impress the king and queen, it fits well with the centralizing tendencies of the rulers.

The Vow of Puduhepa records one of the largest and most complex votive offerings in the corpus, and the only one containing evidence of major contributions to fulfillment by multiple parties. Its complexity may explain in part why both the vow promise and fulfillment were committed to writing, but if complexity and size were the only criteria for extra administrative attention then one might expect other vows to have received similar treatment. The conundrum of the Vow of Puduhepa's uniqueness is not unprecedented. There is a pattern of

exceptional “capstone” texts in the administrative corpus, which appear as mirages to tempt the modern reader to reconstruct such regularity everywhere in the corpus. The Inventory of Manninni (CTH 504) does this for the inventory texts, the KASKAL Main Text for shipment records, and the Vow of Puduhepa for the votive texts. Yet these special texts are too infrequent to be regular parts of the Hittite bureaucracy, and it must be assumed they originated from extraordinary administrative situations no longer perceptible. If one may for a moment cop a misused phrase, the capstone texts are the “exceptions that prove the rule” in a minimalist Hittite bureaucracy: they do not define the bureaucracy, but can at least be appreciated as brief glimpses into otherwise undocumented processes of the Hittite administration.

The unusual contents of the Vow of Puduhepa, i.e. the deportees, the late delivery of the livestock, and the irregularity in the gifts of precious metal, show there was some flexibility to vow fulfillment. While the sample size of one text does not allow for firm conclusions, it seems the administration of vows was more ad hoc than one might think if the only preserved record of vow compliance contains such irregularities of timing and content. The unexpected details of the Vow of Puduhepa and the difference in its prescription and practice should serve to caution the present study’s attempt to reconstruct the economics of the votive system.

6.13 Average Value and Significance of the Vow Objects

Counting all of the vows presented in the tables above (including the Vow of Puduhepa and excluding the vows of Tudhaliya) gives a total of 164 minor vows and 30 major vows attested from the reign of Hattusili and Puduhepa.

Vow Totals by Category

Illness Vows:	50 / 12
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Military Vows:	26 / 7
Other Vows:	39 / 6
Vows w/ Lost Conditions: ⁶⁷	49 / 4
Total:	164 / 30 (minor/major)

The minor vows, as was discussed in section 6.2 *Using the Vows as Economic Documents*, tend to be similar in the quantity and size of gifts, while major vows varied enormously in size and contents. Because the minor vows are fairly uniform, consisting usually of one or two votive objects made of precious metal or stone and the occasional livestock, it is possible to reconstruct the amount of gold and silver in a “standard” minor gift by averaging the objects with known weights. Conversely the major gifts must be treated separately.

⁶⁷ Because of the state of preservation, these vows are classified as minor unless there is compelling evidence otherwise, which is why there are relatively few major vows compared to the ratios in other categories.

Table 35: Object Weights in Minor Vows

Text	Object(s)
KUB 15.1 obv. II 11-12	10 s. silver soul
KUB 15.1 obv. II 25-27	10 s. gold ear, 1 m. silver ear
KUB 15.1 rev. III 2'-3'	10 s. silver soul
KUB 15.8 obv. I 4'-7'	3 s. gold soul, 6 s. silver pair of eyes
KUB 15.9 rev. III 6'-8'	10 s. gold ear, 3 s. gold earring
KUB 15.11+KBo 60.99 obv. II 3-5	1 m. gold pair of breasts
KUB 15.19 obv. 4'-5'	1 m. gold soul
KUB 15.19 obv. 12'-13'	20 s. gold soul
KUB 48.123 obv. I 12'-18'	1 m. silver Ištar, 20 s. gold Ištar
KUB 48.126 obv. I 19'-23'	20 s. silver lion
KUB 56.13 obv. 1'-4'	20 s. silver sun disk
KUB 56.13 rev. 1'-8'	2 m. silver dream
KUB 56.13 rev. 9'-13'	1 m. gold dream, 2 m. silver dream
KUB 56.25+60.11 8 rev. IV 10'-13'	[an object] weighing 1 m. gold
KBo 8.61 3'-4'	1 m. silver lion statue
KBo 8.61 5'-9'	2 m. silver eyes
KBo 34.145 6'	1 m. silver statue
KBo 34.145 7'-9'	15 s. silver Morning Star
KBo 55.208 obv.? 1'-2'	[an object] weighing 5 s. gold
KBo 55.208 rev.? 11'-15'	1 m. gold eyes
KBo 55.213 11'-12'	2 m. silver soul

From the attested object weights in minor vows, it can be seen that an average gold object weighed 26 shekels (a little over half a mina) and an average silver object weighed 40 shekels (exactly one mina).

