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The use of large numbers in the Old Testament, with particular emphasis on the use of *'elep*

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ABSTRACT

THE USE OF LARGE NUMBERS IN THE OLD TESTAMENT

David M. Fouts, Th.D.

This dissertation attempts to demonstrate a viable alternative to accepting the large numbers of the Old Testament at face value. The hypothesis that this viable alternative is seen in the area of literary hyperbole is introduced by means of a cursory examination of the problems involved in five representative passages and by an overview of the early history of interpretation.

Chapter two lays the foundation for the argument by a textual analysis of significant biblical passages which contain אֶלֶף and by a grammatical-syntactical analysis of its use throughout the Old Testament. Textual analysis reveals no significant lessening of the enormity of the numbers, a problem which remains despite the reading chosen. Grammatical-syntactical analysis supports the normal gloss "thousand" in the majority of cases.

Chapter three examines recent demographic analyses of Palestine. At no time in ancient history did the population of Palestine approach the numbers demanded by accepting the census figures of the Old Testament at face value.

Chapter four examines the use of large numbers in the milieu of the ancient Near East. Literary hyperbole of numbers may be witnessed particularly in the royal inscription genre which records the number of troops killed or captured and the amount of spoil taken.

Chapter five develops the hypothesis by analyzing the majority of biblical passages which contain large numbers. Similarities to the royal inscriptional genre of other ANE countries with respect to large numbers, figurative language, and military contexts are demonstrated.

Chapter six contains other suggestions for understanding the term אֶלֶף. It is thought that no other suggestion satisfies as well as accepting the majority of biblical passages which contain large numbers as reflecting literary hyperbole.

Chapter seven reviews the data of the dissertation and forms a conclusion, and includes brief comments about recent Conquest models.

Appendices include the use of numbers in Northwest Semitic, a concordance of biblical passages employing large numbers, an ordering of the larger numbers in descending fashion, and a listing of the largest numbers with their associated kings.

THE USE OF LARGE NUMBERS
IN THE OLD TESTAMENT
With Particular Emphasis on the Use of 'elep

A Dissertation

Presented to

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Grade A-

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PREFACE

When the present writer began this study in the Fall of 1987, he hoped to find some solution to the problem of the use of large numbers in the Old Testament. Many hours were spent in an endeavor to factor the numbers with a calculator, or to calculate gematria values, or to simply stumble on some other means of interpreting the numbers. What he discovered instead were the amazing similarities of Scripture to other ANE literature with respect to this problem. The results of that discovery are included in this dissertation.

I would like to thank all who contributed to this work in terms of helpful suggestions and ideas. Foremost among these are Dr. Eugene Merrill, my advisor, and Dr. Mark Rooker and Dr. Dick Averbeck, the secondary readers. Dr. Allen Ross, of Trinity Evangelical Episcopal Seminary, offered helpful input in the early stages. Both my parents believed in my ability to accomplish this project and both provided financial support. I would like to thank my two children Heidi and Jason, who may now have the full attention of their Daddy, for their love. Finally, my highest accolades go to my dear wife, Marlene, without whose love, patience, emotional support and encouragement this project would have never been begun or completed. Surely she is a Proverbs 31 woman: אִשָּׁה יִרְאַת יהוה הִיא תִתְהַלָּל.

ABBREVIATIONS

ANE	Ancient Near East
ANET[3]	*Ancient Near Eastern Texts Relating to the Old Testament.* 3rd edition.
ARAB	*Ancient Records of Assyria and Babylonia,* D. D. Luckenbill
ARI	*Assyrian Royal Inscriptions,* Albert Kirk Grayson
BASOR	*Bulletin of the American Schools of Oriental Research*
BHS	*Biblia Hebraica Stuttgartensia*
BSac	*Bibliotheca Sacra*
GTJ	*Grace Theological Journal*
HUCA	*Hebrew Union College Annual*
IEJ	*Israel Exploration Journal*
JANES	*Journal of the Ancient Near Eastern Society*
JAOS	*Journal of the American Oriental Society*
JBL	*Journal of Biblical Literature*
JCS	*Journal of Cuneiform Studies*
JJS	*Journal of Jewish Studies*
JNES	*Journal of Near Eastern Studies*
JNSL	*Journal of Northwest Semitic Languages*
JPOS	*Journal of the Palestine Oriental Society*
JSS	*Journal of Semitic Studies*
LXX	Septuagint
MT	Masoretic Text
PEQ	*Palestine Exploration Quarterly*
RB	*Revue Biblique*
RIMA	*The Royal Inscriptions of Mesopotamia,* volume 1: *Assyrian Periods* Albert K. Grayson
RIME	*The Royal Inscriptions of Mesopotamia,* volume 4: *Early Periods* Douglas Frayne
SARI	*Sumerian and Akkadian Royal Inscriptions,* volume 1: *Presargonic Inscriptions* Jerrold S. Cooper
SMF	Standard Military Formula
TynBul	*Tyndale Bulletin*
VT	*Vetus Testamentum*
WTJ	*Westminster Theological Journal*
ZAW	*Zeitschrift für die alttestamentliche Wissenschaft*

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

Preliminary Remarks

Large numbers in the Old Testament have long been a matter of concern to scholars who have sought to understand their purpose and their apparently unrealistic enormity. For some scholars, the large numbers have often been dismissed as obvious exaggerations or simply errors. Others desire to accept the large numbers at face value, insisting that the biblical writers were constrained by modern, rather than by ancient, conventions. This dissertation will attempt to deal with the large numbers of the Old Testament in a way that is consistent with the literary, historical, and theological character of the Bible and in a manner that will address the tensions felt especially by conservatives who accept the data at face value but are at a loss as to how to reconcile them to historical, cultural, and sociological factors.

The Scope of the Study

Due to the abundance of examples of the use of numbers in the Old Testament, one must limit oneself to a certain degree in order to remain within the parameters of a dissertation. For this reason, only those numbers in excess of 1,000 are directly considered. This study is further limited to those numbers in excess of 1,000 which include the use of the term אֶלֶף[1] and to those usages of

[1]Although not the primary focus of the study, numbers in excess of 1,000 which are based on the use of רִבּוֹא and רְבָבָה will be noted as necessary.

אֶלֶף which occur in pre-exilic historical literature.[2] Because of this necessary limitation, the lengths of the years of life for the antediluvians and for the patriarchs will not be considered, inasmuch as these life-spans do not exceed 1,000 in the biblical accounts.

The Problems Caused by the Use of Large Numbers

The historical literature of the Old Testament employs more numbers in excess of 100,000 (over 50 occurrences) than does all the major published historical literature of the ancient Near East (roughly 30 occurrences).[3] The Old Testament also contains the largest numbers extant in the *historical* literatures of the ancient Near East, as far as the present writer can determine.[4] These two facts in themselves are enough to cause one to wonder about the actual value of the numbers in excess of 1,000. If nothing else, they distinguish the Old Testament from the remainder of comparable literature.

The occurrences of large numbers in the Old Testament provide numerous problems in specific passages as well. Those cited below are meant to be illustrative, not exhaustive. These, with others, will be dealt with in detail in chapter five of this dissertation.

[2]Poetic, prophetic, and post-exilic historical passages will be noted as necessary. The basis for their omission here is not arbitrary. It involves the particular type of inscriptional genre found in pre-exilic historical accounts. More will be said about this inscriptional genre below. Over 300 occurrences of אֶלֶף remain in pre-exilic historical literature, enough to constitute a thorough study!

[3]The literature examined may be found in the Bibliography.

[4]The largest specific number of available ancient Near Eastern literature of all types is 3,000,000 found in a poetical passage of the Ugaritic KRT text (however, see note 136 in chapter four below).

The Population of Israel at the Exodus

The size of the population of Israel at the Exodus traditionally has been estimated at between 2,000,000 and 3,000,000, figures based on the number of fighting men enumerated at the censuses of Numbers 1 and 26.[5] Though this is not an impossible figure for a nation "as the sand of the sea, which cannot be counted due to abundance" (Gen. 32:13),[6] it does present some demographic and archaeological conundrums. As will be demonstrated below in chapter three of this dissertation, such an estimate of the size of population for Israel may or may not be appropriate for the land of Palestine in antiquity.[7] However, if indeed there were seven nations more numerous than Israel already in the land (Deut. 7:1) and if indeed Israel was the least of all nations (Deut. 7:7) as the Scriptures indicate, the demographic problems increase exponentially. The land of Canaan would have been crushed under the weight of up to 21,000,000 people (more than the present population of the entire state of Texas) prior to the Conquest of Joshua![8] There is little archaeological

[5]Magen Broshi, "La population de l'ancienne Jérusalem," *Revue Biblique* (*RB*) 82 (1975): 5; cf. Eugene H. Merrill, "Numbers," in *The Bible Knowledge Commentary*, eds. John F. Walvoord and Roy B. Zuck (Wheaton: Victor Books, 1985), 217; and Edward J. Young, *An Introduction to the Old Testament*, revised edition (Grand Rapids: Eerdman's, 1964), 85.

[6]Unless otherwise noted, all translations from Hebrew are by the author.

[7]One must admit that if the census figures are taken at actual value, the two midwives of Exodus 1:15 were fully employed! For the view that the two names mentioned in Exodus 1:15 may refer instead to two overseers or to two guilds of midwives, see Nahum M. Sarna, *Exploring Exodus* (New York: Schocken Books, 1986), 25. Martin Hoegger ("L'interprétation des grands nombres dans l'Ancien Testament," *Hokhma* 25 [1984]: 4) also points out that the people could assemble immediately around the Tent of Meeting and were able to hear Moses and Aaron (Exod. 16:8-12), and that though exhausting, Moses alone was able to judge all the people until adopting Jethro's wise counsel (Exod. 18:13-14). Such terms seem to indicate a somewhat smaller populace.

[8]This estimate is based on seven nations, each more numerous than Israel. If only the sum total of all the nations was greater in number than Israel, then Deuteronomy 7:7

support to testify of such a large population at any time in the past.

If the largest numbers are accepted as actual value or even as rounded off approximations in Numbers 1 and 26 (and related passages) either Deuteronomy 7:1 and 7:7 (and related passages) are in error, or the conclusions of archaeologists are in error. One is reticent to deny either validity to Scripture[9] or to the results of scholarly individuals who have no theological axe to grind. Conversely, if Deuteronomy 7:1 and 7:7 are accepted as factual,[10] and the results of archaeology accepted as being at least close to the truth, one must accept that the largest numbers are used in some other way than expressing actual value or even rounded off approximations. To explore the nature of this usage is the purpose of this dissertation.

The Number of Levites and Israelite First-Born

Numbers 3 records several large numbers which cause problems if taken at face value. In numbering the Levites, three group totals are given, the sum of which is offered at 22,000 (3:39). The sum as given is incorrect.[11] The number of all Israelite first born is given as 22,273 (3:43), with 273 being the excess above the number of the Levites (3:46). Gray has pointed out that this would yield at least 25 sons per family given a population between two and

would be in error. To be consistent within these two verses (Deut. 7:1, 7), one would have to postulate that up to 21,000,000 awaited the Conquest if the census numbers are taken at face value!

[9]As does Broshi, who writes: "L'historien dispose de deux sources principales: la littérature et l'archéologie. Nous ne pourrions, pour notre propos, utiliser les données littéraires, car on ne peut s'y fier. On peut généraliser et prétendre que presque tout ce qui a été dit sur les chiffres de la population dans la littérature ancienne n'a pas grande utilité" (Broshi, "La Population de l'ancienne Jérusalem," 5).

[10]One must note that even accepting Deut. 7:1, 7 as figurative does not mitigate the problem of the enormity of the largest numbers.

[11]See the textual study of this passage in chapter two of this dissertation.

three million persons.[12] The figures do indeed appear to be difficult if taken at face value.

The Number of the Ephraimites in Judges 12

Judges 12:6 presents another problem of many which involve the use of large numbers in the Old Testament. The text reveals that 42,000 Ephraimites were slain at the river Jordan for mispronouncing "Shibboleth,"[13] a number which exceeds the census total for that tribe in either Numbers 1 (40,500) or in Numbers 26 (32,500). Even allowing Ephraim to increase its population of warriors after the Conquest to the period of the Judges from 32,500 to 42,000 does not alleviate the problem of the enormity of the number of slain.[14]

The Wall at Aphek

First Kings 20:30 offers still another passage which seems to be impossible if one accepts the large numbers at actual value. The text asserts that after Israel had killed 100,000 Aramean foot soldiers at a nearby battle, 27,000 more fled into the city of Aphek where a wall fell on them, apparently

[12]G. B. Gray, *Numbers*, International Critical Commentary (Edinburgh: T & T Clark, 1963), 13.

[13]It may be that the figure cited refers to the total of all Ephraimites killed in both the battle and attempting to ford the river, but the figure is still too enormous to be considered at face value.

[14]One may contrast this number with the account of a member of the 32nd Iowa Infantry in the Civil War battle of Pleasant Hill, Louisiana, on April 9, 1864, who records that somewhat less than 23,000 Federal troops were engaged in battle (Solon F. Benson, "The Battle of Pleasant Hill, Louisiana," *Annals of Iowa* 7:7 [1906]: 7). The commander of the Federal troops, Major General Nathaniel P. Banks, estimated the Confederate force at 15,000. N. P. Banks, Official Report of April 13, 1864, made to Major General H. W. Halleck, in *War of the Rebellion: Official Records of the Union and Confederate Armies*, volume 34, *The Red River Campaign*, part 1, *Official Reports* (Washington: Government Printing Office, 1890), 183. A total of 38,000 were engaged; fewer than 2,000 were killed or wounded.

killing them as well. One would think that this wall or its remains would be somewhat comparable to the Great Wall of China to be so calamitous in its collapse, and that it would have been at least partially unearthed by now. If there is some other significance to the large numbers, the size of the wall may not matter.

The Davidic Census in Samuel versus Chronicles

One of the most perplexing problems involving large numbers is the different numbers offered in the 2 Samuel 24 and 1 Chronicles 21 accounts of the census ordered by David. Like the censuses of the book of Numbers, the totals are entirely too large. Schedl writes: "Solche Heeresaufgebote kantte der gesamte Alte Orient nicht."[15] The textual study of chapter two of this dissertation seems to indicate that the differences cannot be explained simply due to textual corruption. Only if the numbers are taken as something different than actual or as rounded off can one maintain the integrity of Scripture.

Summary

These five representative problem passages should be enough to encourage the reader that the present study is not simply valid, but is of utmost importance. Those who would challenge an essentially conservative view of Scripture often do so by appealing to passages which involve large numbers.[16] It is therefore necessary that this study be undertaken, in order

[15]Claus Schedl, "Biblische Zahlen -- unglaubwürdig?" *Theologisch-praktische Quartalschrift* 107 (1959): 59.

[16]Most notable of the objections to the large numbers recorded in historical texts of the Old Testament were those presented by John William Colenso in the first volume of his *The Pentateuch and the Book of Joshua Critically Examined* (New York: D. Appleton

to discover the way that large numbers were used in the Old Testament. Accepting them at face value often leads to internal disharmony with other biblical passages. Then, there are the archaeological data with which to contend. These facts may no longer be ignored by conservative scholars. However, the simple dismissal of the numbers as obvious exaggeration or simple error by many scholars is just as dangerous. What is needed is a balanced approach which examines the numbers as they are encountered in the text and suggests a plausible explanation of their use which is consistent with other scriptural data and with the demographics demonstrated by regional archaeology.

The Hypothesis

This dissertation will demonstrate that for the most part the large numbers used in the Old Testament are valid textually, grammatically, and syntactically. However, scriptural testimony and demographic archaeology demonstrate that the largest numbers must be understood as something other than as an actual value of the persons, animals, etc., enumerated. It is the hypothesis of this dissertation that the large numbers reflect hyperbole, a literary convention[17] common in the royal inscriptional genres of the ancient Near East. More specifically, these numbers are often used in the pattern of Sumerian and Akkadian royal inscriptions in that they are embellished for the purpose of glorifying the reigning monarch. This is not

and Company, 1862-1879).

[17]The use of numbers as a rhetorical device may be seen on a smaller scale in the x/x+1 formula found in Proverbs 6 and 30, and in Amos 1 and 2. The same rhetorical device is often employed in Akkadian and Ugaritic texts (cf. Wolfgang M. W. Roth, "The Numerical Sequence x/x+1 in the Old Testament," *Vetus Testamentum* (*VT*) 12 (1962): 300-311).

to say that scriptural accounts are identical in genre to the ANE royal inscriptions. They in fact differ in numerous ways. It is to say, however, that a literary convention of hyperbole did exist in the ANE, and was employed by the writers of Scripture. The intentional, purposeful embellishment of the numbers (hyperbole) is for the purpose of glorifying King Yahweh, King David, or King Solomon (and a few lesser kings of the divided monarchy). By analogy with the practices of other ancient Near Eastern cultures who so embellished numbers, the large numbers of the Old Testament may be safely reduced to 1/10 in the case of Pentateuchal numbers, and possibly to as little as 1/100 or even 1/1000 in such passages as 1 Kings 20:30, as an approximation of what the actual totals may have been.[18] It is furthermore thought that understanding the large numbers as hyperbole is the only tenable solution to the problems encountered by their occurrences which satisfies both the demands of Scripture and the artifactual data currently available.[19]

A History of Scholarship

The Beginnings until Modern Times

Flavius Josephus (ca. A.D. 37-100?)[20] provides an example of first

[18]There is biblical evidence for such a practice of ten-fold embellishment to glorify a given individual in the poetical use of אֶלֶף and רְבָבָה (cf. 1 Samuel 18:7-8; 21:12; 29:5).

[19]For instance, this dissertation presupposes the essential Mosaic authorship of the book of Numbers. By accepting the large numbers therein as hyperbole reflective of the literary conventions of the ANE, one does not have to postulate that they are later scribal embellishment, nor that they reflect the census of David ca. 975 B.C. (after W. F. Albright, *From the Stone Age to Christianity* {Garden City, N.J.: Doubleday Anchor, 1957}, 253), nor that they are simply in error. The presence of the large numbers indicates some other purpose than an actual count of persons. It remains therefore a problem of hermeneutics, not one of the reliability of Scripture.

[20]Dates cited for the lives of pre-Reformation witnesses are taken from J. D. Douglas, ed., *The New International Dictionary of the Christian Church* (Grand Rapids:

century understanding of the large numbers involved in Numbers 1 and 2 as actual value when he writes: "Now when the people had been numbered, there were found six hundred thousand that were able to go to war, from twenty to fifty years of age, besides three thousand six [sic] hundred and fifty."[21] He later affirms the number 42,000 in Judges 12:6: ". . .and seized on the passages of Jordan by a part of his army which he had sent before, and slew about forty-two thousand of them."[22] He also affirms the 27,000 of 1 Kings 20:30.[23] Interestingly enough, he reads 70 persons instead of the 50,070 at 1 Samuel 6:19 (Masoretic Text).[24]

Early church fathers[25] generally either avoided the problems involved with large numbers in the Old Testament or they spiritualized them. Consider the words of Epiphanius Constantiensis (ca. A.D. 315-403) as he discussed the purpose of the Law: "*οὐκέτι γὰρ δύο ἢ τρεῖς μαρτυρίαι εἰς τοῦτο ἡμῖν ἐπιμαρτυροῦσιν, ἀλλὰ μυριάδες ἑζήκοντα δύο αἱ ἠριθμημέναι ἐν τῇ ἐρήμῳ. . . .*"[26]

Zondervan, 1974).

[21]Flavius Josephus *Antiquities of the Jews* 3.12.4.

[22]Ibid., 5.7.11.