Of the 164 minor vows attested in the corpus, there are 159 with sufficiently preserved apodoses to determine the nature of at least some of the gifts. Of the 159 preserved apodoses, 129 show evidence of votive objects. Due to preservation, the construction material of the objects cannot be determined in every case. Of the 125 instances where the material is known there are 54 attestations of votive objects made of gold (= 43%), 60 of silver (= 48%), and 11 of

other materials (= 9%).⁶⁸ Preservation also makes it difficult to determine the average number of votive objects for a given vow. Some apodoses have only one, whereas others have three or four. For the convenience of calculation it can be assumed that there was an average of two objects per minor vow apodosis.

Restricting calculations to the objects made of precious metal, a combination of the ratios (43% gold / 48% silver) and average weight (26 s. gold / 40 s. silver) of the gold and silver objects in the minor vows gives an average value of 11.2 shekels gold and 19.2 shekels silver per one, composite votive object. If there were two votive objects in a minor gift, then the “standard” minor vow contained 22.4 shekels of gold and 38.4 shekels of silver, or to put in rounder terms, a minor vow contained on average of **one-half mina of gold and one mina of silver**. While a rough estimation, it is pleasing this figure matches the one-to-two ratio of gold and silver observed in three of the vows with known weights (KUB 15.8 obv. I 4’-7’; 48.123 obv. I 12’-18’; 56.13 rev. 9’-13’).

It is remarkable just how close in value the half mina of gold and mina of silver of the average minor gift is to the “standard” diplomatic gift of the Egyptian correspondences (48 Babylonian shekels gold = .8 mina) and the gold cups of the Ugaritic tribute (30 Hittite shekels gold = .75 mina) discussed in Chapter 3. The similarity is probably no coincidence. In theory, the Hittite Palace would have considerable flexibility in choosing its schedule and size of votive offerings. Even if the royal couple were committed to a certain value of yearly gifts, one could conceive of it being presented as a lump sum once or twice a year, perhaps coinciding with the Autumn and Spring Festivals. But it seems the king, and especially the queen, were habituated to make votive offerings of a value nearly identical to the regular diplomatic gifts of the day.

⁶⁸ Of the eleven other objects, ten are of precious stone and one of copper. The small number and relative lack of known weights precludes the objects from further discussion.

Mechanically it is possible the frequency of gifts was a result of the source of the “vow budget” (to be discussed further below). But there is also a great symbolism in the congruence of diplomatic gifts and votive offerings of Puduhepa. As Gary Beckman noted in his work on Hittite diplomatic texts, “In times of good relations among the great powers, there was a constant exchange of messengers among their courts.”⁶⁹ With these messengers came a steady stream of diplomatic gifts. By giving a votive gift that echoes the form and value standard diplomatic gift—from vassal to master and from king to allied king—Puduhepa indicates her commitment to maintain a regular, loyal, and in the language of Bronze Age diplomacy, affectionate relationship with the gods. One might indeed wonder how many of the vows were occasioned by a crisis like severe illness, and how many were simply intended to keep open the lines of communication (cf. the many vows for His Majesty’s long life).

The votive texts become a redistributive system of prestige and material when seen as a link between the diplomatic and the religious worlds. The king and queen transferred the diplomatic income accorded to their political station to the gods in approximately the same dimensions as the gifts were received. In real terms this meant that wealth was invested into the temples of provincial Anatolia. In symbolic terms Hattusili and Puduhepa situated the Hittite Kingdom, one of the apices of the Ancient Near Eastern political world, as vassal and tributary to the divine.⁷⁰

⁶⁹ Gary Beckman, *Hittite Diplomatic Texts* (Atlanta: Society of Biblical Literature, 1999), 5, quoting further from KBo 1.10+KUB 3.72 obv. 50-54, a letter from Hattusili III to Kadashman-Enlil II, “[Only if two kings] are hostile do their messengers not travel continually between them.”

⁷⁰ Such a mindset was not at all unique to Hattusili and Puduhepa, but rather constitutive of Hittite royal ideology. See Fiorella Imparati, “Die Organisation des hethitischen Staates,” in *Geschichte des Hethitischen Reiches*, by Horst Klengel, et al. (Leiden: Brill, 1998), 323, 327-328.

6.14 Reconstructing a Schedule of Vows in the Reign of Hattusili and Puduhepa

Given the state of preservation it can be conservatively estimated that tablets of the corpus retain around half of their original text, so the 164 minor vows and 30 major vows represent a reconstructed total of 328 minor and 60 major vows. It can be assumed that most of the vows were distributed evenly across the reign of Hattusili and Puduhepa. The military vows are an exception as these were triggered by specific, historically compact events. If the reign of Hattusili and Puduhepa lasted about thirty years (c.1267-1237), and the reconstructed total for non-military vows are divided evenly across thirty years, the results are:

Reconstructed Yearly Vows Obligations (over 30 years)

For Illness:	3.3 minor / 0.8 major
For Other Topics:	2.6 minor / 0.4 major
Unknown Topics:	3.3 minor / 0.3 major
Total:	9.2 minor / 1.5 major per year

The vows for “Unknown Topics” reflect the vows with lost or damaged conditions. If the conditions could be recovered the topics would probably show a distribution similar to the undamaged vows, though skewing towards the “Other Topics” (of omens, calamity, etc.) as many damaged vows have already been identified as dealing with illness and war (these topics being easier to identify as it only takes the discovery of a single word in the damaged text, e.g. a body part or mention of healthiness, or a campaign or mention of the enemy, to assign the vow to the illness vows or military vows, respectively).