[23]Ibid., 7.14.4.

[24]Ibid., 6.1.4.

[25]The discussion of the early church fathers came after a lengthy attempt to trace their appropriate comments by perusing *Biblia Patristica*, a bibliographical tool of four volumes plus a supplement which cites references, quotations of, and allusions to biblical passages to be found within the patristic period. This attempt proved to be more difficult than imagined inasmuch as many of these sources have not yet been translated from Latin to a modern language. For the most part, the fathers avoided discussion of the numbers. I have selected from my limited research the clearest examples. The topic of the understanding of the Church Fathers regarding large numbers could merit at least a master's thesis, if not a dissertation.

[26]Epiphanius Constantiensis *Panarion* 9.4.2. Normal Greek syntax for numerals would have us translate this figure as 62 ten-thousands, or, 620,000.

One notes his divergence from the Masoretic text at Numbers 1:46, the cited cross-reference.[27] Consider as well the words of Hippolytus of Rome (d. ca. A.D. 236): "Das sind die Häupter der Sippen der Stämme der Israeliten; und diese waren bei Mose, als er die Zählung der Israeliten vornahm. Mose nun is das Vorbild Christi, und die zwölf Häupter sind die Vorbilder der Jünger."[28]

Hippolytus seems on the one hand to spiritualize, on the other hand, to accept the large numbers at face value. He was one of the few church fathers to cite large numbers directly from Scripture, and even ventured to calculate the total population of women who came out of Egypt in the Exodus:

> Den Stamm der Söhne Levi zählte er getrennt von den Stämmen der Söhne Israel. Und ihre Zahl betrug 603,550 Seelen. Die Gesamtzahl der Stämme der Israeliten betrug 1,181,550 [sic!] Männer, ohne die Weiber und Kinder, sondern bloss von zwanzig Jahren an aufwärts. Und als die Israeliten aus dem Lande Aegypten ausgezogen, betrug ihre Zahl 601,730 Männer, von zwanzig Jahren an aufwärts. Und die Zahl der verheirateten und unverheirateten Frauen war 1,100,920. So nach der Angabe des Buches, welches in der syrischen Sprache "simâthâ" heisst, was übersetzt ist "Buch der Schätze." Dagegen sagt das Buch der Chronik, die Zahl der Israeliten habe in der Königszeit 1,100,000 streitbare Männer betragen; und im Heere der fünf Könige waren von den Leviten, dem Priesterstamme, 22,573 Seelen.[29]

Tertullian (ca. A.D. 160-215) seems to have accepted the numbers at actual value. He comments on Exodus 12:37 in *Aduersus Marcionem*: "Aut si non eadem est maiestas, ergo iam minor est creatore, qui non uno die, sed annis quadraginta, nec de inferioribus materiis panis et piscis, sed de mann

[27]Ibid.

[28]Hippolytus Romanus *Fragmenta Uaria* 14. Translation from *Hippolyt's Kleinere Exegetische und Homiletische Schriften*, part two, Hans Achelis herausgeber, *Fragmente zum Pentateuch aus der Arabischen Katene*, Die griechischen christlichen Schriftsteller der ersten drei Jahrhunderte 1, 2 (Leipzig: J. C. Hinriches'sche Buchhandlung, 1897), 98.

[29]Ibid. One also notes in the context that Hippolytus cites Benjamin at 30,400 and Gad at 45,600 versus the Masoretic accounts of 35,400 and 45,650 respectively (Num. 1).

caelesti, nec quinque dirciter, sed sexcenta milia hominum protelauit."[30] Another example of Tertullian's acceptance of the numbers as actual value may be seen in *De Pudicitia* concerning Numbers 25:9: "Et utique sufficit tantum numerum xxiv milium populi fornicantis in filias Madian una plaga ruisse."[31] In still another example, Tertullian may reflect a textual variant when he comments on 2 Kings 19:35:

> Dehinc quid aliud centum et octoginta quatuor milia de exercitu eius per angelum absumpsit quam Ezechiae regis humiliatio? Siquidem duritia hostis adnuntiata uestem scidit, saccum induit eodemque habitu seniores sacerdotum ad deum per Isaiam adire iussit utique ieiunio preces prosequente. Neque enim cibi tempus in periculo nec saturitatis cultus in sacco.[32]

Origen (ca. A.D. 185-254) also dealt with many of the passages which contain large numbers. Many of these references are found in his Homilies

[30]Tertullian *Aduersus Marcionem* 4.21.3. Translation:

> Or else, if there was not the same grandeur, it follows that He is now inferior to the Creator. For He, not for one day, but during forty years, not on the inferior aliment of bread and fish, but with the manna of heaven, supported the lives of not five thousand, but of six hundred thousand human beings.

Alexander Roberts and James Donaldson, eds., *The Ante-Nicene Fathers* (New York: Chas. Scribner's Sons, 1957), 3:381.

[31]Tertullian *De Pudicitia* 6.13. Translation: "And of course it is a sufficient one, that so vast a number--(the number) of 24,000--of the People, when they committed fornication with the daughters of Midian, fell in one plague." Alexander Roberts and James Donaldson, eds., *The Ante-Nicene Fathers* (Grand Rapids: Wm. B. Eerdman's, 1951), 4:79.

[32]Tertullian *De ieiunio aduersus Psychicos* 7.3. Translation:

> After that, what else swept away by the hand of the angel an hundred eighty and four thousand from his army than Hezekiah the king's humiliation? if (sic) it is true, (as it is), that on hearing the announcement of the harshness of the foe, he rent his garment, put on sackcloth, and bade the elders of the priests, similarly habited, approach God through Isaiah -- fasting being, of course, the escorting attendant of their prayers.

Alexander Roberts and James Donaldson, eds., *The Ante-Nicene Fathers* (Grand Rapids: Wm. B. Eerdman's, 1951), 4:106. The MT reads 185,000 at this point.

on Numbers. Consider the spiritualizing manner in which he deals with the large numbers in Numbers 3:

> De eo quod scriptum est: >viginti duo milia numero inventos esse Levitas, primogenitos autem filiorum Istrahel viginti duo milia ducentos sepuaginta tres.<
>
> >Viginti duo< quidem numerus in scripturis divinis, si qui observet, quod principalus quibusdam causis adscriptus sit, frequenter inveniet. Nam viginti duo prima apud Hebraeos elementa tradunt esse litterarum. Viginti et duo rursus a protoplasto Adam usque ad Iacob, ex cuius semine initium duodecim tribus sumunt, patres fuisse numerantur. Tradunt etiam omnium creaturarum Dei species intra viginti et duo numerum colligi. Sed et alia multa in scripturis, si qui diligentius exsequatur, sub hoc numero consecrata repperiet.
>
> Igitur humani generis in carne generatio, sicut asserunt qui in talibus periti sunt, novem quidem mensibus continetur in vulva, sed non prius moveri fertur ad partum quam etiam decimi mensis triduum transeat; et ita invenitur quod numerus iste, id est >ducenti septuaginta tres< dies illos indicent, qui ex novem mensibus et triduo mensis decimi colliguntur et fiunt simul >ducenti septuaginta tres.<[33]

In the early middle ages, the spiritualizing of the large numbers was

[33] Origen *Homiliae in Numeros* 4.1. Translation:

> Now concerning this, it is written, "Twenty-two thousand Levites were counted by number, moreover the firstborn of the sons of Israel [were] twenty-two thousand two hundred seventy-three."
>
> Indeed, if one observes, he will find that frequently in the divine scriptures the number "twenty-two" may be written for various reasons. For, first of all, with the Hebrews there appear to be twenty-two letters in the alphabet. Similarly, from the first-formed Adam until Jacob, from whose seed the twelve tribes derive their origin, twenty-two forefathers could be counted. In addition, all the species of God's creatures can be collected into twenty-two groups. Yes, if one were to enumerate carefully, he will discover in the scriptures many more sacred things under this number. . . .
>
> Therefore in the physical generation of the human race, as those who are skilled in such things claim, one remains nine months in the womb, and if not removed first, he is carried until birth, which can go even to the third day of the tenth month. Thus such a number is computed, that is, "two hundred seventy-three" describes those days which are calculated from nine months and the third day of the tenth month and become "two hundred seventy three". . . .

Origen passages translated by Douglas W. Ullmann, personal letter, Dallas, Texas, June 20, 1991.

continued by both Venerable Bede (ca. A.D. 673-735) and Rhabanus Maurus (d. 856).[34] Consider the words of Bede concerning the large numbers of Numbers 1 and 2:

> Porro quod sexcenta millia armatorum de Ægypto numerantur egressa, et ex ipsis non sunt amplius, quam duo tantum terram repromissionis ingressi, hæc figura demonstrat multos per baptismum ad fidem transire, se ad patriam cœlestem valde paucissimos pervenire. Secundum illam figuram in Evangelio, in qua *multi vocati, pauci autem* inveniuntur *electi* (*Matt.* xx).[35]

In another work on the Book of Numbers, Bede writes:

> Multum jam interest in numeratione populi Moyses, et ad David. Numeratio a Moyse et Aaron fact a Domino imperata est, et non pro elevatione, se pro obedientia facit, ut filii Israel tabernaculum portarent secundum ordinem. A David vero numeratio pro elevatione facta est, et non a Domino imperata, et idcirco vindictam ineruit. Per hoc etiam testimonium quod est: *Tolle summam filiorum Israel*, et reliqua, significari potest quod dicitur: *Multi autem suni vocati, pauci vero electi.*[36]

For the most part then, it was not until the Reformation that scholars

[34] Rhabanus Maurus *Enarrationum in librum Numerorum* 108.

[35] Venerable Bede *Quæstiones super Numeros* 24. Translation:

> Further, since six hundred thousand armed soldiers are counted leaving Egypt, and out of them there are no more than two [who] entered the land of promise, this example shows clearly that many pass over to faith by baptism, but very few enter into the heavenly land. Following that example in the gospel: "Many are called, but few are found to be chosen" (Matt. 20).

Bede translation by Douglas W. Ullmann, personal letter, Dallas, Texas, June 20, 1991.

[36] Venerable Bede *Explanatio in quartum librum Moisis* 1.d. Translation:

> Moreover, there is a significant difference between the counting of the people by Moses and that by David. The counting done by Moses and by Aaron was commanded by the Lord and was not done out of pride but out of obedience, that the sons of Israel might carry the tabernacle in an orderly manner. The counting by David was truly done out of pride, was not commanded by the Lord and for that reason brought on punishment. Still throughout this there is a testimony, which is, "Take away the most distinguished of the sons of Israel," and [as for] the remaining ones it can be shown what is said, "Although many are called, few are chosen."

Bede translation by Douglas W. Ullmann, personal letter, Dallas, Texas, June 20, 1991.

began accepting the large numbers at face value. Throughout most of early church history, scholars in general either withheld comment on the passages containing large numbers or interpreted them in a spiritualizing manner. It appears to have been the exception, rather than the rule, that scholars accepted them at face value. During the Reformation, however, Martin Luther and Jean Calvin both appear to have done so. Luther writes: "It says that God's anger was kindled against them so that He let the saintly David be moved by the devil to number the people; on account of this, seventy thousand of them were destroyed by pestilence (2 Samuel 24:1-15)."[37] On the devastating destruction of Sennacherib's Assyrian army (2 Kings 19:35; Isaiah 37:36), Luther writes: "*He slew in the camp*, where there were many nobles, *one hundred and eighty-five thousand.* How dreadful it would be to see five or six corpses. What do you think this vast slaughter was like?"[38] Calvin likewise saw actual value in the large numbers when he writes on Isaiah 37:36:

> That the army was so vast need not make us wonder, as ignorant people do, who reckon it to be incredible and fabulous when they are told that so great a multitude went into the field of battle, because we are accustomed to carry on war with much smaller troops. But that the case was very different with eastern nations, is fully testified by historians and by well-known transactions of the present day. Nor ought we to be astonished at the vast forces which they led into battle, for they are much more capable of enduring heat, and toil, and food, and do not care about those luxuries by which our soldiers in the present day are corrupted.[39]

On Exodus 32:28, Calvin exhibits a typical problem in the transmission of large numbers: ". . . how much milder here is the rate of punishment, when only

[37]Martin Luther, *The Magnificat*, Luther's Works, 21:356.

[38]Martin Luther, *Lectures on Isaiah: Chapters 1-39*, Luther's Works, 16:330.

[39]Jean Calvin, *Commentary on the Book of the Prophet Isaiah*, trans. by William Pringle (Grand Rapids: Eerdman's, 1948), 3:146.

three thousand perish out of six hundred millions [sic]!"[40] In discussing Numbers 1, Calvin yields yet another insight into his understanding of numbers: "If any disputatious person should contend that one family could not increase in 250 years [sic!] to so great an amount and thus should reject as fabulous what surpasses the ordinary rule of nature, we must bear in mind what I have already stated, that, inasmuch as this increase depended on the power of God, nothing is more absurd than to measure it by ordinary rules."[41] One must point out that neither Calvin nor Luther had the archaeological data on demographics available today, and that the emphasis that both placed on the importance and reliability of the Scriptures may have made it difficult for them to observe figurative language as such.

The actual value of the large numbers was not often questioned from the Reformation until the time of DeWette (ca. 1806) and other later scholars who questioned the entire biblical account of the history of Israel. Most notable of the objections to the large numbers recorded in historical texts of the Old Testament were those presented by J. W. Colenso in his seven volume *The Pentateuch and the Book of Joshua Critically Examined.*[42] Colenso dedicates the better part of his first volume to mocking the results of accepting the census figures at face value. He complained about the size of the camp and the great amount of waste generated by the corresponding large amount of

[40]Jean Calvin, *Commentaries on the Four Last Books of Moses*, trans. by Chas. William Bingham (Grand Rapids: Eerdman's, 1950), 3:354.

[41]Ibid., 3:442. Surely Calvin was aware of the 430 years of Gal. 3:17 and of the 400 years of Gen. 15:13. Such is the substance for an article, and it would be inappropriate to follow it here.

[42]John William Colenso, *The Pentateuch and the Book of Joshua Critically Examined* (New York: D. Appleton and Company, 1862-1879).

animal sacrifice, among other things:

> Thus the refuse of these sacrifices would have had to be carried by the Priest himself, (Aaron, Eleazar, or Ithamar,--there were no others,) a distance of three-quarters of a mile. From the outside of this great Camp, wood and water would have had to be fetched for all purposes, if, indeed, such supplies of wood or water, for the wants of such a multitude as this, could have been found at all in the wilderness,--under Sinai, for instance, where they are said to have encamped for nearly twelve months together. How much wood would remain in such a neighbourhood, after a month's consumption of the city of LONDON, even at midsummer? And the 'ashes' of the whole Camp, with the rubbish and filth of every kind, for a population like that of LONDON, would have had to be carried out in like manner, through the midst of the crowded mass of people.[43]

Colenso obviously ignores the supernatural nature of both the Exodus event and the wandering in the wilderness, to which Scripture testifies in Deuteronomy 8:3-4. Though one does not condone his mocking attitude, one may agree that he was correct in stating that the presence of such enormous numbers presents a problem to those scholars who desire to maintain an actual value for them, especially in view of passages like Deuteronomy 7:1 and 7:7 (see above discussion). Perhaps because of this, rejection of the large numbers for being essentially erroneous has been the view of many scholars into modern times.[44] Mendenhall writes: "There seems to be a consensus among those who have treated of the census lists in the Book of Numbers since 1903, on at least two points: first, that the word *'elef* does not mean 'thousand' but rather is a designation of some subsection of a tribe: and second, that the numbers are impossible."[45] Wenham is worthy of note at this point as he

[43]Ibid., 1:86.

[44]Cf. Roland de Vaux, *Ancient Israel: Its Life and Institutions*, trans. by John McHugh (London: Datron, Longmann, Todd, 1961), 65ff.; and Aage Bentzen, *Introduction to the Old Testament* (Copenhagen: G. E. C. Gad, 1952), 2:34.

[45]George E. Mendenhall, "The Census Lists of Numbers 1 and 26," *Journal of Biblical Literature* (*JBL*) 77 (1958): 52.

writes on the problems of large numbers. In his concluding challenge he says:

> The present study offers tentative solutions to a number of problems, but it also raises a host of further questions which are worthy of detailed research. In due course, better solutions will doubtless be found to some of the problems. In the meantime we may hope for one useful result. We may hope that the temptation cavalierly to dismiss a passage which seems obviously unhistorical will be replaced by the conviction that the passage must originally have made sense, and will endue the scholar with patience in trying to recapture its meaning. Colenso, for all his brilliance and all his earnestness, taught his readers not to take seriously great tracts of Old Testament history. In so doing he taught impatience, and so set up a barrier to discovery. In the way of patience lies progress.[46]

The present writer hopes that the present endeavor will be such a step in the progress of knowledge of the use of large numbers in the Old Testament.

Modern Interpretations

The various views of modern interpreters will be developed more fully in a later chapter. The most significant of these are summarized below.

Perhaps the earliest modern attempt to explain the difficult problems associated with the Old Testament use of אלף was that of W. M. Flinders Petrie.[47] Petrie argued that אלף meant "tent-group." W. F. Albright in 1925 attempted to point out the flaws in Petrie's reasoning.[48] He argued instead that the large numbers of the census lists of Numbers actually were derived from the population figures of the monarchy under David.[49] A. Lucas in 1944 also

[46]J. W. Wenham, "Large Numbers in the Old Testament," *Tyndale Bulletin* (*TynBul*) 18 (1967): 53.

[47]W. M. Flinders Petrie, *Egypt and Israel*, new edition (London: Society for Promoting Christian Knowledge, 1931), 40-46. Originally published in 1910.

[48]W. F. Albright, "The Administrative Divisions of Israel and Judah," *Journal of the Palestine Oriental Society* (*JPOS*) 5 (1925): 20.

[49]Ibid., 21.

found the large numbers associated with the Exodus to be uncomfortably large. He argued for an adoption of Petrie's view on the basis of population growth figures and the actual population figures for the region in recent times.[50] Allrik in 1954 apparently accepted אלף as the literal numeral 1,000, although he did not specifically deal with the implications of this choice. He concentrated rather on the divergent accounts of the censuses of Ezra 2 *vis à vis* Nehemiah 7.[51] Clark in 1955 argued that we accept in the term אלף the meaning of "officers or mighty men of valor."[52] The totals offered in the censuses of Numbers 1, 2, and 26 were therefore combinations of the meaning of אלף as 1,000 on the one hand and "officers" on the other. Mendenhall in 1958 attempted to build on the earlier views of Petrie.[53] He argued that the large numbers of the census lists of Numbers 1 and 26 are reflective of the military organization of the post-Exodus Israel, but have been inflated to mirror the numbers of the monarchial period. Driver in 1960 attempted to explain at least some of the problematic passages in terms of misunderstood abbreviations.[54] Segal in 1965 attempted to explain the large numbers of the historical passages as simply representative of the symbolic meanings of

[50] A. Lucas, "The Number of Israelites at the Exodus," *Palestine Exploration Quarterly* (*PEQ*) 76 (1944): 167.

[51] H. L. Allrik, "The Lists of Zerubbabel (Nehemiah 7 and Ezra 2) and the Hebrew Numeral Notation," *Bulletin of the American Schools of Oriental Research* (*BASOR*) 136 (1954): 21-27.

[52] R. E. D. Clark, "The Large Numbers of the Old Testament--Especially in Connexion with the Exodus," *Journal of the Transactions of the Victoria Institute* 87 (1955): 84.

[53] Mendenhall, "The Census Lists of Numbers 1 and 26," 52.