The military vows probably cluster into a few short years. The campaigns themselves were fairly brief (the Arzawa campaign took place in a single season) and the preparation was most likely accomplished in the preceding winters, which leaves a small window of time for military vows to be made. There is a reconstructed total of 54 minor and 14 major military vows (doubled from the 27 minor / 7 major counted at the beginning of section 4.13) to be divided across the thirty years of Hattusili's reign. The outstanding question is how many years did the Hittites spend in campaigns against the Kaskaens? The preserved scraps of Hattusili's Annals unfortunately do not allow a continuous narrative to be reconstructed for his kingship. In the votive texts, the single-year Arzawa campaign garnered thirteen vows in seven texts. The Northern campaigns, which include the vows of Puduhepa for Tudhaliya, have nineteen vows in five texts. Even allowing that the Arzawa campaign was much more of a formal military expedition compared to the police actions against the Kaskaens, it seems the Northern campaigns, at least those significant enough to appear in the vows, were not exceedingly frequent. Let it be assumed for convenience's sake that the total number of years during Hattusili's reign spent on military campaigns was around five years. The 54 minor and 14 major military vows, divided over 5 years, yields a total of 10.4 minor vows / 2.8 major vows per year. When added to the normal obligations this average means the total number of vows was effectively doubled during war years.

Thus during the reign of Hattusili the Hittite Palace could typically expect to offer **nine to ten minor gifts and one to two major gifts per year**, with campaign years seeing perhaps as many as twice this amount. Of every ten minor vows offered, nine of them would be authored by Puduhepa and one by Hattusili, except for military vows when the ratio would be closer to seven

to three, still in the queen's favor. For the major vows the distribution is almost even, with half given by Puduhepa and half by Hattusili.

Hattusili gave far less frequently than Puduhepa but his gifts could be very large. In the vows from KUB 56.30 obv. 19'-22', 23'-26' and KUB 15.9 rev. III 1'-5' he offered a total of 300 mina of silver and 100 mina of mixed precious metals (it also possible that the 100 mina of silver from KUB 15.29 obv. I 2'-3' should also be added to this total). Thus by these three vows alone it is likely that despite the queen being the more frequent user of the votive system **the total value Hattusili's gifts equaled or exceeded the gifts of Puduhepa.**

6.15 Source and Destination of the Votive Objects

It was estimated at the beginning of the previous section that a minor gift was roughly equal in value to a standard diplomatic gift, suggesting there was a symbolic link between diplomacy and devotion in the Hittite court. Because large quantities of gold could only be acquired through trade for the Hittites, the link was also practical.

Anatolia, while blessed with deposits of copper, iron, and silver was poor in exploitable gold during Hittite times. There is no evidence of large scale mining of the metal in the region during the Bronze Age, save for a few sites in far western Anatolia along the Aegean (and thus beyond regular Hittite control).⁷¹ As Andreas Müller-Karpe found in his study of Anatolian metalworking, the lack of domestic gold income is confirmed by the Hittite texts where it is nearly absent from the IGI.DU₈.A and *MANDATTU* taxation lists, comprising less than 1% of

⁷¹ The origins and ratios of the gold ingots of the KASKAL Main Text, while only a single data point, are instructive. Egypt provides by far the largest amount (41 m. 4 s.), with Babylon in distant second at only a tenth of Egypt's amount (4 m. 7 s.), and the only Anatolian source coming from Lycia with less than half of Babylon's contribution (2 m. 2 s.).

the objects therein.⁷² Conversely, in the Palace and temple inventory texts, which document the contents of warehouses in the capital, over 60% of the objects are described as made of gold.⁷³ Gold also appears in sixty-four of the 194 vows analyzed above, showing that the precious metal was a vital substance to the Palace economy. If the gold filling the Hittite coffers did not come from domestic sources, it must have come from abroad; and given the Hittite state's seeming abhorrence of private commerce this means the well-attested channels of diplomatic gifts and tribute.⁷⁴

In section 5.2 *Tribute from Hittite Vassals* it was shown that during the reign of Hattusili and Puduhepa the Hittite Palace could expect a minimum yearly tribute of twenty-one mina of gold (thirteen and one-half mina from Ugarit and seven and one-half mina from Amurru; a total which must surely have been increased by the incidental diplomatic gifts accompanying letters between kings, as well as any unattested tribute there may have been). The gold was referred to by weight in the vassal treaties, suggesting it was shipped in bullion form, but it likely did not stay this way for long. Müller-Karpe found within the Hittite inventory texts that in contrast to the raw silver, which probably came from a domestic source, gold tended to be stored as finished objects.⁷⁵ The relative lack of unfinished gold suggests a high turnover in the gold economy, with the yearly tribute being processed into objects fast enough by the Palace workshops (the “smelting texts” form a well-attested subgenre of the administrative corpus) that bullion was the exception rather than the rule in the palatial storehouses.

⁷² Andres Müller-Karpe, *Altanatolisches Metallhandwerk* (Neumünster: Wachholz, 1994), 73-78.

⁷³ Müller-Karpe, *Altanatolisches Metallhandwerk*, 78 Abb. 53.

⁷⁴ The same can be said for any of the exotic materials appearing in the Hittite religious economy, including the seven lapis lazuli objects in the votive texts, which probably came from Egypt, and any mention of ivory and ebony elsewhere in the inventories.

⁷⁵ Müller-Karpe, *Altanatolisches Metallhandwerk*, 75 Abb. 50b.

As discussed in section 4.13, an average minor vow contained about one-half mina of gold (and one mina of silver). Combining this with an estimated rate of ten minor vows per year means that around **five mina of gold was consumed by minor votive gifts each year**. It is not possible to guess how much gold the major gifts consumed in a year because the major gifts could vary so greatly in size. It is clear that the palace would need to build up a “strategic gold reserve” so that they could deliver on promises like the life-size golden statue in KUB 15.1 rev. III 32’-35’ and the recurring yearly gifts of KUB 15.3 obv. I 5-16 and the Vow of Puduhepa. Let it be assumed that somewhere between five and ten mina of diplomatic gold was saved for major gifts each year (which would allow for a very substantial statue weighing between twenty-five and fifty mina to be produced every five years). With the estimates of minor and major gifts in mind, it can be said in very general terms that **between a half and a three-quarters of the gold from the known yearly tribute was earmarked for votive objects during the reign of Hattusili and Puduhepa**. Of the remaining gold income, some of it must have been returned to the diplomatic economy through out-going gifts, and some of it designated for the maintenance of cult objects around the countryside. Judging by the attestations of jewelry in the inventory texts, some gold was also turned into objects for use in the ritual vestments and perhaps also for the personal wardrobe of the royal family.⁷⁶

It is necessary for the modern observer to break out of the mindset of seeing gold simply as a marker of wealth in the Hittite context. The only attested expenditures of gold during the

⁷⁶ See discussion of Hittite use of precious metals in Jana Siegelová and Hidetoshi Tsumoto, “Metals and Metallurgy in Hittite Anatolia,” in *Insights into Hittite Archaeology and History*, edd. H. Genz, D.P. Mielke (Leuven: Peeters, 2011), 277-278: “The precious metals were controlled by the administration offices and hoarded as an accumulation of capital, but were also spent: for temples (regular maintenance of for votives), for furnishing palaces (insignia, emblems, prestige weapons and jewellery), or as remuneration or reward (all metals, but predominantly silver).”

Hittite Late New Kingdom were for votive gifts, the restoration of cult objects domestically, and diplomatic gifts abroad. There is no evidence for large-scale distribution of gold in the form of non-religious prestige gifts to local elites. It was too precious and exotic for mundane use, and altogether too value-dense for most transactions, so that unlike silver there is no evidence of its use for exchange or currency. Gold's import, manufacture, and emplacement in the form of religious objects was most likely centrally controlled. Because of its restricted source and utility, gold must be seen in the Hittite context not so much as a marker of wealth but of prestige connected to the central government. Viewed this way, the votive system was a program of distribution, or perhaps better curation since the objects were inalienable to the temple and did not circulate, of wealth gained through foreign contacts.⁷⁷

6.16 Conclusions on the Votive Corpus

All evidence from the votive texts suggest that the vows were completely centered on the psyche of the royal persons of Hattusili and Puduhepa, either occasioned by dreams or in response to an event impacting a member of the royal family. It seems the vows were pronounced solely at the discretion of the king or queen, with apparently little to no consultation with the local temples. Mechanically speaking, the gifts promised by the vows were centrally manufactured in the workshops of the capital from gold and other exotic materials acquired through diplomatic trade. It is not clear in every case where the gifts ended up. Some of the offerings were surely given in Hattusa, which is known to have contained many temples of different gods transplanted to the capital. But many others, perhaps most, were distributed across temples in Hatti land. A number of the vows are prefaced by the location where they were made

⁷⁷ A time-honored and anthropologically sound way of cultivating legitimacy: see Timothy Earle's discussion of wealth financed states from Chapter 1.