[54] G. R. Driver, "Abbreviations in the Massoretic Text," *Textus* 1 (1960): 125.

numerals as a whole.[55] Wenham in 1967 offered the most comprehensive attempt at explaining the difficulties of the large numbers of the Old Testament.[56] He argued that אֶלֶף and אַלּוּף were at times confused (*à la* Clark), and that מֵאָה can sometimes refer to a small military unit. Recently, M. Barnuoin has tried to relate the large numbers of the censuses to Babylonian mathematics.[57]

Definitions

For the purposes of this dissertation certain definitions must be ascribed to the most frequently occurring terms. Therefore, a "general number" may be represented by *thousands* or *millions* as opposed to a "specific number" such as 603,550. In most cases, this dissertation deals with specific numbers. A "large number" will refer to any number in excess of 1,000. This may be further refined to include a "larger number" which will refer to a number in excess of 10,000 and a "largest number" which refers to a number in excess of 100,000. A "numeral" may be a figure or word which expresses a number. An "actual" number or a number with "actual value" (or, "face value") refers to a verifiable number or one which is meant to be understood as factual and precise. Perhaps an example will help at this point. If within my wallet there is a hundred dollar bill, a fifty dollar bill, a ten dollar bill, and a five dollar bill, then there is within my wallet $165.00. This is the actual value of the money of

[55]J. B. Segal, "Numerals in the Old Testament," *Journal of Semitic Studies* (*JSS*) 10 (1965): 7.

[56]J. W. Wenham, "Large Numbers in the Old Testament," 19-53.

[57]M. Barnuoin, "Remarques sur les tableaux numériques du livre des Nombres," *RB* 76 (1969): 351-364; idem., "Les recensements du livre des Nombres et l'astronomie babylonienne," *VT* 27 (1977): 280-303.

my wallet. It is verifiable and the statement of its value is meant to be understood as factual and precise. A "precise" figure is one which is not rounded off, i.e., it is precise to the digits.[58] A "rounded off" number may be defined as a number not meant to represent actual value, but merely an approximation. To return to the illustration of the money in my wallet, I could round off the figure to "about $175.00," or to "just over $150.00." A "hyperbolic number" or simply "hyperbole" is a number used to represent an exaggeration or embellishment in order to express some purpose other than actual value or an approximation.

The Organization of the Dissertation

The second chapter ("Textual and Syntactical Analyses of אֶלֶף") will seek to demonstrate two foundational facts. First, the textual occurrences of אֶלֶף as we now have them within the Masoretic tradition must be understood as valid. In other words, the texts withstand textual analysis with the Masoretic text being confirmed in the majority of the cases. The very few variants which would be better text-critical choices serve to alleviate, rather than to exacerbate, the problems large numbers present. Nevertheless, large numbers remain despite the variant chosen in the majority of cases. A brief section concerning the uniqueness of transmitting numerals over time will be considered, with special sections included on the abbreviations of numbers and the use of hieratic numerals. Second, the chapter will also seek to demonstrate the validity of reading אֶלֶף as a number in contexts of various

[58]It is readily admitted that the mere citation of a number such as 27,000 does not mandate that it is a rounded off figure. That figure may or may not represent an actual value of precision. However, if the figure is not verifiable, or if the figure is not meant to be taken at actual value, it must at least be taken as rounded off, at most as hyperbole.

items or persons counted rather than reading it as one of the alternative lexical meanings of "ox" or "clan."

The purpose of the third chapter ("The Demographics of Ancient Israel") will be to demonstrate that with the archaeological data we now have, the population figures suggested by the largest numbers in the Bible, particularly those in Numbers 1, 2, 26 and in the 2 Samuel 24/1 Chronicles 21 parallel, are impossible to sustain as precise. Population densities in Palestine have been estimated from the Chalcolithic through the Early Iron ages on the basis of dwelling size, cultivable land, and available water supplies. Similar studies have been made with reference to first century A.D. Palestine and with reference to Jerusalem over a lengthy period of time. The results of these studies may demonstrate that the traditionally accepted totals cannot reflect the actual populations of the Late Bronze Age through the Early Iron Age. If this is the case, the actual value of other large numbers may also be called into question. Since therefore the word אֶלֶף must be taken as a number in the most problematic passages, and since the texts have been authenticated, and since demographics demonstrate the improbability of the largest numbers, the numbers may reflect some use other than actual precise figures taken at face value.

The fourth chapter ("Large Numbers in the Ancient Near Eastern Milieu") will demonstrate the use of large numbers within the milieu of the ancient Near East. Included will be a study of the types of literature which would most likely utilize the largest of numbers and the reasons for that usage across the geographical and chronological spectrum of ancient Near Eastern cultures. Contextually, the largest numbers in extant ancient Near Eastern texts occur in historiographical literature. Specifically, they occur in royal inscriptional literature which records military strength and victories,

numbers of sacrifices made to deities, and amounts of corvée labor. In Sumer, Akkad, Assyria, and Egypt,[59] these numbers are clearly embellished for the purpose of glorifying the then reigning monarch and were not always intended to be accepted as actual and precise.[60] The largest and most problematical numbers occurring in the Old Testament occur in precisely the same contexts. Significant patterns will be identified, and appropriate Old Testament comparisons made.

The fifth chapter ("A Plausible Suggestion") presents what appears to be the only plausible suggestion for the use of the large numbers in the Old Testament as outlined above in the statement of the hypothesis. Those passages which may in all likelihood reflect literary hyperbole will be discussed. These include all passages which include the largest and most problematic of the numbers, as well as a significant number of other passages which may exhibit hyperbole.

The sixth chapter ("Analysis of Other Proposals") will analyze the suggestions made by others concerning the use of large numbers in the Old Testament. Notably the positions of scholars such as Mendenhall, Wenham, Hallo, and others will be considered. Other proposals, as yet unpublished and which would demand further study, will also be presented. These include the concept of gematria, the assigning of a lexical category of "troop" or "soldier" to the semantic field of אֶלֶף, and factoring of the large numbers.

[59]Babylonian monarchs rarely (if ever) employed large numbers in their royal inscriptions.

[60]For example, Shalmaneser III offered several royal inscriptions containing records of the battle of Qarqar. In the earliest of these, the monolith inscription, the king records that he slew 14,000 of the Syro-Palestinian alliance. The later Black Obelisk inscription records the total as 20,500. The still later bull inscription records the figure at 25,000.

The conclusion will summarize the data and review the plausibility of the author's suggestion. Ramifications with regard to Conquest models will be considered.

The first appendix will offer a study of the use of numbers in general in representative Northwest Semitic inscriptions. The second appendix will contain a listing of the occurrences of the large numbers. The third appendix will list the larger numbers in descending order. The fourth appendix will demonstrate the largest numbers of the Old Testament and the kings they magnify.

CHAPTER 2

TEXTUAL AND SYNTACTICAL ANALYSES OF אֶלֶף

This chapter attempts to accomplish two things basic to the present study. The first part of the chapter examines the Hebrew texts where numbers which involve the term אֶלֶף occur. This is done to ascertain whether there is significant evidence of transmission error which would lead to the enlarging of the numbers over the course of time. If there was significant transmission error over time, then there is no real problem for conservative scholarship. It simply becomes a matter of accepting that the original numbers were lost. If there is no significant evidence of transmission error, and the text withstands analysis, then the numbers must be accepted as originally very large.[1] The second part of the chapter endeavors to examine the grammatical and syntactical usages of passages which contain the term אֶלֶף. This process will establish the fact that in most cases of the occurrence of the term in historiographical literature, the word אֶלֶף must be understood as a numeral representing the number 1,000.[2]

[1] It is quickly admitted that the numbers could have been enlarged between the time of writing and the time of standardization of the text, i.e., before the proto-MT and before the original Septuagint, and that some conservative scholars would opt for this view. Unfortunately, we have little data, biblical or otherwise, to argue either way.

[2] Indeed, it may be that אֶלֶף is suspect at face value at times since it is the only Hebrew *Zahlwort* which may take a meaning other than a numeral (eg. "clan", "cattle").

Textual Analysis

To insure thorough coverage, an investigation of the occurrences of אלף in historical literature was undertaken. These represent 335 of the over 425 total occurrences of the word, or about 78%. Due to time and spatial considerations, only textual problems noted by the editors of *Biblia Hebraica Stuttgartensia* are dealt with herein, although numerous other sources were used for the actual textual analysis.[3] Many of the problems identified were minor; only the most important are included below.

A more important problem presented itself in the lack of agreement on a few of the occasions between the Samuel-Kings accounts and those of Chronicles. While this project cannot hope to adequately or exhaustively deal with this issue, the passages which contain אלף will be examined and comment made as necessary.

Transmitting Numbers over Time

Numbers have a way of growing with the passage of time. One thinks of the fisherman's tale of the length of the fish he caught, or of the number of antler points of the buck that got away. The ancient Near East provides a good example of the tendency for large numbers to increase over time in the inscriptions of Shalmaneser III (ca. 859-824).

This very important Neo-Assyrian king left many annalistic accounts of his military conquests which occurred in over thirty-four expeditions. Notice

[3]A glance through the textual apparatus of the Brooke-McLean edition of the Septuagint (LXX) in Genesis-Numbers revealed textual variants in almost every verse containing large numbers. Most of these were minor, but their presence suggests that much needs to be done in the textual analysis of these passages. The current study does not involve Ezra-Nehemiah. Though these books are historical in genre, the numbers they contain do not present problems to one's thinking; i.e., they are generally smaller in amount and precise to the digits.

the increase in the size of the number of warriors killed at the battle at Qarqar as the event was recorded over a period of time.[4] First, from the Monolith inscription, erected just after the battle:

> Karkar, his royal city, I destroyed, I devastated, I burned with fire. 1,200 chariots, 1,200 cavalry, 20,000 soldiers, of Hadad-ezer, of Aram (? Damascus); 700 chariots, 700 cavalry, 10,000 soldiers of Irhulêni of Hamath; 2,000 chariots, 10,000 soldiers of Ahab, the Israelite, 500 soldiers of the Gueans, 1,000 soldiers of the Mureans, 10 chariots, 10,000 soldiers of the Irkanateans. . . . these twelve kings he brought to his support; to offer battle and to fight, they came against me. . . . From Karkar, as far as the city of Gilzau, I routed them. 14,000 of their warriors I slew with the sword.[5]

Then, from the Black Obelisk inscription, the account of the same battle includes a higher total: "Their chariots, their cavalry, their weapons of war, I took from them. 20,500 of their warriors I slew with the sword."[6] From his bull inscription which records the same battle: "I fought with them. 25,000 of their warriors I slew with the sword. Their chariots, their cavalry, their weapons of war, I took from them. To save their lives they fled (lit., went up)."[7] Olmstead states that the Monolith inscription offers the original total, and that later editions of the battle, including the Black Obelisk and bull inscription, aggrandized the total.[8] In fact, he goes on to say that the real victory was that of the scribe![9] The point to be made here is that similar

[4]Despite Shalmaneser's claims, the battle was a stalemate at best.

[5]Daniel David Luckenbill, *Ancient Records of Assyria and Babylonia* (*ARAB*) (Chicago: The University of Chicago Press, 1926), volume 1, *Historical Records of Assyria: From the Earliest Times to Sargon*, § 611.

[6]Ibid., § 563.

[7]Ibid., § 647.

[8]Albert Ten Eyck Olmstead, *Assyrian Historiography* (Columbia, Missouri: University of Missouri Press, 1916), 22.

[9]Ibid.

scribal embellishment may have taken place with the large numbers of the Old Testament prior to the standardization of the text. However, as noted in footnote one above, we have no biblical witnesses at this time to this possibility.

Transmission Errors with Numerals

Although numbers may be embellished over a period of time, there are also transmission errors which are peculiar to numbers. As would be expected, the transmission of numerals involves the same type of potential errors as does the transmission of non-numerals. These include haplography and dittography due to homoioarchton or homoioteleuton, expansion, conflation of variant readings, simple omission, metathesis, and of course graphic confusion.[10] This latter also may have occurred both in the Aramaic ("square") scripts and in the paleo-Hebrew scripts.

Numerals have additional possibilities for corruption which go beyond the basics listed above. Driver has noted that there is some evidence that abbreviations have been used in the past in the Masoretic Text to represent numbers, and that this practice may be the source of several difficult readings.[11] In addition to this possibility, it may be that hieratic notations were used both in earlier scripts[12] and possibly even in later biblical

[10]For a good treatment of various types of basic transmission errors, see P. Kyle McCarter, *Textual Criticism: Recovering the Text of the Hebrew Bible* (Philadelphia: Fortress Press, 1986), 26-61.

[11]For the possibility of the use of abbreviations, see G. R. Driver, "Abbreviations in the Massoretic Text," *Textus* 1 (1960): 112-31; and idem., "Once Again-Abbreviations," *Textus* 4 (1964): 76-94.

[12]Hieratic numeral notation occurred in the Samarian ostraca, the Arad ostraca, the Lachish letters, some Sefire inscriptions, and in Hebrew shekel weights. Contra Davis, the use of hieratics does seem to be widespread both in proto-Hebrew and Aramaic

writings.[13] Either of these peculiarities could have led to variant readings.[14] Evidence of these possibilities will be noted in the textual analysis below.

A Text-Critical Analysis of אלף Passages

Numbers 3:28

Numbers 3:28 is particularly interesting in its context, because the three numbers given in the passage do not equal the total offered for their sum (cf. 3:22, 28, 34 with 3:39). At 3:28, the Masoretic Text (MT)[15] reads שְׁמֹנָה אֲלָפִים וְשֵׁשׁ מֵאוֹת (8,600), which reading is supported by Septuagint Codex Vaticanus (LXX^B). Variant witnesses include minuscule c, which reads 8,800; minuscules a^b and k, which read 8,500; and Lucian, represented in the book of Numbers by minuscules d, p, t, g, n, w,[16] all of which read 8,300. The reading

scripts. Davis is simply incorrect in his statements when he says: "Other archaic Hebrew inscriptions such as the Lachish Letters, Gezer Calendar, and fragmentary inscriptions on seals and ostraca, either do not furnish us with information as to the numerical notation patterns or such notations are limited and not clear." He is also incorrect when he states: "The method of using symbols for numbers (such as I,II,III, etc.) does not seems to have been widely used among the Hebrews in the earlier periods." John J. Davis, *Biblical Numerology* (Grand Rapids: Baker, 1968), 37. Payne on the other hand affirms the existence of such hieratic notation. See J. Barton Payne, "The Validity of the Numbers in Chronicles," *Bibliotheca Sacra* (*BSac*) 136 (1979): 118, 122, 123. Also see Yohanan Aharoni, "The Use of Hieratic Numerals in Hebrew Ostraca and the Shekel Weights," *BASOR* 184 (1966): 13-19. Refer to appendix one of the present dissertation for a study of the use of numbers in the Northwest Semitic inscriptions.

[13]For the possibility of a different numeral notation system in later writings, see H. L. Allrik, "The Lists of Zerubbabel (Nehemiah 7 and Ezra 2) and the Hebrew Numeral Notation," *BASOR* 135 (1954): 21-27.

[14]For still other possibilities of textual corruption with numbers, see J. W. Wenham, "Large Numbers in the Old Testament," *TynBul* 18 (1967): 21-24.

[15]For the purposes of this dissertation, the *Biblia Hebraica Stuttgartensia* (*BHS*) edition of the Masoretic Text is employed. In addition, the abbreviations used in this chapter are those commonly utilized by Old Testament text-critics, and most Greek readings are retroverted to Hebrew for the sake of comparison.

[16]The attribution of these minuscules to Lucian is an extrapolation derived from

of minuscule c is perhaps a result of graphic confusion with שְׁמֹנָה in the near environment replacing the שֵׁשׁ. The חֲמֵשׁ of minuscules a^b and k may be the result of scribal remembrance from the חֲמֵשׁ of 3:22. Lucian, supported also by the Armenian, proves the most interesting. He provides a reading which yields a total consistent with 3:39. It is therefore highly suspect from a text-critical perspective.[17] Some factors must be considered to reach a decision in this verse. There are a number of examples in ancient Near Eastern literature wherein lists of numbers are given followed by a total which does not equal the sum of those numbers. These lists occur in contexts similar to Numbers 3 in that they are historiographical.[18] This reckoning is foreign to Western technologically precise mentalities, but it may be the case in Numbers 3 (MT). If so, there no longer remains a textual problem in the lack of agreement. If this is the case here, it may be the only such case in the Old Testament.[19] It may be that Lucian reflects the original reading. In this case, the ל of שְׁלֹשׁ was inadvertently lost in transmission, resulting in the שֵׁשׁ of the MT. It is perhaps

the textual apparati of *BHS* and Brooke-McLean. The present writer could find no documentary evidence for Lucian to be so identified in Numbers.

[17]A similar attempt at harmonization occurs in minuscules b and w at 3:22, both of which read 200 rather than 500.

[18]As an example, Amenhotep II (ca. 1450-1425 B.C.) recorded his Asiatic campaigns on the Memphis and Karnak stelae. The total offered for the number of killed and captured is 89,600 men, but the sum of the individual listings is 108,128 (*Ancient Near Eastern Texts*, 3rd edition (*ANET*[3]), edited by James Pritchard, s.v. "Egyptian Historical Texts," translated by John A. Wilson, 247). There do not seem to be any lacunae. Earlier, Rimush of Akkad (ca. 2300 B.C.) on a tablet inscription lists the killed and captured at a sum of 45,856, and then cites the total at 54,016. This latter figure is conveniently just over 10 times the amount offered by his father Sargon concerning those who ate daily at his table (I. J. Gelb and B. Kienast, *Die Altakkadischen Königsinschriften des dritten Jahrtausends v. Chr.*, Freiburger Altorientalische Studien 7, [Stuttgart: Franz Steiner Verlag, 1990], 191-93).

[19]Ezra 1:11 may include a similar phenomenon, but I have not worked through it text-critically as yet. It might be that the Ezra passage lists only the most important before giving the total.

more likely that Lucian, or a scribe of the Vorlage from which he worked, intentionally harmonized the reading with the total of 3:39. Read with the MT and LXX^B here.

Numbers 25:9

The MT and the vast majority of LXX witnesses, including Lucian, witness to the reading אַרְבָּעָה וְעֶשְׂרִים אָלֶף (24,000). The minuscules d and m read אלף עשרים ארבעה (1,024). The New Testament reference in 1 Corinthians 10:8 reads 23,000. Whether that passage reflects a Hebrew or Greek basis is impossible to establish at this point. There may be an interpretative difference rather than a textual one in 1 Corinthians.[20] Read with the MT and LXX.

Numbers 35:4

The MT reads אֶלֶף אַמָּה סָבִיב ("a thousand cubits around"). Most LXX witnesses read אַלְפַּיִם אַמָּה סָבִיב ("two thousand cubits around"), a reading supported by the Old Latin. Only Greek majuscule G and minuscules c, x, o read as MT. The occurrence of the dual preceding באמה three times in verse 5 perhaps indicates that the dual was substituted for the singular in verse 4 unintentionally. Read with the MT.

Joshua 4:13

The MT reads כְּאַרְבָּעִים אֶלֶף חֲלוּצֵי הַצָּבָא ("about 40,000 equipped for war"). LXX^B, followed by Syriac and Vulgate, reads without the "about" (כ). Minuscule b', marginal reading in minuscules v and z, and the Ethiopic all read 4,000

[20]I.e., 1 Corinthians 10:8 records that 23,000 perished in one day; the length of time is not specified in Num. 25:9.

rather than 40,000. Lucian, represented in Joshua also by d, p, t, g, n, w,[21] reads with MT. The variant 4,000 may have arisen due to early graphic confusion, due to the early use of abbreviations, or due to the possibility of the early use of a different numeral notation system.[22]

Though this appears at first glance to be a very minor problem unworthy of consideration, it may be that the כ preposition on numbers is more important than heretofore realized. This importance remains to be examined at a later date. At present it is an indicator that the number is rounded off. Read with the MT.