or where the dream occurred, and it is likely that the location where the vow was promised was in many cases where the gift was intended to be given (de Roos provides a discussion and list of the locations of the vows, almost all of which are confined to Central Anatolia).⁷⁸ Sometimes it is explicitly stated that the gifts will be given in a specific location, as in KUB 15.3 obv. I 15-16 (“But whatever *SÎN* wills, according to that I will be giving the months of silver and gold, whether (in) Urikina or wherever”; cf. also KUB 48.119 obv.? 3’-8’ where the possible sites of Nerik and/or Hakmis are offered). Additional evidence for the dispersal of votive gifts comes from the various geographical hypostases of the gods in the vows.⁷⁹ In some cases the human supplicant cycles through the different hypostases of a single godhead, raising doubt that the gifts will be distributed to all of the locations mentioned, but most of the time the god appears only once, identified by a specific town suggesting that the vow might be connected to that location.

The votive system as a government institution was coincident with Puduhepa’s tenure as an influential *tawananna* of the Hittite court. While there are clear precedents for vows in Hittite culture, only under Puduhepa was vow-making a tool of state. Though she pioneered and largely ran the votive system, she relied on the full support and participation of her husband Hattusili. Puduhepa’s share of the votive gifts comprised nine out of ten of the minor vows and half of the major vows, greatly exceeding the amount of gifts she is recorded to have personally received in yearly tribute. It must be concluded that she was explicitly tasked by Hattusili with spending a large portion of the combined diplomatic income of the Palace. The importance of the king in the votive system can be seen by its abrupt collapse when Puduhepa fell out of favor with Tudhaliya, presumably as a result of her lost access to diplomatic income.

⁷⁸ de Roos, *Hittite Votive Texts*, 22-26.

⁷⁹ Also discussed and listed by de Roos, *Hittite Votive Texts*, 26-30.

Hattusili participated fully in the votive system but seems to have drawn on a different source of income than Puduhepa, as evidenced by the strong distribution in the kinds of gifts given by the king and queen. Hattusili's gifts tend towards deportees, livestock, and large amounts of raw silver, all of which are obtainable within Anatolia. Puduhepa's gifts contain most of the gold and lapis objects attested in the corpus, which could only be obtained from her diplomatic contacts abroad. This division fits well with the image of Puduhepa as a political driving force and diplomatic *doyenne* in the Hittite court. It seems she had great influence not only in the crafting of foreign diplomacy, but also in the spending of its tangible rewards.

The votive texts are proof of the strong symbolic link between the diplomatic and religious spheres for the Hittite court. The preceding analysis suggests that the vows must be interpreted as more than expressions of piety; they were engines of legitimation that by their etiology in the dreams and mental states of the king and queen served to centralize power in the royal persons. This imperious aspect of the votive system can perhaps be contrasted to the consensus-based approach of Tudhaliya, who distributed the diplomatic wealth of his reign in conversation with local temples.⁸⁰

6.17 The Votive Texts and the KASKAL Series

To return to the question of the origins and purpose of the KASKAL series, it can be seen that vow fulfillment is unlikely to be the context of KASKAL Main Text, despite the large amounts of wealth expended on vows during the reign of Hattusili and Puduhepa. The votive

⁸⁰ The administrative/ideological impact of the Hittite local cults, and Tudhaliya IV's role in promoting or "reorganizing" them, awaits further evaluation, but see Michele Cammarosano, "Hittite Cult Inventories – Part One: The Hittite Cult Inventories as Textual Genre," *Die Welt des Orients* 43 (2013): 63-105, and "Hittite Cult Inventories – Part Two: The Dating of the Texts and the Alleged 'Cult Reorganization' of Tudhaliya IV," *Altorientalische Forschungen* 39/1 (2012): 3-37.

system was a recurring, extended process, whereas the KASKAL Main Text records a single large event. The number and variety of objects involved is simply too high for even the largest major vow, and textiles are never mentioned in the votive corpus (though as was learned in the Vow of Puduhepa, some components of vow fulfillment could be implied: there are no records in the Hittite corpus of deportees being provisioned with textiles, but this is not to say it is impossible). The periodic nature of vows in fact reemphasizes how unusual the KASKAL text is, as most of palace administration geared towards continuous expenditure, not large bursts.

CHAPTER 7

CONCLUSION

My original goal when I set out to write this dissertation was to explain the enormous amounts of wealth found in the KASKAL Main Text discussed in Chapters 3 through 5, perhaps even to find a historical context for the objects' purpose and destination. In this sense the dissertation is unfinished, thwarted by the incompleteness of philological evidence. But in seeking alternative paths to solving the problem of the KASKAL wealth, which precipitated the examination of the Votive Corpus and the review of previous scholarly literature on the Hittite state, the dissertation found its true purpose as the first step towards reevaluating the unique nature of Hittite administration.

The basic conclusions of the dissertation were thus: Hittite administration as it is preserved was a hands on, small-scale affair focused on the management of luxury goods. This style of administration was sufficient for the Hittite Empire because the state was maintained primarily by the manipulation of prestige objects, i.e. by wealth finance, acquired from foreign trade and expended in the religious sphere. The KASKAL Main Text provides evidence for the first conclusion because it shows direct interaction between the scribe and the goods he is recording. Because of the lack of metadata, the scribe's presence was required to interpret the text, suggesting that the text functioned not as a long-term record but as an *aide de memoire* (a description which can be provisionally extended to the rest of the Palace Administrative Corpus). The Hittite Votive Corpus supports the dissertation's second conclusion, because it substantiates a direct link between the income of foreign luxury goods acquired by the royal family and the Hittite religious system. It is estimated that during the reign of Queen Puduhepa, between half and three-quarters of all gold income (which could only be acquired from foreign sources) was

spent on vow fulfillment. Thus already the KASKAL Main Text and Votive Corpus suggest a Hittite state focused on religious wealth.

A future program of research on Hittite administration will expand the interface of religion and wealth in the Hittite state. It might look as follows. First, more can be done with the KASKAL series, which remains a useful point of entry for investigating Hittite administration simply by the extraordinary magnitude of its wealth. Analysis of the remaining religious administrative texts, especially the cult inventories and temple restorations, will further shed light on the expenditure of luxury goods, with finding a home for the ca. 900 textiles in the KASKAL text as probably the biggest challenge. Next, the rest of the Palace Administrative Corpus awaits re-analysis. Much of the PAC records incoming or stored wealth, such as the tribute lists, which might illuminate how the wealth of the KASKAL Main Text was collected in the first place. There are also some inventory texts which seem to reference the purpose of their goods. These will help further refine our understanding of redistributive expenditure by the Hittite government. Last, search must be undertaken for concrete examples of staple finance in the Hittite Empire. This will relieve stress on theoretical model discussed at the end of Chapter 2, which as it stands is extremely skewed towards wealth finance for a polity the size of the Hittite state. At the very least it would be convenient to find evidence for the feeding of the attached specialists, such as the temple personnel and craftsmen who produced the religious paraphernalia attested in the cuneiform records. While it is conceivable that such specialists were maintained more or less informally, receiving food rations as part of their participation in a social network dependent on the king, the matter should be formally investigated. Furthermore, the outstanding questions about the festival texts, discussed at the very end of Chapter 2, offer the best chance of extending a staple finance system to the Hittite population at large.

In closing, it should be noted that while a book on “Hittite Administration” may some day exist, one on “Hittite Economy” will not, and cannot, ever be written. The reason is that the evidence for such a study does not exist. Estimating the “Gross Domestic Product” for the Hittite Kingdom would require the kind of history from below that is unknown in the Hittite world. Census data, records of large scale taxation, and private economic documents are all missing, and were probably never recorded. Only the small portion of the economy that the Hittite central government was able to cream off for financial purposes has been preserved. But I hope to have shown that studying even this narrow interface between government and economy, i.e. finance, is a worthwhile goal, because it gives a glimpse into the psyche and motivations of the Hittite ruling class. It is only by understanding the human response to the environmental constraints of Anatolia, the economic and ideological motivations of the religious system, and the political importance of acquiring foreign luxury goods that the modern scholar can access the alien world of Hittite history.

APPENDIX A

The Eternal Treaty Dossier: The 21st year of Ramses II

Edel No. 7 (KBo 28.47)¹

E 7 (end of obv., beginning of rev.)

King Ramses to King Hattusili:

[6 gold objects]

[48 linens]

E 7 rev. 3'-1'

Prince Sutahapsap to Hattusili:

(1 cup of good gold)

(1 *maklalu* garment of kingly linen)

(1) tunic of kingly linen)

E 7 rev. 4'-6'

Prince Ramses to Hattusili:

1 cup of good gold

1 *maklalu* garment of kingly linen

1 tunic of kingly linen

¹ See the commentary to the tables in section 3.2 for reasoning behind restoration of King Ramses' gift to Hattusili.

Edel No. 8 (KBo 28.48)²

E 8 obv. 27-rev. 11'

Vizier Pašiyara and the “Grandees” of Egypt to King Hattusili:

2 containers (made of) good gold

[3 additional gold objects]

[1] small [smthg.] of good gold

[48] linens

Edel No. 9 (KUB 3.70)

E 9 rev. 11-17

Prince Sutahapsap to King Hattusili:

1 drinking cup of good gold and inlay, in the form of the face of a bull, with the horns of white stone, and the eyes of black stone. 93 shekels of good gold.