1 Samuel 6:19

This passage contains probably one of the most significant textual problems associated with the use of אלף in the Old Testament. The context explains that a number of men of Beth-Shemesh were slain as a result of looking into the ark of the covenant. The MT asserts that this number was "70 men, 50,000 men" (שִׁבְעִים אִישׁ חֲמִשִּׁים אֶלֶף אִישׁ). Two Hebrew manuscripts offer the minor variant בהם for בעם. A few Hebrew manuscripts more importantly omit the 50,000 as does Josephus.[23] The majority of LXX witnesses, including Lucian, are joined naturally by daughters Syriac and Vulgate in supporting the MT with 50,070. Armenian and Ethiopic reverse the order and omit one אִישׁ with *quinquaginta millia et septuaginta uiros.* Minuscules c and x read 5,070; and minuscule d reads "of men, a thousand fifty and seventy" (sic!). External

[21]McCarter, *Textual Criticism*, 89.

[22]See above discussion for the possibility of abbreviations and hieratic numeral notation.

[23]Flavius Josephus *Antiquities of the Jews* 6.1.4.

evidence favors the MT. However, perhaps more than in any other place, internal grammatical-syntactical evidence bears on this present problem. For one thing, Driver notes that the absence of the copula is itself an indication of error.[24] Too, the pattern observed in the present verse ("70 men, 50,000 men") where the objects are repeated after each numeral, occurs nowhere else in the over 425 occurrences of large numbers which contain אלף. In fact, elsewhere only in Number 3:50 does the tens place ever precede the thousands place. This fact, coupled with the mixed external evidence, might suggest that the "50,000 men" is an addition later than the original. This possibility was accepted as fact by the *New International Version* editors, perhaps correctly.

1 Samuel 8:12

This passage is important because the MT reflects a pattern different from normal OT usage. In dealing with the organization of armies, the arrangement is normally thousands, hundreds, fifties, and tens.[25] In this case, MT reads "leaders of thousands and leaders of fifties" (שָׂרֵי אֲלָפִים וְשָׂרֵי חֲמָשִׁים). LXX witnesses read "leaders of thousands and leaders of hundreds" after the standard pattern. The Syriac adds "and leaders of fifties and leaders of tens." The Targum follows MT, but Josephus follows LXX.[26] Though McCarter claims that there is "no compelling reason to choose between the two shorter readings" (i.e., MT and LXX), it seems to this present writer that the MT best

[24]S. R. Driver, *Notes on the Hebrew Text and the Topography of the Books of Samuel*, second edition (Oxford: Oxford University Press, 1912; reprint, Winona Lake, Indiana: Alpha Publications, 1984), 58.

[25]Cf. Deuteronomy 1:15.

[26]According to McCarter, *I Samuel*, The Anchor Bible 8 (Garden City, New York: Doubleday and Company, Inc. 1980), 155. The reference in Josephus is *Antiquities* 6:40.

explains the LXX reading.[27] Though the pattern is unusual, there may not be a need for the full standard military formula in the context of Samuel's words of warning to the people concerning a king. Read with the MT.

1 Samuel 11:8

The MT reads בְּנֵי יִשְׂרָאֵל שְׁלֹשׁ מֵאוֹת אָלֶף וְאִישׁ יְהוּדָה שְׁלֹשִׁים אָלֶף. The 30,000 of Judah is supported by the Ethiopic and Belsheim's edition of the Old Latin, as well as the Targum. All Septuagint witnesses are in agreement by reading אִישׁ יִשְׂרָאֵל שֵׁשׁ מֵאוֹת אָלֶף וְאִישׁ יְהוּדָה שִׁבְעִים אָלֶף. The 70,000 of Judah is supported by some Old Latin manuscripts and more importantly, by 4QSam[a]. McCarter makes a surprising comment at this point: "Since such numbers tend to become exaggerated rather than understated, we prefer the smaller number of MT."[28] Since the MT reading of 30,000 of Judah could have arisen from the 300,000 of Israel (שלשים from שלש), one would favor the older testimony of LXX and Qumran with 70,000 men of Judah. However, concerning Israel, it is a toss-up between 300,000 and 600,000. The present writer would favor the MT since it seems easier for a ל to be omitted by accident than added, but that choice is held with little tenacity, since an early use of abbreviations could result in either variant.

1 Samuel 13:5

The MT and LXX[B] read שְׁלֹשִׁים אֶלֶף רָכֶב, but Lucian and Syriac read שלשה אלפים רכב. Since either could have given rise to the other, internal

[27]McCarter, *I Samuel*, 155.

[28]Ibid., 200. On this basis, one would expect him to opt for the pre-MT Qumran reading, since it is chronologically older than the MT we have, which is based on the Ben Asher text, ca. A.D. 1000.

evidence is inconclusive. Since it seems odd to have 30,000 chariots but only 6,000 horsemen, perhaps Lucian retains the original reading. The oddity may be less severe if the numbers were purposefully embellished at some time in the tradition, or if hyperbole was a then current literary convention. The tendency of mankind to unintentionally embellish numbers with the retelling or recopying of stories could also explain the differences. In any case, large numbers remain despite the variant chosen.

1 Samuel 15:4

This verse has a variety of external witnesses:

MT: מָאתַיִם אֶלֶף רַגְלִי וַעֲשֶׂרֶת אַלָפִים אֶת־אִישׁ יְהוּדָה

LXX^{B}: ארבע מאות אלף רגלי ושלשים אלף . . .

LXX^{A}: עשרת אלפים רגלי ועשרת אלפים . . .

Origen: מאתים אלף . . . . . ושלש אלפים . . .

Greek minuscules d, l, p, q, t, z support MT. Greek minuscule g (*uid*) follows LXX^{B} but adds 2,000 to the total for Judah. LXX^{A} seems to be a harmonization of positions of strength and so may be rejected. Internally, there is little to suggest the priority of one reading over another. McCarter favors MT because of the smaller numbers.[29]

2 Samuel 6:1

It may be that the LXX 70,000 against the MT 30,000 reflects a different tradition. However, a more likely reason for the difference may lie in the use of abbreviations. It may be that a ש was used in the text as an abbreviation and later mistaken in the LXX Vorlage (or by LXX translators) as referring to שִׁבְעִים

[29]McCarter, *I Samuel*, 261.

rather than to שלשים.[30] Given the fact that ש could also be understood as שש, שמנה, שמנים, or שנים, this would be difficult to solve in this case.

2 Samuel 8:4

This becomes the first example of a passage which differs from its intra-biblical parallel in Chronicles with regard to numbers. The major variants are as follows:

MT:	אֶלֶף וְשִׁבְעַ מֵאוֹת פָּרָשִׁים
LXX^{BL} and 1 Chron. 18:4:	אלף רכב ושבעה אלפים פרשים
LXX^{A}:	שבע רכב ושבעה אלפים פרשים
4QSam^{a}:[31]	אלף רכב
One Sahidic Ms.:	אלף רכב ושבעים אלף פרשים

Though there are numerous occurrences of רֶכֶב in the near environment, and it is therefore possible that the Hebrew Vorlage of LXX and 1 Chronicles accidently inserted רכב here and thus necessitated a secondary change from מאות to אלפים, the testimony of Lucian and the likely agreement by Qumran lead one to read against the MT here. In this case, at least, one does not have to postulate entirely different traditions in order to explain the intra-MT differences.

2 Samuel 17:1

The reading 10,000 reflected in part of Origen's writings, in Lucian and

[30]The normal numerical value of ש is 300. However, if this was used in an early text, the manner in which it was viewed by a given scribe could vary immensely. The normal value would support the MT, at least in part.

[31]Eugene C. Ulrich, *The Qumran Text of Samuel and Josephus* (Missoula: Scholar's Press, 1978), 56. The reading is questionable.

in Josephus (עשר אלף איש) could reflect a different tradition. MT and LXX^{BAMN} all read 12,000 (שְׁנֵים־עָשָׂר אֶלֶף אִישׁ). Perhaps the term for two (שְׁנֵים) could have been inadvertently omitted at some point. There does not seem to be any graphic reason for this possibility however. This is a toss-up, with leanings toward MT and LXX^{BAMN}.

2 Samuel 24:9

How many men of Israel and Judah did Joab report in the census demanded by King David? The MT and LXX^{BAMN} read שְׁמֹנָה מֵאוֹת אֶלֶף אִישׁ and חֲמֵשׁ מֵאוֹת אֶלֶף אִישׁ, respectively. However, Lucian, Josephus, and Theodotian all read תשע מאות אלף איש and ארבע מאות אלף איש. The issue is further complicated by the parallel account in 1 Chronicles 21:5 which reads 1,100,000 for Israel and 470,000 for Judah. Unfortunately, 4QSam^{a} offers no help at this point because that section was not preserved.[32] In this case, I would favor MT with LXX^{BAMN}, but it is apparent otherwise that either there were three different traditions extant at some point, or that there was some scribal embellishment of the numbers at some other point. That the Chronicler may have expanded the numbers as hyperbole has been discussed by Dillard.[33]

1 Kings 5:6

This verse is paralleled in 2 Chronicles 9:25 and has near parallels in 1 Kings 10:26 and 2 Chronicles 1:14. The MT at 1 Kings 5:6 has "40,000 stalls of horses for his chariots and 12,000 horsemen." Second Chronicles 9:25 reads

[32]Ibid., 271.

[33]Raymond Dillard, *II Chronicles*, Word Biblical Commentary 15 (Waco: Word Publishers, 1987), 110.

"4,000 stalls for horses and chariots and 12,000 horsemen." LXX witnesses (minus minuscule d) agree with the MT reading of 1 Kings 5. The near parallels assert that Solomon had 1,400 chariots and 12,000 horsemen, but this could be an assertion distinct from the other two passages even though the figure 1,400 is very close to 4,000 or 40,000. The distinction between the latter two can be explained by any of several possibilities. There could be differing traditions between the Kings and Chronicles accounts. There could have been a transposition of the masculine plural endings. There could have been a misunderstanding of an abbreviation. There could have been a differing numeral notation system which was misunderstood by a scribe. It is interesting to note that the Chronicler records the smaller number here rather than embellishing a number as may be the case in 2 Sam. 24:9/1 Chron. 21:5. Read with the MT in this verse, but understand that the original number may be that recorded in 2 Chronicles 9.

1 Kings 5:12

MT reads וַיְהִי שִׁירוֹ חֲמִשָּׁה וְאֶלֶף. LXX reads ויחי שירו חמשה אלף, with some support from the Vulgate. Irenaeus also reads 5,000.[34] A number over 1,000 in Deuteronomistic historical narratives which is not rounded off to the nearest 1,000 is extremely rare,[35] a fact which would call the present MT reading into question. Since there are numerous waws present in the near environment, it appears that the waw before the אלף is perhaps a later addition and that the LXX and Irenaeus preserve the best reading.

[34]Irenaeus of Lyon *Aduersus Haereses* 4.27.1.46 reads "et loquebatur tria milia parabolarum in adventum Domini et quinque milia canticorum hymnum dicens Deo."

[35]See below on the grammatical-syntactical study of אלף.

1 Kings 5:25

MT has עֶשְׂרִים כֹּר שָׁמֶן. LXX and 2 Chronicles 2:9 record ועשרים אלף בת שמן. It appears that LXX is a case of either scribal anticipation of 2 Chronicles 2:9 or that the אלף is a dittograph from the first part of the verse, where a nearly identical graphic environment exists. A kôr is equal to 10 battîm. It would have to be equal to 1,000 baths to argue for simple stylistic difference here. Retain the MT at 1 Kings 5:25 regarding the number.

1 Kings 5:30

The variants are as follows:

MT:	שְׁלֹשֶׁת אֲלָפִים וּשְׁלֹשׁ מֵאוֹת
Josephus:	שלשת אלפים ושלש מאות
LXX^{B}:	שלשת אלפים ושש מאות
2 Chron. 2:1, 16 MT:	שלשת אלפים ושש מאות
LXX^{A}:	שלשת אלפים וחמש מאות
LXX^{L}:	שלשת אלפים ושבע מאות

Note the numerous letters ל in the verse, which could argue for either שלש or שש as original. The שבע of Lucian might have arisen from the שבע of verse 29, but the חמש of LXX^{A} is puzzling as to origin.[36] The external evidence reflects the decision: it is a toss-up between MT and Josephus in 1 Kings, and LXX^{B} with the 2 Chronicles MT parallel.

1 Kings 10:26

The MT reads אֶלֶף וְאַרְבַּע מֵאוֹת רֶכֶב, but LXX^{B} reads אַרְבָּעָה אֲלָפִים סוּסוֹת רֶכֶב. The

[36]If a notation (abbreviation) ח, normally valued at 8, were taken to mean חמש instead, this would explain the variant.

remainder of the LXX witnesses and daughter versions read 40,000. One notes the LXX agreement with 1 Kings 5:6 at this point, which may be scribal reminiscence or intentional harmonization. Again, this passage may only be a near, and not an actual, parallel to 1 Kings 5:6. Since 2 Chronicles 1:14 is an actual parallel here and reads 1,400, perhaps it is best to retain MT here.

1 Kings 12:21

MT reads מֵאָה וּשְׁמֹנִים אֶלֶף. LXX^{B} reads מֵאָה וְעֶשְׂרִים אֶלֶף. LXX^{A} and daughter versions read מֵאָה וּשְׁנַיִם אלף, which may be a simple case of a deleted ם from שמנים. The LXX^{B} reading may be a different tradition; however, it could be explained by a reading by Josephus. He offers *ὀκτωκαίδεκα μυριάδας* which may retrovert to שְׁמֹנֶה עֶשֶׂר רִבְבוֹת.[37] This might explain the source of the עשרים of the LXX^{B}. The parallel in 2 Chronicles 11:1 supports the MT here; so read.

1 Kings 20:15

The MT reads שִׁבְעַת אֲלָפִים. LXX^{B} reads only שִׁשִּׁים. Other LXX witnesses are divided between שבעת אלפים and ששים אלף. The loss of אלף in LXX^{B} makes it unique among all other witnesses. The readings שבעת and ששים could have arisen from other numerals in verses 15 and 16 which begin with ש, or this could be yet another occurrence where abbreviations were used and interpreted differently in the proto-MT or the LXX Vorlage.

2 Kings 19:35

This familiar passage has parallels in Isaiah 37:36 and 2 Chronicles 32:21. The MT reads here מֵאָה שְׁמוֹנִים וַחֲמִשָּׁה אֶלֶף. LXX^{B} reads likewise, as do all LXX

[37]Admittedly, the Vorlage of Josephus could have read as MT, but Josephus preferred the term רבבה for 10,000.

witnesses. Isaiah 37:36 reads in agreement, but 2 Chronicles omits any figure. Tertullian reads 184,000.[38] Though the number seems large and though Sennacherib made no mention of it in his annals, the tradition is strong that 185,000 perished (or, 185 אלפים, as the case may be!). Cogan and Tadmor claim that the number is exaggerated.[39]

1 Chronicles 5:21

MT reads גְּמַלֵּיהֶם חֲמִשִּׁים אֶלֶף. LXX^B reads גְּמַלִּים חֲמִשָּׁה אֲלָפִים but Lucian[40] and Theodotian support the MT. In the second problem of this verse, minuscules f, j, p, q, t, z read וצאן שמנה מאות against MT and all other LXX witnesses to וְצֹאן מָאתַיִם. This might be explained if at one time מאתים was corrupted to שנים מאות and thence to שמנה מאות, or, it may be another witness to human proclivity which enlarges numbers with time.[41] Retain the MT at both points.

1 Chronicles 12:36

MT, LXX^{BL} all agree to עֶשְׂרִים וּשְׁמוֹנָה אֶלֶף. Josephus reflects עשרים ושבע אלף. Minuscules d and m invert the order of the MT and read 1,028. Whether that inversion reflects a previous inversion in their Greek Vorlage, or an even yet earlier inversion in a Hebrew Vorlage, cannot at present be determined. Three minuscules, d (44), m (72), and 71, reflect this inversion very

[38]Tertullian *De ieiunio aduersus Psychicos* 7.3.

[39]Mordecai Cogan and Hayim Tadmor, *II Kings*, The Anchor Bible 11 (np: Doubleday and Company, Inc., 1988), 239.

[40]Lucian is represented in Chronicles by minuscules bye$_2$ (McCarter, *Textual Criticism*, 94).

[41]Witness again the inscriptions of Shalmaneser III which increased with time and distance from Nineveh the numbers he claimed to have smitten at the battle of Qarqar. See above.

frequently.[42] Read with the MT here as well.

1 Chronicles 18:4

See the discussion on the parallel 2 Samuel 8:4.

1 Chronicles 19:6

MT and all LXX witnesses here agree on אֶלֶף כִּכַּר־כֶּסֶף, but the near parallel in 2 Samuel 10:6 omits it. The passages seem to be different enough that the latter's omission is not textually significant.

1 Chronicles 19:18

MT and all LXX witnesses agree on שִׁבְעַת אֲלָפִים here. The parallel passage in 2 Samuel 10:18 has שִׁבְעָ מֵאוֹת. It is difficult to explain the difference graphically, so this could be an example of literary hyperbole or scribal embellishment in a different tradition. Otherwise, it is perhaps a case where the original numeral notation was misunderstood.

1 Chronicles 21:5

Though this problem has been dealt with under 2 Samuel 24:9, there are a few textual comments in order here. MT reads אַרְבָּע מֵאוֹת וְשִׁבְעִים אֶלֶף. LXX^{B} deletes the entire account of Judah's numbers, apparently due to homoioteleuton with שֹׁלֵף חָרֶב. LXX^{A}, all minuscules, and the Armenian version include it. Minuscule m again inverts the order and reads 1,470. The שִׁבְעִים of minuscule m therefore supports MT at this point. Minuscules d, j, p, q, t, z all support MT with וְשִׁבְעִים against LXX^{-B} which read וּשְׁמֹנָה אֶלֶף. The שמנה of the

[42]Minuscule 71 does so in Num. 1; d and m in Chronicles. This could prove to be an interesting study for one inclined to pursue it throughout the LXX.

latter may have arisen from the שמנה מאות in 2 Samuel 24:9 via scribal remembrance; otherwise, its presence supports either a three tradition theory, or the proposed literary convention of hyperbole in which the numbers need not agree. Read with the MT here.

1 Chronicles 27:2

This is a rather insignificant problem. One notes however that in chapter 27 the numeral 24,000 is often repeated. Minuscules d and m throughout the chapter either invert and read 1,024 or delete the complete spelling in favor of the abbreviation *χιλιάδας κδ'*, or, 1,024.

2 Chronicles 2:1

This was adequately dealt with in the earlier coverage of the parallel in 1 Kings 5:30.

2 Chronicles 4:5

MT and LXX witnesses agree on בַּתִּים שְׁלֹשֶׁת אֲלָפִים יָכִיל, but the parallel in 1 Kings 7:26 has a reading שׁוֹשָׁן אַלְפֵים בַּת יָכִיל. With the three occurrences of שְׁלֹשָׁה in verse 4 and שׁוֹשָׁן present earlier in verse 5, one might justly posit that שלשת is secondary and the original reading is to be found in 1 Kings 7. Otherwise a differing tradition could be involved.