(1) good, new, fine-threaded linen

(1) good, new, fine-threaded blanket for the bed, two-sided

Edel No. 10 (KUB 34.2)

E 10 rev. 3'-5'

Queen Mother Tūya to King Hattusili:

1 cup of good gold

1 colorful garment of kingly linen

² There are a minimum of four lines of gifts lost (one line at the end of obv., three lines at beginning of rev.). The reverse of the column breaks off at line 11' (=line 14 if beginning three lines restored), leaving a maximum of fifteen or so lines possibly broken away. For the restorations, see the commentary to the tables in section 3.2.

1 colorful tunic of kingly linen

Edel No. 12 (KBo 1.29+Kbo 9.43)

E 12 obv. 25-rev. 4

Queen Naptera to Queen Puduhepa:

1 very colorful necklace in 12 strings of good gold, weighing 88 shekels

1 colorful *maklalu* garment of kingly linen

1 colorful tunic of kingly linen

5 colorful garments of good fine linen

5 colorful tunics of good fine linen

Edel No. 15 (KBo 28.36)

E 15 rev. 1'-9'

King Ramses(?) to a Hittite Prince(?):

[1] gold-inlaid object

(1)]colorful tunic of good kingly linen

(1) colorful tunic of kingly linen

[2+] garment with colorful trim of good fine linen

(1) cloak, two-sided, of good fine linen

[2+] colorful garment of good fine linen

[2+] colorful []-ta garments of good fine linen

E 15 rev. [12'-?]

Queen Naptera to a Wife of a Hittite Prince(?):³

[4 linens]

Edel No. 16 (KUB 4.95+KBo 28.45)

E 16 obv. 12-rev. 3'

King Ramses to Prince Teššub-šarruma:

1 drinking cup of good gold, inlaid with stones, (in the form of) a cow

1 chariot of []-wood, inlaid with gold

1 team of horses

(4) colorful garments of kingly linen

4 colorful *maklalu* garments of kingly linen

4 colorful tunics of kingly linen

E 16 rev. 4'-12'

King Ramses to Teššub-šarruma's Wife(?):⁴

1 colorful *maklalu* garment of kingly linen

[1] colorful tunic of kingly linen

[1] colorful garment of *miku* linen

[1] colorful *maklalu* garment of *miku* linen

[1] colorful tunic of *miku* linen

[1] colorful garment of good fine linen

[1] colorful *maklalu* garment of good fine linen

³ See commentary to tables in section 3.2 for restoration.

⁴ With the exception of the first and last garments, this set is entirely restored by Edel.

[1] colorful tunic of good fine linen

Edel No. 17 (KBo 28.44)

E 17 obv. 13-17

King Ramses to Prince Tašmi-šarruma:

1 cup of good gold, weighing 49 shekels.

2 colorful *maklalu* garments of kingly linen

2 colorful tunics of kingly linen

APPENDIX B

A Hittite-Egyptian Royal Marriage:

The 34th year of Ramses II

LETTERS CONCERNING THE BRIDE PRICE

Edel Nos. 45 (KBo 28.5(+))6 and 46 (KBo 28.4)¹

E 45, rev. 1'-[20'] (dupl. E 46, rev. [-7']-13')

Ramses (and Naptera) to Hattusili and Puduhepa:

ingots of good gold, weighing 765 shekels.

1 object of good gold, inlaid with precious stones, weighing 234 shekels.

1 object of good gold, inlaid with precious stones, weighing 83 shekels.

10 drinking cups of good gold, weighing 480 shekels.

1 *kaptukû* jar of good gold, weighing 96 shekels.

[2+] variegated eyes of good gold, with inlay, weighing 36 shekels.

1 very colorful necklace of good gold, weighing 26 shekels.

1 pair of earrings of good gold, weighing 22 shekels.

11 rings of good gold, weighing 12 shekels.

2 arm-clasps of good gold, inset with various stones, weighing 5½ shekels.

1 casket of good gold, in the Hittite style, weighing 19½ shekels.

¹ These texts record gifts from Ramses to Hattusili (E45) and Puduhepa (E46), and are near duplicates. They can also be partially restored from a gift summary tablet E92. For the relationship between these texts, see Edel vol.II pp. 180-197, and see the especially useful table summarizing gifts on pp.190-191.