2 Chronicles 7:5

MT reads הַבָּקָר עֶשְׂרִים וּשְׁנַיִם אֶלֶף, to which all LXX witnesses agree with the exception of minuscule m, which inverts to 1,022 oxen. For the sheep, LXX^{B} omits altogether due to homoioteleuton with the אלף, but all other LXX witnesses (except d and m) read with the MT. Minuscules d and m again invert

and read 1,120 sheep. The parallel passage in 1 Kings 8:63 agrees with MT at both points. Read with the MT.

2 Chronicles 14:7

MT and Lucian read מָאתַיִם וּשְׁמוֹנִים אֶלֶף against LXX^B which has a reading of מָאתַיִם וַחֲמִשִּׁים אֶלֶף and the Armenian reading מָאתַיִם וְשִׁשִּׁים אֶלֶף. Minuscule m inverts to 1,280 but in so doing supports MT and Lucian with the שמונים. Read with the MT.

2 Chronicles 14:8

MT reads אלף אלפים and LXX witnesses unite with באלפים. This is difficult, but I would opt for the indefiniteness of the LXX. Syriac and Vulgate offer a higher שלשים אלף for the MT and LXX reading of מאות שלש. Read with the MT at this point.

2 Chronicles 28:8

MT, LXX^L, and Theodotian read מאתים אלף. LXX^B reads שלש מאות אלף and minuscules d, p, q, t, z read שמונה מאות אלף. Read with the MT and Lucian. The LXX variants are difficult to explain (other than a result of embellishment over time), though the odd minuscules may reflect a corruption similar to that of 1 Chronicles 5:21.

Samuel-Kings versus the Chronicler

The following chart sets forth the parallel passages dealt with in this exercise:[43]

[43]By transmission error is meant (in the chart that follows) graphic confusion, abbreviation confusion, or perhaps confusion with a differing numeral notation system.

2 Samuel 8:4 - 1 Chronicles 18:4	Transmission error very likely; differing traditions unlikely.
2 Samuel 24:9 - 1 Chronicles 21:5	Transmission error less likely than differing traditions or embellishment.
1 Kings 5:6 - 2 Chronicles 9:25	Transmission error very likely; differing traditions unlikely.
1 Kings 5:25 - 2 Chronicles 2:9	Transmission error very likely; differing traditions unlikely.
1 Kings 5:30 - 2 Chronicles 2:1,16	Transmission error possible; differing traditions possible.
1 Kings 10:26 - 2 Chronicles 1:14	Numbers are in agreement.
1 Kings 12:21 - 2 Chronicles 11:1	Numbers are in agreement.
1 Chronicles 19:18 - 2 Samuel 10:18	Transmission error possible; differing traditions very likely.
2 Chronicles 4:5 - 1 Kings 2:26	Transmission error very likely; differing traditions at least possible.
2 Chronicles 7:5 - 1 Kings 8:63	Numbers are in agreement.

One can see that in the ten parallel passages which involve the use of אלף, there are three which are in agreement. In four cases, transmission error is a likely or very likely explanation for the disagreement. In two cases, differing traditions or purposeful scribal embellishment or literary hyperbole are likely if not necessary for explaining the differences. One may be explained either way. Others scholars may read the results differently.

Of the four cases where differing traditions, purposeful scribal embellishment or literary hyperbole are at least possible, all the Chronicles passages involve a number larger than that of Samuel-Kings.[44]

[44] The one exception is Judah's part of 2 Samuel 24:9/1 Chronicles 21:5, in which the Chronicler lowers the amount from 500,000 to 470,000.

It is evident from this aspect of the study that the LXX might also reflect still another tradition differing from both that of Samuel-Kings and the Chronicler. It may be that all three traditions are evident in the manuscript witnesses of 2 Samuel 24:9 and 1 Chronicles 21:5.

A Word Concerning Three Greek Minuscules

It was noted earlier that three Greek minuscules of the LXX had a tendency to invert the order of large numbers, thus effectively reducing them in size. These three minuscules are numbered 44 (d), 71, and 72 (m). Why did they do this? Were all three from the hand of an individual scribe? Or were they all independent, yet perhaps working from the same Greek Vorlage? In either of these two cases, was that Greek Vorlage reflecting an earlier Hebrew copy which also inverted the order? If so, did that Hebrew manuscript reflect the original numbers, which in time and transmission were elsewhere embellished? Or perhaps more importantly, did these scribes understand that the numbers could be understood syntactically different from what we have commonly understood? Such questions obviously lie outside the scope of this exercise, but they are interesting to consider.

Summary

The purpose of this study was to undertake a textual analysis of the historical passages which contain large numbers based on the presence of אלף. Only 35 such textual problems warranted mentioning here; most of these occur in Samuel, Kings, and Chronicles. Despite the textual analysis undertaken, only in one case was a large number significantly reduced based on a textual decision (1 Samuel 6:19). The large numbers remain intact as a valid part of the MT for the most part. Where variant readings were accepted, large numbers still remain. Those passages in which there was disagreement

between the Samuel-Kings tradition and the Chronicler proved of great interest. It was determined that in many cases, transmission error can explain those differences. In a few cases, most notably 2 Samuel 24:9 and 1 Chronicles 21:5, differing tradition, purposeful scribal embellishment, or literary hyperbole is most likely.

Since the text for the most part withstands textual analysis, it remains for the next section to discover if the word אֶלֶף has been faithfully rendered as a number and to demonstrate how that number is used in historiographical passages.

Grammatical/Syntactical Analysis of אֶלֶף

It has now been illustrated above that for the most part the texts in which large numbers occur in the Old Testament withstand textual analysis. It is the purpose of this part of the chapter to examine the grammatical and syntactical usages of the term אלף within its various contexts. It will be seen that the word in most (if not all) cases under consideration must retain its semantic value as "1,000," as opposed to alternative suggestions.[45] Consequently, even the largest numbers built from this term must be dealt with as such.

In order to limit the scope of this present study, peripheral studies were abandoned. Hence, the usages of the root where it occurs as a verb, or where it clearly occurs as the nominal form אַלּוּף, were not considered. Less frequent occurrences of אלף with the clear meaning of "cattle" or even "family" or "clan" are discussed only when essential. It is noted at this point that אֶלֶף with

[45] An alternative suggestion would be explaining the term as a defective spelling or misunderstood reading for אַלּוּף, for example.

either of these two latter meanings occurs only when no other numbers are present. The emphasis of this present study was therefore on the usage of אֶלֶף in those contexts where it is commonly translated "1,000". The over 350 examples of this usage proved more than sufficient for this study. Initially, the observations on the grammar and syntax of אלף will be discussed with representative samples provided.

Observations on the Grammar and Syntax of אלף

Morphologically, אלף is a segholate noun derived from the proto-Semitic *'alp. This is evident from the suffixed form אלפי in Judges 6:15 (where it means "family" or "clan"), and from the Ugaritic cognate 'alp. As a segholate noun, the singular absolute does not differ in form from the singular construct. Because of this fact, it is difficult at times to recognize bound relationships. The absence of the article on the immediately following noun in most cases suggests that an appositional relationship is to be preferred where there is any question. The plural construct does occur, normally with the gloss of "families of" or "clans of". It rarely occurs in the plural construct with the meaning "thousands of". Examples of the latter are Exodus 32:28, Judges 4:10 (the textual variant reads the absolute), and Psalm 68:18. The form is rarely suffixed; when suffixed, it carries the meaning of "family" or "cattle" (Judges 6:15, Deut. 7:13). The word אלף does occur in the dual, but invariably with the meaning "2,000" (or 2 אלף!) as opposed to "two families" or "two cattle".

When אלף is preceded by the number 10 or less, it appears in the plural (eg. ששה אלפים); conversely, when preceded by a number larger than 10, it appears in the singular (eg. ששים אלף). Exceptions to this include the phrase אלף אלפים in 1 Chronicles 21:5 and 22:14 and the unusual עֲשָׂרָה אלף of Ezekiel

45:1 (LXX reads εἴκοσι = עשרים). The gender disagreement normally associated with numerals in Biblical Hebrew is fully operational with אלף.

Syntactically, אלף occurs with great variation, depending on the context and the item numbered. In terms of measurement, אלף is used as the numeral 1,000 in contexts of weight, capacity, distance, and time. In terms of counted animals, אלף is also used as the numeral 1,000. In contexts of counted humans, אלף is most often found with a qualifying noun, adjective, or adjectival phrase. These different contexts will now be considered in depth.

In Terms of Measurement

Of Weight

The word אלף is commonly used to refer to a literal "1,000" in contexts which deal with the weight of money (Judges 17:2) or of metallic objects (1 Samuel 17:5). Where thus occurring, the items numbered or weighed may either precede or follow the numeral, and are often described in terms of sheqels (שקל; cf. Num. 31:52). Weights larger than 3,000 sheqels are normally expressed in terms of talents (ככר). Where numerals smaller than 1,000 are included for a more precise total, the normal pattern is thousands, hundreds, ten and digits.[46] With אלף present, this pattern is inverted only once, in Numbers 3:50.

Of Capacity (dry or wet measure)

As the literal number 1,000, אלף is used in expressing wet and dry measurements of capacity. Examples include the 20,000 "kors" (כֹּר) of wheat

[46]The order thousands, hundreds, digits and tens is also possible in normal Semitic usage. An example occurs in Exodus 38:28. See the study by Robert Hetzron, "Innovation in the Semitic Numeral System," *JSS* 22 (1977): 167-201.

which Solomon sent to Hiram in 1 Kings 5:25 and the 2,000 "bath" (בַּת) capacity of the bronze sea constructed by Solomon for the temple (1 Kings 7:26).

Of Distance

The term אֶלֶף is commonly used as a literal number to express great distance, usually in terms of cubits (אַמָּה). It is found as such in Numbers 35:4-5 and Ezekiel 45:1ff. Where a hundreds place does occur, it precedes the thousands place (as in Ezekiel 48:16).

Of Time

Measurements of time also include אֶלֶף to express the number 1,000. With years, אֶלֶף is found in Psalm 90:4. With days, אֶלֶף is found in Daniel 12:11-12, where the order is thousands, hundreds, tens, and digits.[47]

In Terms of Animals Counted

Though at times the numbers seem quite large, there is little question that אֶלֶף represents the number 1,000 in the contexts which deal with animals sacrificed, taken as spoil, or possessed by individuals.[48] The animal counted may be named either preceding or following the numerals given (cf. 1 Samuel 25:2, 1 Kings 5:6, 1 Chronicles 5:21, Job 1:3). The unusual characteristic of these passages is that all except Ezra-Nehemiah round off to the nearest 100.

[47]It may be noted here that the occurrence of this large number is found in the prophetic genre in a predictive sense. One also notes that it is also a rare instance among the occurrences of אֶלֶף in that it is precise to the digits. Because of these two facts, the numbers therein may be accepted at face value.

[48]This opinion runs counter to the suggestion of R. E. D. Clark that אֶלֶף in contexts of animals refers to the lead, or chief, animals. See R. E. D. Clark, "The Large Numbers of the Old Testament--Especially in Connexion with the Exodus," *Journal of the Transactions of the Victoria Institute* 87 (1955): 85.

The pattern followed by Ezra-Nehemiah is thousands, hundreds, tens, digits.[49]

In Terms of Humans Counted

In contexts (other than census lists) which deal with humans counted, it is at least possible that אלף could mean something different from the numeral 1,000. Where it occurs in these contexts, אלף is usually qualified with nouns, adjectives, or adjectival phrases. These may either precede or follow the numeral(s). These qualifying terms are for the most part used to describe soldiers, either in the field or slain or captured in battles.[50] Such qualifying phrases include, but are not limited to, the following examples: אלפים איש (Joshua 7:3, 4); אלף רגלי (Numbers 11:21); אלף איש שלף חרב (Judges 8:10); and אלפים איש בחור (1 Samuel 24:3). Though these may simply reflect stylistic differences, they may also be intended to demonstrate a meaning for אלף as something other than the numeral 1,000. Again, and with very few exceptions, the numbers outside the census lists of the Book of Numbers are rounded off to the nearest 1,000. This fact could support a possible meaning other than the numeral 1,000. It seems to this writer though that where אלף does appear in these contexts, it is still functioning grammatically as a numeral. The peculiar nature of gender disagreement of numerals with the nouns (or other numerals) they modify could make this point inconclusive however. Yet the passages wherein humans and animals are numbered side by side would argue for a literal number 1,000, at least in those passages.

[49]It may well be that by the time of Ezra and Nehemiah, the literary use of large numbers had changed from hyperbole to factuality. Certainly royal inscriptions in other ANE nations had done so.

[50]One must note the similarity of contexts with the obviously hyperbolic figures of the Assyrian royal inscriptional material.

Census lists, while providing syntactical arrangements similar to the above examples, seem to be different in some ways. First of all, census lists often provide a total of the numbers listed. Secondly, though the prefatory verses in Numbers 1, 2, 3, and 26 virtually demand an exact figure, the figures given have apparently been at least rounded off. The census lists of Ezra-Nehemiah on the other hand are precise down to the digits, a very rare occurrence where אלף is used in contexts of counted humans. Thirdly, even though numbers in excess of 10,000 are found in most biblical census lists (and in other contexts as well), only those of Ezra-Nehemiah utilized the number רִבּוֹא (10,000). The forms רִבּוֹא and רְבָבָה were both known to pre-exilic writers: why were they not used? The answer to that question could provide a key to the understanding of אלף in the contexts of humans counted.

With reference to humans counted, אלף does certainly mean the number 1,000 when found in passages speaking of the divisions of the people into "thousands, hundreds, fifties, tens" (Exodus 18:21, 1 Samuel 8:12, 2 Samuel 18:1, etc.). For the purposes of this dissertation, this phrase or any part of it is called the Standard Military Formula (SMF).

Summary on the Grammar and Syntax

It has now been demonstrated that scholars are justified in translating the term אֶלֶף as the number 1,000 in the majority of the cases considered. It might be possible that at times, in dealing in terms of numbers of humans counted, the word could refer to something else. Refer to chapter six of this dissertation for some of the possibilities. This seems unlikely however, inasmuch as not every such context would support a gloss other than 1,000, and the term still seems to be functioning as a numeral in the remainder of the cases.

Chapter Summary

This chapter has demonstrated two basic truths about large numbers in the Old Testament. First, the texts which contain large numbers have been handed down to us in remarkably good shape. For the most part, those passages withstand textual analysis. More significant perhaps is the fact that in most cases when variants are chosen, large numbers remain. Second, this chapter has affirmed the semantic value of 1,000 for the term אֶלֶף as the most normal gloss in historiographic literature.

CHAPTER 3

THE DEMOGRAPHICS OF ANCIENT ISRAEL

It is the purpose of this chapter to examine the archaeological data which contribute to the understanding of population demographics for ancient Israel from the earliest periods until the first century A.D. If it can be demonstrated that at no time in the ancient history of the land of Palestine could there have been the enormous number of inhabitants demanded by accepting the census totals at the Exodus (with resulting total population figures of 2 to 3 million Israelites) or during the monarchy (with a resulting total of 5 million), then the numbers recorded may have to be understood as something different from an accounting which reflects actual totals. If the numbers of the censuses are not meant to be seen as reflecting actual totals, but rather have some other significance, it may be that other similarly large numbers of the Old Testament likewise have significance apart from reflecting actual totals.

Demographic studies based on archaeological discoveries in ancient Israel have been conducted primarily over the past two and a half decades. While the results of such pursuits are certainly open to debate, inasmuch as the data may be interpreted variously (and the authors of the studies are quick to point this out), those results may not be far from the actual circumstances which existed in ancient Israel. This chapter will review the methods and the results of these studies in order to postulate a maximum number of population

which the land of Palestine could support at a given time during the biblical period.[1]

Demographic Methodology

Numerous methods to estimate the populations of ancient cities and nations have been proposed by scholars involved in archaeological and demographic research in the ancient Near East. The methods discussed below differ and any given proponent at times finds fault with differing methods. However, it is noteworthy that the totals of all modern demographic studies are consistently lower for all periods of Israel's history than that which is suggested by taking the census figures of the Old Testament at face value. The primary methods are discussed below.

Available Water Supplies

The premier study in English which concentrates on measuring the population of ancient Jerusalem on the basis of available water supplies is that of Wilkinson.[2] One must agree that available water supply does indeed play an important part in sustaining a certain population over lengthy periods of

[1]As a conservative, the present writer is quick to mention that not all the archaeological data are in (most of the studies to date have been limited either chronologically and/or geographically), and that subsequent discoveries may produce conclusions which differ from the results, not only of this chapter, but of this dissertation as a whole. However, two factors mitigate this position. First, one doubts that the demographers involved hold a hidden agenda against biblical teaching on the subject, though that might be at least possible. Second, the physical artifactual evidence which does remain is overwhelmingly supportive of a population considerably smaller than that suggested by taking the census numbers at face value.

[2]John Wilkinson, "Ancient Jerusalem: Its Water Supply and Population," *PEQ* 106 (1974): 33-51. A similar but shorter study has been conducted by N. Rosenan for the city of Arad (N. Rosenan, "A Note on the Water Storage and Size of Population," in *Early Arad*, edited by Ruth Amiran [Jerusalem: The Israel Exploration Society, 1978], 14).

time. By a thorough study of the archaeological data concerning various spring fed pools and aqueducts, he concludes that the population of ancient Jerusalem ranged from 2,500 in David's time to a high of 76,130 in the time of Herod Agrippa.[3] Wilkinson derives his population figures on an average consumption of 20 liters per person per day, a figure which is based on the amount of water from the systems he studied.[4] He qualifies this by suggesting that cisterns could have stored up to perhaps 50% of the rain-water, providing a more reasonable daily consumption.[5] One may assume for the sake of argument that his estimate is wrong and that total consumption was less than his suggested 20 liters per person per day, say only 10 liters. This would allow for a doubling of his figures from a low of about 5,000 in David's time to a high of about 152,000 in Agrippa's.[6] On the other hand, raising the estimated daily consumption would reduce the feasible population figures proportionately. Estimating population size by this method has been questioned by Broshi for these same reasons:

> Le principal inconvénient de cette méthode est qu'elle ne peut que donner approximativement le nombre maximum d'habitants et cela à la condition qu'on connaisse la consommation moyenne d'eau par jour et la quantité totale d'eau disponible. Il va sans dire que ces deux conditions sont très difficiles à réaliser. La première donnée est même presque impossible à obtenir, car on n'a aucun moyen d'arriver à connaître la consommation journalière d'eau, même approximativement, l'écart étant trop grand, de 3 litres par personne dans certaines localités du Liban, à 363 aux États-Unis.[7]

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[3] Wilkinson, "Ancient Jerusalem," 50.

[4] Ibid., 47.

[5] Ibid., 48-49.

[6] These figures are still too small to support the large numbers of population suggested by the census of David.

[7] Magen Broshi, "La Population de l'ancienne Jérusalem," *RB* 82 (1975): 7.

It is because of these problems that Broshi offers a differing method to determine population figures. This method is discussed below.

Urban Areas and Population Densities

Broshi offers what he considers to be the most viable method of estimating past populations of Jerusalem by calculating a density coefficient which is to be multiplied by the surface area of the city at a given time in its history.[8] Density factors include the size of dwellings, the average size of families, the number of slaves, and urban area devoted to public usages. This coefficient Broshi sees as 40 persons per dunam.[9] Though he is skeptical of the methodology of Wilkinson (see above), his results are surprisingly similar to Wilkinson's at several points.[10] This fact may actually serve to validate each of the two methods above as adequate estimators of early populations.

The method of Broshi has proven to be one of the most widely used methods, and was selected by Shiloh for his study of Iron Age Palestine.[11] Making the assumption that there were 60 Iron Age settlements with an average area of 50 dunams each, Shiloh suggests that the urban population of the era was 150,000, with the rural population somewhat larger.[12] The total

[8] Ibid., 6.

[9] Ibid. One dunam = 1,000 m^2 = 1/10 hectare.

[10] For instance, he estimates the population of Jerusalem under David to be 2,000 and under Herod Agrippa to be 82,500 (page 13).

[11] Yigal Shiloh, "The Population of Iron Age Palestine in the Light of a Sample Analysis of Urban Plans, Areas, and Population Density," *BASOR* 239 (1980): 25-35. Shiloh adopts this method despite the pitfalls he mentions on page 26.

[12] Ibid., 32.

would have been less than 1,000,000.[13] If this figure is correct, or even close to correct, then the numbers recorded in the census of King David (2 Samuel 24/1 Chronicles 21) may have a significance other than an actual accounting of the mustered army.

Other Methods

Other methods to estimate the populations of ancient cities and nations include the use of tax lists,[14] refugee lists,[15] available roof space,[16] analogy with present population,[17] and the maximum agricultural production of a given region,[18] among others. These methods all have their proponents and opponents, and all may be less reliable than the area/density coefficient method described above.[19]

[13] Ibid.

[14] J. E. Packer, "Housing and Population in Imperial Ostia and Rome," *Journal of Roman Studies* 57 (1967): 80-89.

[15] Cf. J. T. Milik, *La topographie de Jérusalem vers la fin de l'epoque byzantine*, Mélanges de l'Universite St. Joseph 37, (Beyrouth: Imprimerie Catholique, 1961), 133.

[16] R. Naroll, "Floor Area and Settlement Population," *American Antiquity* 27 (1962): 587-89.

[17] A. Lucas, "The Number of Israelites at the Exodus," *PEQ* 76 (1944): 164-68. For this method in other lands, see William M. Sumner, "Estimating Population by Analogy: An Example," in *Ethnoarchaeology: Implications of Ethnography for Archaeology*, edited by Carol Kramer (New York: Columbia University Press, 1979), 164-74.

[18] Magen Broshi, "The Population of Western Palestine in the Roman-Byzantine Period," *BASOR* 236 (1979): 6-7.

[19] Shiloh, "The Population of Iron Age Palestine," 26-27, discusses reasons for not accepting these other methods.

Diachronic and Synchronic Analyses

The Chalcolithic Period (ca. 4000-3100 B.C.)[20]

To date, the only published study which pertains to the population of the Chalcolithic Period of Palestine has been that of Gophna and Portugali, of Tel Aviv University.[21] This study is geographically limited to Israel's coastal plain. This is described in the article:

> The study area (figs. 1-8) includes the regions of the Carmel coast, the Sharon plain, and Philistia. It stretches from the northern edge of the Mt. Carmel ridge (Haifa) to Naḥal Besor in the south, northwest of Beer-sheva, and from the coastline in the west to the Samarian and Judean foothills in the east. It covers about 25 percent of western Palestine/Israel, excluding the Negev. The northern part of the area has a humid, Mediterranean climate; in the south it gradually changes to semiarid, Irano-Turanian.[22]

The authors studied each of the known settlements of the era (apart from those which are now submerged) and calculated the population on the basis of three density coefficients,[23] each inversely proportional to settlement size. They "estimate a population of 8576 for the Chalcolithic period."[24]

[20]For the most part, dates are taken from the demographic studies themselves, with supplemental data provided by William W. Hallo and William Kelly Simpson, *The Ancient Near East: A History* (New York: Harcourt, Brace, Jovanovich, 1971).

[21]Ram Gophna and Juval Portugali, "Settlement and Demographic Processes in Israel's Coastal Plain from the Chalcolithic to the Middle Bronze Age," *BASOR* 269 (1988): 11-28. It is they who claim the originality of the study of the time frame (p. 12).

[22]Ibid., 12.

[23]For a good discussion of differing density coefficients suggested by various scholars, see Broshi, "La population de l'ancienne Jérusalem," 6-7; or Magen Broshi and Ram Gophna, "The Settlements and Population of Palestine during the Early Bronze Age II-III," *BASOR* 253 (1984): 41-42. For the most part, the density coefficient in ancient cities was 40-50 per dunam. Unwalled cities of the Chalcolithic era may vary considerably from this figure.

[24]Gophna and Portugali, "Settlement and Demographic Processes," 13.

Assuming for the sake of argument that this figure represents 25% of the total population of the time,[25] the total for the entire western Palestine/Israel of the Chalcolithic age would approximate 34,300. This figure may be lessened somewhat if the authors are correct in their assessment that "during the Chalcolithic period, the southern coastal plain was probably the more densely populated region in Palestine."[26]

For the sake of argument, let us assume for a moment that Gophna and Portugali are incorrect in their analysis, either by incorrect density coefficients, or by an inaccurate total of settlements, or simply by inept research. Let us assume that they have miscalculated the figure by 90%, and that their figure should be 85,760 and our suggested total for all the land should be 343,000. One notes immediately that this figure is still far smaller than many of the largest numbers of the Old Testament, and while the present writer quickly admits that the Old Testament does not deal *per se* with this time period of Palestine, the argument here is that it is unlikely at any time of Palestine's ancient history that the population attained to that suggested by taking the census figures at face value. This is all the more true for this time period if Gophna and Portugali are correct (or statistically correct within reasonable confidence intervals) in their analysis.

Early Bronze IA and IB (ca. 3100-2900)

Continuing their study of the same region into the Early Bronze Age (EB), Gophna and Portugali note the population shifts to the north in EB IA and

[25]This model of 25% is based on the relative size of the described coastal area proportionate to the land as a whole. It is intended to be a model only for the purpose of argument.

[26]Gophna and Portugali, "Settlement and Demographic Processes," 21.

to the central portions in EB IB.[27] Due to increasing urbanization late in EB IB with resulting changes in density coefficients, the population figures they suggest may be regarded as somewhat tenuous.[28] They suggest 2,475 for EB IA[29] and from 7,705 to 12,925 for EB IB.[30] Assuming our earlier model that their figures represent 25% of the entire land, the entire population of western Palestine at these two times would be 9,900 and from 30,820 to 51,700 respectively. Again, for the sake of the present argument, if their analysis is wrong by 90% for any reason, the highest totals still do not amount to the large population figures suggested by the censuses of the Old Testament. Again, however, it is thought by the present writer that their analysis has adequate sampling to be statistically significant within reasonable confidence intervals.

Early Bronze II-III (ca. 2900-2300 B.C.)

To the study of Gophna and Portugali concerning the coastal plain of Palestine during Early Bronze II and III may be added the study of Broshi and Gophna of a larger area:

> The area encompassed in our discussion is western Palestine of the British Mandate (Israel and the occupied territories), excluding the Negev south of Beersheba and the Arad plains. For this area (14,000 of the 26,000 km^2 of the land area of Mandatory Palestine), reliable archaeological data

[27] Ibid., 14.

[28] Gophna and Portugali, "Settlement and Demographic Processes," 15, write: "The variable density coefficient is based on the following assumptions: that urban settlements are usually more densely populated than nonurban, but that the highest density is in medium-sized towns, and that density diminishes in larger towns or cities as a result of a higher proportion of public space (e.g., city walls, temples, palaces)."

[29] Ibid., 13.

[30] Ibid., 15.

are available; the area also represents a definite geopolitical unit concerning which data from various periods can be compared.[31]

For the coastal plain, Gophna and Portugali suggest an EB II population of 17,000,[32] which based on our model would yield a total population of 68,000. As urbanization increased from this period into the beginning of EB III, "the settled population at that time in Palestine reached [a maximum of] 150,000."[33]

It is interesting to note that Broshi and Gophna acknowledge that not all of the archaeological data are in, inasmuch as there are still settlements to be uncovered.[34] Most of these are probably small and probably would have no significant impact on their results.[35]

Intermediate Bronze (ca. 2300-2200 B.C.)

During the period between the Early Bronze and Middle Bronze, there appears to have been a sharp decrease in the population in the coastal plain.[36] Gophna and Portugali suggest that the coastal population fell to only about 1,800 in this period, but this figure may be low since it was a time of temporary abandonment of urban areas.[37] According to our suggested model, the total

[31]Broshi and Gophna, "The Settlements and Population of Palestine," 41.

[32]Gophna and Portugali, "Settlement and Demographic Processes," 15.

[33]Broshi and Gophna, "The Settlements and Population of Palestine," 45. The figure seems to conflict somewhat with the results of Gophna and Portugali, "Settlement and Demographic Processes," 16, that the coastal regions decreased in population in EB III, but this may be mitigated by the fact that the hill country regions were gaining significant numbers (cf. Broshi and Gophna, "The Settlements and Population of Palestine," 49).

[34]Cf. Broshi and Gophna, "The Settlements and Population of Palestine," 49.

[35]Ibid., 50, n. 2.

[36]Gophna and Portugali, "Settlement and Demographic Processes," 16.

[37]Ibid.

population of Palestine as a whole based on their figures for the coastal plain would have been 7,200.

Middle Bronze I-II (ca. 2200-1550 B.C.)

Because Middle Bronze (MB) I (ca. 2200-2000) was primarily a phase of urban development in Palestine, the population increased in the coastal plain to "over 28,000."[38] This growth in turn led to further growth and urbanization in MB II (ca. 2000-1550 B.C.), reflected in the coastal population of 37,000.[39] Based on our suggested model, these figures would yield totals of 112,000 and 148,000 respectively for the land as a whole. The latter total comports well with the earlier study of the MB IIA and MB IIB period accomplished by Broshi and Gophna, who suggest a rounded off total of 140,000 for all of Palestine.[40] This fact serves to validate our suggested model of using the figures from the coastal plain as 25% of the total for the entire country.

Late Bronze Age (ca. 1550-1200 B.C.)

The published data from the Late Bronze Age (which period covers both the early and late dates for the Exodus) is lacking at this point (the study of Gophna and Portugali ends with MB II).[41] Nelson Glueck has conducted surface explorations in the Trans-Jordan region and concluded that that

[38] Ibid., 17.

[39] Ibid.

[40] Magen Broshi and Ram Gophna, "Middle Bronze Age II Palestine: Its Settlements and Population," *BASOR* 261 (1986): 87.

[41] W. F. Albright, "The Administrative Divisions of Israel and Judah," *JPOS* 5 (1925): 25, n. 15, does note that "the total population of Western Palestine in the Amarna Age was not far from half a million. . . ."

region was essentially unpopulated during the early part of the Late Bronze Age. Apparently, his conclusions have only recently been called into question.[42] At any rate, if one accepts the biblical testimony that there were seven nations already in the land more numerous than Israel (Deut. 7:1) immediately prior to the Exodus, taking the census numbers of Numbers 1 and 2 at face value (which numbers yield a total population for the expatriated nation of two to three million), mandates that the population of Palestine grew from the 140,000 at the end of MB II to between 15,000,000 and 21,000,000 by the time of the Conquest![43] What is obvious is that the artifactual remains of such a populace do not exist. Too, one would be hard pressed to explain how the population not only grew to this size, but also diminished to the size reflected in the Iron Age (less than 1,000,000), all within a 350 year period. To answer here that such a diminishing was due to the Conquest of the land by Israel wars against the scriptural testimony that Israel was not able to completely rid the land of Canaanites.[44]

Iron Age Palestine (ca. 1200-586 B.C.)

This also may be referred to as the biblical period extending from the middle of the period of the Judges to the Exile. It therefore includes the period

[42]Gerald L. Mattingly, "The Exodus-Conquest and the Archaeology of Trans-Jordan: New Light on an Old Problem," *Grace Theological Journal* (*GTJ*) 4 (1983): 245-62. Cf. H. J. Franken and W. J. A. Power, "Glueck's *Explorations in Eastern Palestine* in the Light of Recent Evidence," *VT* 21 (1971): 119-23; and Broshi and Gophna, "Middle Bronze Age II," 88, n. 7.

[43]For those who accept the early date of the Exodus (ca. 1446 B.C.), the Conquest would have begun ca. 1406 B.C. This enormous growth would have had to have taken place in less than 150 years! Even if one accepts a late date for the Exodus of ca. 1260 B.C. and Conquest of ca. 1220 B.C., the growth would have had only 330 years to take place.

[44]Judges 1:19-36.

of biblical literature outside of Joshua and the Pentateuch and is therefore useful in comparing the large numbers of that body of literature with the data from demographic surveys.

Though Yigal Shiloh discusses the issue at length in his 1980 article dealing with Iron Age Palestine, he does not clearly state his opinion for the population as a whole. He instead estimates the urban population at 150,000, with the rural population being somewhat higher.[45] He then compares it to Palestine of the Roman era, wherein the population did not exceed 1,000,000, and states that Iron Age Palestine held fewer inhabitants.[46] This figure may be contrasted with a total population of 5,000,000 demanded by accepting the census totals of David at face value. Shiloh writes: "The historical reliability of these figures is open to doubt, both on historiographic grounds and in the light of the statistical-demographical analysis outlined above."[47] The present writer takes issue with Shiloh at this point. If the numbers have some meaning other than an accounting of actual value, historical reliability is not the issue with regard to those numbers. It is the purpose of this dissertation to explore that other meaning, the literary convention of hyperbole.

In a diachronic demographic analysis for Jerusalem alone, Broshi suggests that the population of that city in the time of David was 2,000; in the time of Solomon, it was 5,200; in the time of Josiah, it was 20,000.[48] This may be contrasted to Nineveh, which became a much larger city of from 206,000 to

[45] Shiloh, "The Population of Iron Age Palestine," 32.

[46] Ibid., 33; cf. Broshi, "The Population of Western Palestine," 7.

[47] Shiloh, "The Population of Iron Age Palestine," 32.

[48] Broshi, "La population de l'ancienne Jérusalem," 13.

256,000,[49] figures which are somewhat in line with Jonah 4:11. The Lord God himself testifies in that verse to the presence in Nineveh of more than 120,000[50] who did not know their right from their left hand.[51] According to Broshi, much of the growth in Jerusalem between the time of Solomon and that of Josiah was attributable in part to the influx of refugees following the destruction of Samaria and those who soon after were abandoning various Philistine areas: "L'agrandissement de Jérusalem à près de trois fois ses anciennes dimensions et le doublement du nombre des installations en Juda doit s'expliquer, croyons-nous, par l'arrivée de nombreux réfugiés israélites qui s'établirent en Juda après la chute de Samarie (721 av. J.-C.), et la migration vers l'Est de la population judéenne abandonnant les provinces de l'Ouest cédées par Sennachérib aux villes des Philistins (701 av. J.-C.)."[52]

Post-Exilic and Intertestamental Eras (ca. 536 B.C.--A.D. 1)

There have been no significant demographic studies of Palestine as a whole conducted for this era, to the best of the knowledge of the present writer. It is doubtful that the population was at its greatest during this difficult period following the exile. The diachronic demographic analysis for Jerusalem alone by Broshi does include this period, however. During the

[49]Shiloh, "The Population of Iron Age Palestine," 32. Simo Parpola estimates the population of Nineveh in the 620 B.C. era to exceed 300,000 including suburbs (quoted in Jack M. Sasson, *Jonah*, The Anchor Bible 24B [New York: Doubleday, 1990], 312).

[50]The phrase does not include the term אלף, but is rather: הַרְבֵּה מִשְּׁתַּיִם עֶשְׂרֵה רִבּוֹ אָדָם. One also notes the unusual use of the term אָדָם here instead of the more usual אִישׁ.

[51]For a discussion of whether or not these were children, see Hans Walter Wolff, *Obadiah and Jonah: A Commentary*, trans. by Margaret Kohl (Minneapolis: Augsburg Publishing House, 1986), 175.

[52]Broshi, "La population de l'ancienne Jérusalem," 9.

Persian period, the city had an area of about 120 dunams and a population of about 4,800.[53] The city grew until in the second century B.C. it boasted a population of about 32,000, which under Herod the Great increased to about 38,500.[54]

Roman-Byzantine Era (ca. 60 B.C.--A.D. 600)

In sharp contrast to the Post-Exilic era in Palestine, there have been numerous attempts to estimate the population of the era of Roman occupation, especially of the first century A.D. One of the earliest attempts was that of Josephus. An extrapolation of his figures for various towns and cities yields a populace numbered at 2,265,000.[55] Byatt lists nearly 20 scholars who have estimated the total first century A.D. population of Palestine, with estimates ranging from under one million to 6,000,000.[56] The demographic study conducted by Broshi in 1979 is based on extrapolating a total figure from an analysis of the population estimates for the Negev: "We have chosen the Negev for discussion because it is the only region in Western Palestine in the Roman-Byzantine period where the population can be estimated with a reasonable degree of accuracy."[57] Using accepted methods of demographic estimates, Broshi concludes: "If our supposition that the urban population represented

[53]Ibid., 13.

[54]Ibid.

[55]Anthony Byatt, "Josephus and Population Numbers in First Century Palestine," *PEQ* 105 (1973): 60. Broshi extrapolates the figure at 2,500,000. Cf. Broshi, "The Population of Western Palestine," 6.

[56]Byatt, pp. 51-52. For an earlier review of the various estimates of the first century population of Palestine, see C. C. McCown, "The Density of Population in Ancient Palestine," *JBL* 47 (1966): 425-27.

[57]Broshi, "The Population of Western Palestine," 1.

but a third of the total, then the overall population of Palestine in its Byzantine heyday reached the million mark, at most."[58] His earlier study on Jerusalem seems to bear this out. The city continued to show growth after Herod the Great to a population of 82,500 until shortly before the destruction of the Second Temple -- it took until the time of Justinian (ca. A.D. 565) to recoup to just 53,250.[59] Even the highest of these figures is insufficient to postulate (by extrapolation) a population for the entire region much in excess of 1,000,000.

Chapter Summary

If one lends any credence to the work of these scholars whose demographic analyses are presented above, one is forced to make a decision concerning the census figures given in Scripture. Either they are in error, or they have some other significance than an accounting of actual value. If one opts for the latter, it very well may be that other similarly large numbers in Scripture also have some other significance than recording actual value. The next chapter will examine a possible explanation for the use of large numbers in the Old Testament by examining the use of numbers in other ancient Near Eastern literature.

[58] Ibid., 5.

[59] Broshi, "La population de l'ancienne Jérusalem," 13.

CHAPTER 4

LARGE NUMBERS IN THE ANCIENT NEAR EASTERN MILIEU

Preliminary Remarks

This chapter contains the results of a study done in the initial stages of the research for this dissertation, though it has been thoroughly updated. It records both diachronically and synchronically the broad usage of numbers in various types of literature of the ancient Near East (ANE). This was done in an effort to demonstrate the similarities and contrasts between biblical and ANE usages. Though the emphasis of the study is on the use of large numbers in the ANE milieu, from time to time small numbers are included when they show strong contrast in the manner of usage or are particularly interesting to note. Inasmuch as the royal inscription genre in particular holds the most interest for comparative purposes, it is initially necessary to examine this corpus of literature. Following this discussion, the survey of the use of numbers in the ANE will commence.