(sum of gold: 1779 shekels)

(sum of silver: 17 shekels)

2 hawks(?) of precious stone, their copies of gold set with stones

10 rings of precious stone

69 various garments of kingly linen

11 various garments of *miku* linen

127 various garments of good fine linen

(sum of linens: 207)

40 good logs of ebony

5 *kukubu* containers of excellent eye medication

20 reeds of excellent eye medication

E 46, rev. 14'-18' (recapitulated in E 92, [-2]-5a')

Ramses (and Naptera) to "two Grandees" of Hatti, i.e. the Chief of the Guards of the Right

(GAL ^{LÚ.MEŠ}REDÎ ZAG), and the Chief of the Guards of the Left (GAL ^{LÚ.MEŠ}REDÎ GÛB):

2 drinking cups of good gold, weighing 96 shekels

[6 *maklalu* garments of kingly linen]

[6] tunics of kingly¹ linen²

² As Edel notes in vol.II p.195, letters no. 46 and no. 92 differ at this juncture. The former has the "two grandees" receiving only "[x] tunics of good fine linen", whereas the latter has the two men, who are named as the Chiefs of the Guards, each receiving "3 colorful *maklalu* garments of good kingly linen, and 3 colorful tunics of good kingly linen". Edel takes this discrepancy as an accidental omission of the *maklalu* garments, and notes that there is a difference in quality. For my purposes, I will err on the side of Ramses' generosity, and restore the richer gift amount described in E92.

E 46, rev. 17'-18' (recapitulated in E 92, 18'-19')

Ramses (and Naptera) to a palace official:

1 leather cuirass for a man

1 bronze helmet with leaves of tin

1 leather cuirass with bronze inlay

Edel No. 92 (KBo 28.33)³

E 92 6'-17'

Ramses and Naptera to Hittite Princes and their wives:

ingots of good gold, weighing $200 + 565 = 765$ shekels

13 implements of good gold, weighing 893 shekels

100[+] jewelries of good gold, weighing 121 shekels

(sum of gold: 1400 (+ 379) shekels)

[a number of garments are listed, including 9[3] garments of *miku* linen. I will assume there is a sum of 207 garments to parallel the gift given to the Hittite royal couple]

(40) good logs of ebony

1 container of ebony, in the Hittite fashion

OTHER LETTERS CONTAINING GIFTS

Edel No. 44 (KBo 28.14)⁴

³ This section is restored on the assumption that the gifts given to the Hittite princes are perfectly parallel to the gifts given to the Hittite royal couple in E45 and E46. Also see Edel's arguments for this interpretation in vol. II pp. 189-192.

⁴ This letter is fairly well preserved, but there may be five or six lines at the end of obverse and beginning of reverse containing gifts.

E 44 rev. 3'-14'

King Ramses to Queen Puduhepa:

1 *kaptukû* jar of good gold, weighing 96 shekels.

1 *haragabas* container of good gold, weighing 36 shekels.

2 large colorful cloths of kingly linen, 15 x 5½ cubits

2 colorful *maklalu* garments of kingly linen

2 colorful tunics of kingly linen

3 colorful garments of good fine linen

3 colorful tunics of good fine linen

1 chest of ebony inlaid with gold, with feet.

Edel No. 47 (KUB 28.10)

E 47 rev. 33'-34'

Ramses to Hattusili:

2 colorful *maklalu* garments of kingly linen

2 colorful tunics of kingly linen

Edel No. 49 (FHL 98)

E 49 Rs' [0']-4':

Ramses to Hattusili:

1 drinking cup of good gold

3 colorful *maklalu* garments of kingly linen

(3) colorful tunics of kingly linen

4 colorful *maklalu* garments of *miku* linen

(4) colorful tunics of *miku* linen

2 *maklalu* garments of good fine linen

(2) tunics of good fine linen

E 49 rev. 5'-16'

Ramses to Puduhepa:

1 very colorful necklace, in a flower blossom motif

2 rings of good gold (weighing x shekels)

6 rings of good gold (weighing x shekels)

1 ring of good gold (weighing x shekels), taken as booty

7 granulated collars of good gold (weighing x shekels)

(2) *maklalu* garments of kingly linen

2 tunics of kingly linen

(2) *maklalu* garments of good fine linen

(2) tunics of good fine linen

10 rings of bronze

10 r[ings of ?]

Edel No. 51 (KUB 3.63)⁵

E 51 rev. 4'-8'

King Ramses to Queen Puduhepa:

⁵ It is difficult to guess how much is missing at the beginning of this letter. There could easily be another 10-15 lines of gifts before what is preserved.

(4) rings of good gold, weighing 4 shekels of refined gold⁶

1 linen

1 large colorful cloth of kingly linen, [x] cubits in length.

4 large colorful cloths, 6 cubits in length

5 very good bed blankets of kingly linen.

[1] garment of kingly linen

1 storage jar of gold with excellent eye medicine

10 large *kukubu* containers of gold filled with medicine

⁶ See E45, rev. 10' where 11 rings weigh 12 shekels of gold

APPENDIX C

Concordance of Referenced Texts

Siegelová Text	Publication
A	KUB 42.11
B	KBo 18.173
C	KBo 18.175a
D	KUB 42.14
E	KUB 42.16
Ea	IBoT 3.110
F ¹	KBo 18.175
G	KUB 42.17
H	KUB 42.15
I	IBoT 3.144
J	KUB 42.12
K	KUB 42.13
L	KUB 42.64

¹ The fragments 18.175 e+f, and c both belong in col.v of 18.175

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