The Royal Inscription Genre

The royal inscription genre apparently had its beginnings in the Sumerian culture. Other than economic texts, a majority of Sumerian writings are royal inscriptions. Concerning these Hallo has written:

> . . . the great majority of Sumerian monuments, including virtually all building inscriptions, were dedicated either by, or to, or on behalf of the king. These are the royal inscriptions.
>
> The royal inscriptions are of great value as contemporary historical

> documents. But beyond this, they are of interest also from two other points of view, their archaeological context as objects of art and architecture, and their literary analysis, as inscriptional genres. For they were subject to strict rules of composition which are typical for each of the various categories of Mesopotamian literature. In this case, these rules remained largely unchanged from the first royal inscriptions to those of Hammurabi, a period of nearly a thousand years.[1]

It is in these royal inscriptions of Sumer that we find some of the earliest examples of the use of numbers.[2] At Ur, which Hallo says had inscriptions representative of other Sumerian cities,[3] there were four basic types of royal inscriptions. These were the standard inscription, the building inscription, the votive inscription, and the weight/seal inscription.[4] They rarely exceeded a few lines in length, but sometimes included numbers describing the specifics of a king's enterprises, initially often the weight of an object or the thickness of brick employed in building. They are thus to be contrasted with the later royal inscriptions of Assyria, which were at times expansive and often developed into accounts of the king's military exploits.

Grayson lists four types of royal inscriptions employed by the Assyrians. These are the commemorative, label, dedicatory, and letters to the god.[5] He says:

[1]W. W. Hallo, "The Royal Inscriptions of Ur: A Typology," *Hebrew Union College Annual* (*HUCA*) 33 (1962): 1.

[2]Hallo states that the inscriptions were essentially comtemporaneous with the events they record. Therefore, the literary use of numbers found on royal inscriptions date from roughly the same period as the events described thereupon. Cf. W. W. Hallo, "Sumerian Historiography," in *History, Historiography, and Interpretation*, eds. H. Tadmor and M. Weinfeld (Jerusalem: Magnes Press, 1984), 19.

[3]Hallo, "Royal Inscriptions," 5.

[4]Ibid., 8.

[5]A. Kirk Grayson, "Assyrian Royal Inscriptions: Literary Characteristics," in *Assyrian Royal Inscriptions: New Horizons*, ed. F. M. Fales (Roma: Istituto per L'Oriente,

> The commemorative texts were composed to commemorate the deeds of the king and this meant particularly building activity, military action, or both. This large group of documents may be divided into annalistic texts and display texts. Annalistic inscriptions contain narration of military campaigns arranged in chronological order and they are primarily in the first person (in contrast to chronicles which are in third person).[6]

Though the Assyrians started well and faithfully held to the basic form of royal inscriptions established by the Sumerians, in time they began to add historical data. Consider the following quotes:

> The literary typology of these inscriptions was established by the Sumerians and the later Assyrians and Babylonians followed faithfully the basic styles. In Assyria, however, one important development appeared. As time passed the passage on military exploits, which (if it appeared at all) had been only a minor feature in Sumerian times, was expanded. This process can be traced in the inscriptions translated in this volume. The detailed military accounts begin to appear with Adad-nirari I and by the reign of Tukulti-Ninurta I have become quite lengthy.[7]

> . . . the Sumerian and Babylonian rulers studiously refused to allow anything except their pious deeds to appear in the dedicatory inscriptions, the Assyrian rulers early began to add accounts of their military exploits, and occasionally a detail or two of their domestic policy. In the course of time these additions came to form the bulk of the inscription. . . .[8]

> The record of the king's military achievements also evolves from a stage of more or less general statements to detailed accounts of events as they occurred year by year during the reign. . . . . more often it is clear that royal vanity demanded playing fast and loose with historical accuracy.[9]

The Assyrians, as their business documents show, could be exceedingly

1981), 37.

[6]Ibid.

[7]Albert Kirk Grayson, *Assyrian Royal Inscriptions* (Wiesbaden: Otto Harrassowitz, 1972), volume 1: *From the Beginning to Ashur-resha-ishi I* (*ARI I*), xx.

[8]Daniel David Luckenbill, *Ancient Records of Assyria and Babylonia* (Chicago: The University of Chicago Press, 1926), volume 1: *Historical Records of Assyria: From the earliest times to Sargon* (*ARAB I*), § 10.

[9]Ibid.

> exact with numbers. But this exactness did not extend to their historical inscriptions. We could forgive them for giving us in round numbers the total of enemies slain or of booty carried off and even a slight exaggeration would be pardonable. But what shall we say as to the accuracy of numbers in our documents when one edition gives the total slain in battle as 14,000, another as 20,500, the next as 25,000, and the last as 29,000! Is it surprising that we begin to wonder whether the victory was only a victory on the clay tablet of the scribe? What shall we say when we find that the reviser has transformed a booty of 1,235 sheep in his original into a booty of 100,235! This last procedure, the additions of a huge round number to the fairly small amount of the original, is a common trick of the Sargonide scribe.[10]

It seems therefore that the royal inscription genre, particularly of the commemorative annalistic type, evolved into the recording of the primarily military exploits of a given king, though domestic feats might also be mentioned. Hyperbolic numbers became the norm, ostensibly to glorify the then reigning monarch.[11] Grayson makes several other points concerning the commemorative annalistic inscriptions, which will serve as a basis for definition of this genre. First, these inscriptions are literary works of prose, as opposed to oral works.[12] Second, the annalistic inscriptions are primarily in the first person,[13] though Grayson admits that there are some texts which fluctuate between first and third persons.[14] Third, the inscriptions employ

[10]Albert Ten Eyck Olmstead, *Assyrian Historiography*, The University of Missouri Studies: Social Science Series vol. 3, number 1 (Columbia, Missouri: University of Missouri, 1916), 7-8.

[11]Grayson, "Literary Characteristics," 41, writes: "The king was a focal point throughout these texts and behind each and every inscription was his compulsion to boast, although pious overtones are very strong."

[12]Ibid., 42, 44.

[13]Ibid., 37.

[14]Ibid., 42.

rich imagery in describing the king.[15] Fourth, the inscriptions employ numerous similes and metaphors.[16] Fifth, hyperbole regarding numbers of booty taken and enemy slain is "fully exploited."[17] About this Grayson writes: "Indeed the scribes sometimes step beyond the confines of legitimate literary hyperbole and deliberately misrepresent the facts so that Assyrian humiliations appear to be victories."[18] Other features of annalistic inscriptions include exhortations to later rulers to read and appreciate his predecessor's accomplishments, use of various rhetorical devices, and the motif that the current ruler accomplished what none of his predecessors had accomplished.[19] The studies below should demonstrate the development of this genre from its inception through its maturation, as well as offer insights into the use of large numbers in other regions of the ANE. The examples selected, while not exhaustive, are representative enough to accomplish this goal.

[15]Ibid., 45.

[16]Ibid.

[17]Ibid. Millard has recently argued that in many cases such numbers in Assyrian royal inscriptions are to be regarded as historically reliable. Though the present writer does not agree with all of his conclusions, it is interesting to note that Millard does allow for hyperbole in certain examples. Cf. Alan R. Millard, "Large Numbers in the Assyrian Royal Inscriptions," in *Ah, Assyria . . . Studies in Assyrian History and Ancient Near Eastern Historiography Presented to Hayim Tadmor*, eds. Mordechai Cogan and Israel Eph'al, Scripta Hierosolymitana 33 (Jerusalem: The Magnes Press, 1991), 213-22.

[18]Grayson, "Literary Characteristics," 46. Since the Old Testament accounts are quick to record defeats as well as victories, it is doubtful that this particular type of deliberate misrepresentation occurred in Scripture.

[19]Grayson, "Literary Characteristics," 44.

The Data from Mesopotamia[20]

Early Mesopotamia

One of the earliest written inscriptions which includes the use of numbers of any size is that of Enkhegal of Lagash (ca. 2600 B.C.). It is found on a stone tablet which apparently records the produce brought as crop-rent (?) from the king's land: "33 burs of land, 22 manas of bronze, 20 gurs of barley, 10 gurs ziz-grain, the field for Enkhegal, king of Lagash, 7 burs of land, 12 manas of bronze, . . .20 dog-plants, 2 gurs of barley, appointed as the king's revenue (?); a field producing vegetables. . . ."[21] Though this does not fit the normal patterning for the genre of royal inscription, it does illustrate the

[20]The people of Mesopotamia used cuneiform to express numbers as well as words. Thus the number one was expressed as a single vertical wedge (𒁹). Two would be two vertical wedges (𒁹𒁹), and so on. Ten was expressed as 𒌋. For a complete discussion, see the Akkadian grammars, or see John J. Davis, *Biblical Numerology* (Grand Rapids: Baker, 1968), 29-30. It may be noted here that the Assyrian format for recording a large number apparently differs from that of the Babylonians. The Babylonians used a sexagesimal system which had units up to 59, then groups of sixty up to 3,540, then groups of 3,600 upward, and so on, such that the number 1,5,14 would equal our 3,914 (cf. M Barnouin, "Remarques sur les tableaux numériques du livre des Nombres," *RB* 76 [1969]: 357). This also seems to be the system of the Sumerians. As to the later Assyrians, "Below a hundred the numbers are simply added according to their value, e.g., 𒌋𒌋𒐐 60, 10, 5 = 75; 𒐐𒐐𒐐𒐐 30, 4 = 34 (II:17). After a hundred, values less than ten which appear before the hundred sign serve as multipliers, e.g., 𒐐𒁹𒐐𒐐𒐐𒐐 4, 100, 20 = 420; 𒐐𒐐𒐐 𒁹 8, 100 = 800 (III:42). After a thousand values of less than a thousand which appear before the thousand sign serve as multipliers, e.g., 𒁹𒁹 𒁹 𒐐𒐐𒐐 𒐐𒐐𒐐𒐐 𒁹 2, 100, 8, 1000 = 208,000 (I:50); 𒁹𒁹 𒁹 𒐐𒐐𒐐𒐐 𒁹 𒁹𒁹 𒁹 𒐐𒐐𒐐𒐐𒐐 2, 100, 1000, 1, 100, 50 = 200,150 (III:24)." David Marcus, *A Manual of Akkadian* (Washington, D.C.: University Press of America, 1978), 95. This is the method employed in the royal inscription genre and is interestingly enough the pattern of the Hebrew use of numbers.

[21]George A. Barton, *The Royal Inscriptions of Sumer and Akkad* (New Haven: Yale University Press, 1929), 13. This is Barton's translation of the Sumerian phrase: "33 (?) BUR GÁN 22 (?) URUDU MA-NA 20 ŠE-GUR 10 ZIZ-GUR GÁN [EN-ḪE-GÁL]-ŠÙ LUGAL PUR-ŠIR-LA 7 BUR GÁN 12 URUDU [MA]-NA. . . 20 UR-ŠAM 2 ŠE-GUR RÚ-GUR-LUGAL GÁN-GARAŠ-RÚ. . . ."

early use of numbers on a simple receipt.

Eannatum of Lagash (ca. 2470 B.C.) provides the earliest example of an actual royal inscription which includes the use of large numbers: "Eanatum, granted strength by Ningursu, built the reservoir of the Lumagimdu, (using) 3600 *gur* of 2 *ul* (each) (2592 hl.) of [bitumen]."[22]

The nephew of Eannatum, Enmetena of Lagash (ca. 2440 B.C.?), inscribed a building cone which describes the proceeds of a tax levied on the Ummaites by Eannatum: ". . . he. . . levied a tax on them (and thus) brought for himself (as revenue) 144,000 'large' karu."[23] Hoegger says that this "chiffres fantastique dénotant sa supériorité absolue."[24]

Uru'inimgina of Lagash (ca. 2350 B.C.) utilized the royal inscriptions (specifically, on cones) to record his social and economic reforms:

> When Ningirsu, warrior of Enlil, gave the kingship of Lagash to Uru'inimgina, selecting him from among the myriad people, ...[25]

> When a corpse is brought for burial, the *uḫmush* takes his 3 jugs (60 l.) of beer, his 80 loaves of bread, one bed and one "leading goat," and the

[22]Jerrold S. Cooper, *Presargonic Inscriptions*, Sumerian and Akkadian Royal Inscriptions 1 (New Haven, Connecticut: The American Oriental Society, 1986), 42.

[23]Samuel Noah Kramer, *The Sumerians* (Chicago: The University of Chicago Press, 1963), 314. Cooper reads this figure as 8,640,000 *guru*, but this enormous figure is debated (cf. Cooper, *Presargonic Inscriptions*, 55-56, n. 6).

[24]Martin Hoegger, "L'interprétation des grands nombres dans l'Ancien Testament," *Hokhma* 25 (1984): 10.

[25]Cooper, *Presargonic Inscriptions*, 71. Kramer, *The Sumerians*, 318, notes that "myriad" is literally 36,000. The French apparently use the same number (36,000) to express a vast multitude (Robert Hetzron, "Innovations in the Semitic Numeral System," *JSS* 22 [1977]: 200, n. 1).

umum (ix) takes 3 ban (18 l.) of barley.[26]

In these examples one can see both the very specific and the very general use of numbers.

Sargon I of Akkad (ca. 2350 B.C.) also utilized the royal inscription genre to record numbers:

> Sargon, king of Kish, triumphed in thirty-four battles (over the cities) up to the edge of the sea (and) destroyed their walls. . . . . Sargon, the king, to whom Enlil permitted no rival--5,400 warriors ate bread daily before him.[27]

His son and successor, Rimush of Akkad (ca. 2300 B.C.), used large numbers extensively. On a tablet inscription he recorded:

> Rīmuš, der König des Alls: Wahrhaftig, das Königtum hat Enlil ihm gegeben. Den Kampf um Sumer hat er mehrfach, drei(mal), siegreich bestanden. 11.322 Mann hat er hingestreckt; 2.520 Mann hat er gefangen genommen. Auch Kaku, den König von Ur, hat er gefangen genommen; auch dessen "Statthalter" hat er gefangen genommen; ausserdem hat er ihre "Gaben" bis hin zum Unteren Meere hat er an sich genommen. Ferner hat er 14.100 Mann aus den Städten Sumers ausrücken lassen und ins Feldlager (?) verlegt. Und ihre Städte hat er erobert und ihre Mauern geschleift. Später, bei seiner Rückkehr, war Kazallu in Rebellion, doch er

[26] Cooper, *Presargonic Inscriptions*, 72.

[27] Kramer, *The Sumerians*, 324. One may contrast this sexagesimal figure on a royal inscription with an account of the amount of wool produced by a given number of sheep during the same time period:

i 502 udu
siki-pi 747 ma-na
Pà-da
dumu ^{d}En-líl-da

viii [su-nigin x] + 1200 udu
siki-pi 6878 ma-na
udu ^{d}En-líl-kam. . .

Cf. Giorgio Buccellati, gen. ed., *Bibliotheca Mesopotamica*, vol. 1, *Literary and Lexical Texts and The Earliest Administrative Documents from Nippur*, by Aage Westenholz (Malibu: Undena Publications, 1975), 57-58.

hat (die Stadt) erobert. Inmitten des Landes Kazallu hat er 12.052 hingestreckt; 5.862 Gefangene hat er gemacht. Auch, Aš̌arēd, den Statthalter von Kazallu, hat er gefangen genommen. Ferner hat er seine (Kazallu's) Mauern geschleift. Ingesamt 54.016 Mann, einschliesslich der Gefallenen, einschliesslich der Gefangenen, einschliesslich der Männer, die er ins Feldlager verlegt hat.[28]

Naram-Sin of Akkad (ca. 2230 B.C.) also used large numbers in his inscriptions:

. . . und 4.202 + x Mann hat er im Kampf niedergestreckt. . . .
. . . 4.800 + x Gefangene hat er im Kampf gefangen genommen. . . .
. . . 5.400 + x . . . Narāmsîn, der Mächtige, hat in . . . .[29]

Perhaps also from this general time period was Singashid of Erech (Uruk: ca. 2300 B.C.?). He records the stable economic prices of his time on a clay nail: "During his reign--his years were years of great prosperity--3 gur of barley, 12 mina's of wool, 10 mina's of copper, (and) 1/10 of a gur of oil, each sold for 1 shekel of silver in accordance with the (extraordinarily low) market price (current) in his land."[30]

The founder of the the Lagash II dynasty, Urbaba (ca. 2175 B.C.) inscribed a statue with the following: ". . . habe darauf (/darüber) den 'Sockel' 10 Ellen (hoch) gebaut, (und) habe über dem 'Sockel' das Eninnu--Weißer

[28]I. J. Gelb and B. Kienast, *Die altakkadischen Königsinschriften des dritten Jahrtausends v. Chr.*, Freiburger Altorientalische Studien 7, [Stuttgart: Franz Steiner Verlag, 1990], 191-93; (cf. Edmond Sollberger and Jean-Robert Kupper, *Inscriptions royales sumériennes et akkadiennes*, [Paris: Les éditions du Cerf, 1971], 101; Hans Hirsch, "Die Inschriften der Könige von Agade," *Archiv für Orientforschung* 20 [1963]: 54). Hirsch notes that the reading for the excess 16 is questionable in both texts A and B. Barton, *Royal Inscriptions*, 119, had earlier read the figures 14,100, 12,052, and 54,016 as 5,700, 12,051, and 54,000 respectively. Note that either figure given for the total, though clearly not the sum of the individual figures, is conveniently 10 times greater than the number of his predecessor's feasting soldiers!

[29]Gelb and Kienast, *Die altakkadischen Königsinschriften*, 246-48. The ellipses here indicate lacunae.

[30]Kramer, *The Sumerians*, 327.

Anzu--30 Ellen (weit) für ihn (= Ningirsu) gebaut."[31]

His well known successor, Gudea (ca. 2150 B.C.), exhibited classic Sumerian literature in his inscriptions. He used small numbers very specifically to refer to the gathering of lumber for a building enterprise: "Im (wörtlich: aus dem) Amanus, dem Zederngebirge, hat er [Zed]ern von 60 Ellen [Länge], Zedern von 50 Ellen [Länge], (und) Buchsbäume von 25 Ellen Länge zu Flößen zusammengestellt (und sie) (aus) diesem Bergland herabgebracht."[32] He also used large numbers: "Gudea zum recht(mäßig)en Hirten im Lande (Sumer) erwählt hatte, (und) aus der Mitte von 216000 Menschen seine Hand gefaßt hatte, die Stadt gereinigt, hat (sie) mit(?) Feuer geläutert. . . ."[33]

The use of numbers on royal inscriptions was continued during the Ur III period. Šulgi (ca. 2095-2048 B.C.) inscribed a statue with the following account of an offering(?) made on a feast day: ". . . (und) am Festtag im Tempel von Nin-MAR. KI die Erstling(sgaben) (?) im Hof übernommen wurden, waren 5 Krüge Dida(-Bier), 7 Krüge Bier, 1 (UL) 1 (Ban) königliches(?) Mehl, 1 Leinendecke, 1 Leinen(-Decke) (für) den Thron, Zedernzapfen(?) (und) Zedern-wedel(?), zwei mal 7 Pfund, 1200 zerlegte Fische, 1 Königs-Gur Salz, 1 Gur Soda(-Kraut). . ."[34]

[31]Horst Steible, *Die neusumerischen Bau- und Weihinschriften*; teil 1: *Inschriften der II. Dynastie von Lagaš*, Freiburger Altorientalische Studien 9:1 (Wiesbaden: Franz Steiner Verlag, 1991), 135. Kramer reads the last number as 12 cubits (*The Sumerians*, 326).

[32]Steible, *Die neusumerischen Bau- und Weihinschriften*, 163.

[33]Ibid., 161. The figure 216,000 is evenly divisible by 6, 60, 60, or 6,000.

[34]Horst Steible, *Die neusumerischen Bau- und Weihinschriften*; teil 2: *Kommentar zu den Gudea-Statuen; Inschriften der III. Dynastie von Ur*; Freiburger Altorientalische Studien 9:2 (Wiesbaden: Franz Steiner Verlag, 1991), 179-80. The one large number

Also from Ur III, certain letters were written between Ishbi-Erra, a king of Isin, and Ibbi-Sin of Ur (ca. 2029-2006 B.C.) which may reflect non-hyperbolic numbers:

To Ibbi-Sin my king speak: thus says your servant Ishbi-Erra:

> You have charged me with an expedition to Isin and Kazallu to buy grain. The grain has reached the price (of) 1 gur for each (shekel), . . . (and to date) 20 talents of silver have been spent for buying grain. But now having heard the report that the hostile Martu have entered your country, I brought into Isin the 72,000 gur of grain--all of it. Now the Martu--all of them--have entered the midst of the land (Sumer) (and) have seized the great fortresses one after the other. Because of the Martu, I am not able to transport (?) that grain; they are too strong for me, (and) I am immobilized. Let my king have 600 boats (with the capacity of) 120 gur each. . . .[35]

The following account is found in court records (DITILLA) of this era:

> Akalla, the son of Luninshubar, (and) Urshuanna were witnesses (to the fact that) Kaku, the son of Ninshubur, had bought the 12 large date-palm saplings from Lunanna, the father of Urabu, for 3 shekels of silver as its full price. Urabu (however) repudiated the witnesses.[36]

One may see in the above the precision needed for court documentation as opposed to the embellishment which may have been permitted for royal inscriptions.

Excursus: The Sumerian King List.

Though the biographical notes in the Sumerian King List are related to the genre of royal inscriptions and state papers, they are not the same genre. They fit best within the genre of the epic literature, such as the Etana epic, the

included in this record is divisible by 6, 60, and 600, but need not be considered hyperbolic, as the number of fish would be appropriate for a large feast.

[35]Kramer, *The Sumerians*, 333. The figure 72,000 is evenly divisible by 6, 60, 600, or 6,000.

[36]Ibid., 335.

birth legend of Sargon, and the chronicles of Enlil-banî.[37] The date of composition for the list, according to Jacobsen, was sometime near the founding of the Ur III dynasty (ca. 2113 B.C.).[38] Concerning the extreme difference in the size of the numbers Jacobsen states:

> Where the lengths of the reigns do not exceed what is humanly possible we may assume that the author still had reliable historical tradition to go by; where the kings have legendary reigns of several hundred years each, however, we must be beyond those periods of which the Sumerians preserved precise historical memories.[39]

One notes the sharp decrease in the size of the numbers following the flood; a quite similar decrease is found after the Biblical flood. One may also note that all of the lengths of reigns of the antediluvian kings of the Sumerian list are evenly divisible by six, not surprising in view of the fact that the Sumerians utilized a sexagesimal number system.[40]

Summary of the Early Period

From royal inscriptions to law codes, and from letters to court cases, the ancient Sumerians, Akkadians, and Gutians used numbers in much the same way that we do today. Where precision is called for, great care was exhibited in the use of numbers. Where a term is needed to describe a multitude, 36,000 is used (or 216,000!). Whether viewed as legendary or factual, large numbers

[37]Thorkild Jacobsen, *The Sumerian King List*, Assyriological Studies 11 (Chicago: The University of Chicago Press, 1939), 144-45.

[38]Ibid., 140.

[39]Ibid., 152.

[40]For further mathematical analysis of the lengths of the post-diluvian reigns, see Dwight W. Young, "A Mathematical Approach to Certain Dynastic Spans in the Sumerian King List," *Journal of the Ancient Near Eastern Society* (*JANES*) 47 (1988): 123-29.

were usually rounded off. What appears to emerge is the observation that large numbers over 1000 found in early Mesopotamian literature are quite frequently divisible by the number 6, 60, 600, or even 6,000. Notable exceptions of this are found in the Sumerian King List describing the length of reigns of the antediluvian kings, each of which is evenly divisible only by six. Other notable exceptions occur in the inscriptions of Rimush, only some of which are evenly divisible by six.[41]

Assyria to 1100 B.C.

It appears that, as the following examples will show, the Assyrians utilized numbers extensively in their historical documents, though sometimes they are clearly inordinately expanded.[42]

From the reign of Shamshi-Adad (ca. 1841-1781 B.C.) we have an inscription on a stone slab associated with a building project which depicts the then current economy:

> When I built the temple of the god Enlil, my lord, the prices in my city, Aššur, were: two cor of barley could be purchased for one shekel of silver; fifteen minas of wool for one shekel of silver; and two seahs of oil for one shekel of silver, according to the prices of my city Aššur.[43]

Another inscription of Shamshi-Adad reflects a certain looseness with

[41] Cf. Hirsch, "Die Inschriften," 52-69.

[42] Grayson, *ARI I*, xxii, adds: "The reader should be aware of certain facts. The number seven and the round sexagesimal numbers need not be taken literally." However, he offers no explanation for this statement.

[43] Albert K. Grayson, et al., eds., *The Royal Inscriptions of Mesopotamia*, vol. 1: *Assyrian Periods*, part 1: *Assyrian Rulers of the Third and Second Millennia B.C. (to 1115 B.C.)*, by A. K. Grayson (Toronto: University of Toronto Press, 1987), 49. Hereinafter, this work will be referred to as *RIMA*.

historical precision: ". . . from the fall of Akkad until my sovereignty, until the capture of Nurrugu, seven generations have passed."[44]

From the Assyrian king lists comes an entry concerning Išme-Dagan I (ca. 1780-1741 B.C.): "Ishme-Dagan, son of Shamshi-Adad (I), ruled for forty years."[45] This may represent historical precision in stark contrast to the Sumerian King List!

In a letter to the Egyptian Pharaoh Amenhotep IV, Ashur-Uballit (ca. 1365-1330 B.C.) wrote:

> When Ashur-nadin-ahhe (II), my ancestor, wrote to Egypt, he was sent twenty talents of gold. When the king of Hanigalbat wrote to Egypt to your father, he sent him twenty talents of gold. [Now] I [am the equal] of the king of Hanigalbat but to me you have sent [a mere . . talents] of gold. It is not even enough to pay my messengers for their trips to and fro! If you are seriously disposed toward friendship, send me much gold! It is all in the family (lit. "It is your family")! Write me what you (yourself) need and it will be supplied.[46]

On what is apparently the earliest Assyrian Annals text is an inscription concerning Arik-dên-ilu (ca. 1319-1308 B.C.):

> . . . 600 men of the city Ḫi[. . .] . . . he killed. Remaku [. . .] . . . for the *punishment* of the city Nagabbilḫi he killed. [. . .]
>
> . . . from the land Ḫalaḫi *forever* . . . [. . .] . . . he plundered. 254,000 men [. . .] he killed. He brought about their defeat. [*Their*] *captives* [*he carried off bound* . . . to] Aššur he brought. At that time 100(?) [. . .] he rebelled.[47]

Though fragmentary, it offers the beginnings of the Assyrian tendency

[44]Grayson, *ARI I*, 23. In footnote 72, Grayson comments: "It is, of course, not intended to be a precise statement of time, as the figure 'seven' would indicate."

[45]Grayson, *ARI I*, 28.

[46]Ibid., 49.

[47]Grayson, *RIMA*, 127. In all fairness, it must be noted that the figure 254,000 is not evenly divisible by six.

toward exaggeration, as evidenced by the contrast between his own army of 90 chariots and the defeated hordes of 254,000!

His successor on the other hand, Adad-nirari I (ca. 1307-1275 B.C.), was able in contrast to write with extreme mathematical precision: "I restored that facing (of the quay wall) with bitumen and baked brick (and) made it the thickness of four and one half bricks."[48]

In a stone tablet inscription of Shalmaneser I (ca. 1275-1245 B.C.) concerning the rebuilding of the temple of Eharsagkurkurra, "we have the first detailed account of military operations conducted by an Assyrian king."[49] As such, it is somewhat akin to the format of later Assyrian annals. It is full of hyperbolic language:

> I slaughtered countless numbers of their extensive army. As for him (Šattuara), I chased him at arrowpoint until sunset. I butchered their hordes (but) 14,400 of them (who remained) alive I blinded (and) carried off. I conquered nine of his fortified cult centers (as well as) the city from which he ruled and I turned 180 of his cities into ruin hills. I slaughtered like sheep the armies of the Hittites and Aḫlamu, his allies.[50]

Tukulti-Ninurta I (ca. 1245-1208 B.C.) doubles the numbers of the recorded exploits of his predecessor on an inscription on a memorial slab: "On my accession to the royal throne, in my first year of reign, I carried off 28,800 [8 sars. 1 sar = 3600] Hittite warriors from the other side of the Euphrates."[51]

[48]Grayson, *RIMA*, 141.

[49]Luckenbill, *ARAB I*, § 112.

[50]Grayson, *RIMA*, 184. The figure 14,400 is evenly divisible by 6, 60, or 600.

[51]Luckenbill, *ARAB I*, § 164. This doubling of the predecessor's claims apparently escaped the notice of Millard, who inverts the chronological order of the rulers and simply calls the two figures "round numbers." Cf. Millard, "Large Numbers," 214. The figure 28,800 is also evenly divisible by 6, 60, or 600.

Summary of the Assyrian Period to 1100 B.C.

Like the Sumerians before them, the Assyrians used numbers both with precision and imprecision. They also show a preference for large numbers which are divisible by six. The observation made by the present writer concerning the Assyrian use of numbers is that if a statement was verifiable, precise numbers, usually small, were used. For instance, the quay wall of Adad-Nirari I was reinforced 4 1/2 bricks thick. Anyone could verify this fact. However, who would dare to question the king's ability to count when he claimed that he had smitten 254,000 of the enemy in a distant land? If the number was essentially unverifiable,[52] any number would do, as long as it glorified the king and his military exploits. In addition, in at least one case, a ruler would double the number of his predecessor. This pattern was also seen above with the numbers of Rimush of Akkad being conveniently ten times the size of his predecessor Sargon I.[53]

[52]For the view that scribes accompanied a given monarch on a military and could therefore obtain an accurate count, see Millard, "Large Numbers," 215. This may be true; however, one wonders if a king would be more glorified by smaller accurate numbers or by numbers later embellished in stone or clay. As opposed to simple accounting, scribes recording royal inscriptions would employ the literary conventions with which they were familiar. This may have included hyperbole. There are numerous examples in other and later ANE inscriptional material of a military nature which reflect smaller and more precise numbers, a fact which may suggest that embellishment was an early literary convention. It does not seem to be employed regularly in Babylonia and does not seem to have survived beyond the Neo-Assyrian period. See data below.

[53]Though this pattern is not found in Scripture *per se*, one cannot help but note the relative size of the largest numbers of Scripture which are somewhat directly proportional to the importance of the monarch they magnify (see appendix four of this dissertation).

Assyria to 609 B.C.

The period of time under consideration in this sub-section covers Assyria from the temporary revival of 1100-1050 B.C., through the third intermediate period (ca. 1050-900 B.C.), and into the Neo-Assyrian empire (ca. 900-609 B.C.). Throughout this period of time, the literary genre of royal inscription was developing into its most glorious form, commonly referred to as the annals.[54] From these annals, and from cylinder inscriptions, pavement inscriptions, bull inscriptions, precious metal inscriptions, and others, the military history of Assyria is revealed to all, and large numbers are used with great frequency with regard to total slain of the enemy and spoil taken. Obviously, not every Assyrian royal inscription employed large numbers, and not every one which did so can be examined here.[55] However, this is not to say that the published texts were not thoroughly examined: only the best examples which most represent the extant data will be used here.

Tiglath-Pileser I (ca. 1115-1077 B.C.)[56]

This important ruler provides us with the earliest examples of pure annalistic royal inscriptions. He did not hesitate to use large numbers in these accounts of his military exploits. The following examples are recorded in prism inscriptions:

> In my accession year: 20,000 Mushku with their five kings, who had

[54] A. K. Grayson, *Assyrian Royal Inscriptions* (Wiesbaden: Otto Harrassowitz, 1976), volume 2: *From Tiglath-pileser I to Ashur-nasir-apli II* (*ARI II*), xvii.

[55] Doubtless, numerous examples exist in the untranslated tablets in the British Museum (and also in those yet unearthed)!

[56] Hereinafter, all dates are B.C., unless otherwise noted.

held for 50 years the lands Alzu and Purulumzu--bearers of tribute and tithe to the god Ashur my lord--(the Mushku), whom no king had ever repelled, being confident of their strength they came down (and) captured the land Kadmuhu. With the support of the god Ashur, my lord, I put my chariotry and army in readiness (and), not bothering about the rear guard, I traversed the rough terrain of Mount Kashiyari. I fought with their 20,000 men-at-arms and five kings in the land Kadmuhu. I brought about their defeat. Like a storm demon I piled up the corpses of their warriors on the battle-field (and) made their blood flow into the hollows and plains of the mountains. I cut off their heads (and) stacked them like grain piles around their cities. I brought out their booty, property, (and) possessions without number. I took the remaining 6,000 of their troops who had fled from my weapons and submitted to me and regarded them as people of my land.[57]

I subdued the rebellious and insubmissive Shubaru. . . . The splendour of my valour overwhelmed them. Fearing battle they submitted to me. I took them together with their property and 120 chariots (and) harnessed horses. I regarded them as people of my land.[58]

With the mighty power of the god Ashur, my lord, I marched to the land Sugu of the land Habhu, (people) insubmissive to the god Ashur my lord. I fought on foot with 6,000 of their troops--the lands Himu, Luhu, Arirgu, Alamun, Nimnu, and all of the extensive Paphu--(I fought) with all those lands in Mount Hirihu, rough terrain which *cut* like the blade of a dagger. I brought about their defeat. I built up mounds with the (corpses of) their men-at-arms on mountain ledges (and) with the blood of their warriors I dyed Mount Hirihu red like red wool.[59]

From tablets found at the Anu-Adad temple comes the following example: "22,000 warriors of their widespreading [lands] my hand captured in the midst of battle."[60] Weidner cites a parallel account from another inscriptional

[57]Grayson, *ARI II*, 6-7. The cuneiform for the numeral 20,000 is 𒐼𒐼𒐼 (cf. E. A. Wallis Budge and L. W. King, eds., *Annals of the Kings of Assyria* [London: Harrison and Sons, 1902], 1:35). The numerals 2,000, 4,000, 6,000, 12,000 and 20,000 seem to be common for Tiglath-Pileser I, despite the identity of the enemy opposing him (cf. *ARI II*, 6-7, 9, 11, 14, 20-21, 26).

[58]Grayson, *ARI II*, 9.

[59]Ibid., 11. The cuneiform for the numeral is 𒐖𒐖 𒐼 (Budge and King, *Annals of the Kings*, 1:37). One should also note the colorful figurative language.

[60]Luckenbill, *ARAB I*, § 311.

source which reads "12,000 widespreading warriors of Muški."[61] This may illustrate the many textual differences to be found throughout this period in the recording of numbers.

Besides being a military conqueror, Tiglath-Pileser I must have been quite a hunter, as the following account from his prism inscription suggests:

> By the command of the god Ninurta, who loves me, I killed on foot 120 lions with my wildly vigorous assault. In addition, 800 lions I felled from my *light* chariot. I have brought down every kind of wild beast and winged bird of the heavens whenever I have shot an arrow.[62]

This was perhaps a standard "hunting account" genre, the form of which is also reflected in the accounts of later kings.[63]

Adad-Nirari II (ca. 912-889)

This king, with whose rule the Neo-Assyrian empire began, was also an avid hunter, as his annals reveal:

> The gods Ninurta (and) Palil, who love my priesthood, gave to me the wild beasts and commanded me to hunt. I killed 360 lions from my . . . chariot, with my valorous assault, (and) on my swift feet with the spear. I killed 240 wild bulls. I captured alive seven strong wild virile bulls with horns. I killed six elephants in a conflict, I drove . . . [into] an ambush, I captured four elephants alive, I captured five by means of a snare. In Inner City (Ashur) I formed herds of lions, wild bulls, elephants, *ayalu*-deer, ibex, wild asses, deer, (and) ostriches.[64]

Also likely from the reign of Adad-Nirari II is the Broken Obelisk inscription, which is conspicuous in the data it omits:

[61] Ernst Weidner, "Die Feldzüge und Bauten Tiglatpilesers I," *Archiv für Orientforschung* 18 (1957-58): 349.

[62] Grayson, *ARI II*, 16.

[63] See Adad-Nirari II below and note a similar account for Assur-Nasir-Pal II in Grayson, *ARI II*, 175.

[64] Ibid., 91-92. Luckenbill *ARAB I*, § 375, reads the first ellipsis as "hunting(?)."

> The gods Urta and Nergal, who love his priesthood, granted him (the skill) to hunt in the field and he embarked in ships of the Arvadites and slew a dolphin (nahiru) in the Great Sea. [ ] mighty wild bulls near the city of Araziki, which lies opposite the land of Hatte, and at the foot of Mount Lebanon, he slew. [ ] young of wild oxen he captured alive, and herds of them he collected. [ ] elephants he brought down with his bow, and elephants he captured alive, and brought them to his city of Assur. 120 lions with his brave heart and with his attack, he slew from his hunting(?) chariot, or on foot with the javelin. . . .[65]

The words omitted and bracketed are obviously meant to be numbers (they are not lacunae). One wonders why the numbers were omitted. Many possibilities can be postulated in the form of questions. Did the scribe not know the numbers? Did he seek precision? Did he leave these blanks in order to ascertain which figures would best suit the king, or best glorify him? It is odd that these would be left blank in a carved inscription. The omission of numbers here seems to say something about the way numbers were used in the royal inscriptions, but it is difficult to determine exactly what it says!

Also from the Broken Obelisk comes an account of the military exploits of this king: "One thousand men of the land of . . . 4,000 of them he carried away as prisoner and brought them down to the land of Assyria. . . ."[66] Unfortunately, the Broken Obelisk is broken at this very point.

Tukulti-Ninurta II (ca. 889-884)

This successor to Adad-Nirari II employed smaller numbers in his annals for the most part. He does claim to have dug 470 wells,[67] and to have

[65]Luckenbill *ARAB I*, § 392. He notes that these are "spaces left blank."

[66]Ibid., § 388.

[67]Ibid., § 407.

mustered 2,720 horses for use by his armies.[68]

Assur-Nasir-Pal II (883-859)

This king, who won great expanses of territory for Assyria, was very prolific in recording his royal inscriptions. His annals record the results:

> With the mass of my troops (and) my fierce battle I besieged (and) captured the city. I felled with the sword 800 of their combat troops, I burnt 3,000 captives from them. I did not leave one of them alive as a hostage. I captured alive Hulaya their city ruler. I made a pile of their corpses. . . .[69]

> . . . I felled 3,000 of their fighting men with the sword.[70]

> . . . I slew 1,460 of their combatants in the pass. I conquered the cities of Uze, Birutu, (and) Lagalaga, their fortified cities, together with 100 cities in their environs. I carried off captives, property, oxen, (and) sheep from them. Nur-Adad, to save his life, climbed up a rugged mountain. I uprooted 1,200 of their troops.[71]

> I mustered 50,000 troops. I marched to the land Mehru (and) conquered the entire land Mehru. I cut down logs for the goddess of Nineveh, my mistress, for the roof of Emashmash and for the roofs of my palaces.[72]

Large numbers also come from the so-called "Banquet Inscription":

> . . .when I consecrated the palace of Kalach, 47,074 men (and) women who were invited from every part of my land, 5,000 dignitaries (and) envoys of the people of the lands Suhu, Hindanu, Patinu, Hatti, Tyre, Sidon, Gurgume, Malidu, Hubushkia, Gilzanu, Kumu, (and) Musasiru, 16,000 people of Kalach, (and) 1,500 zarīqū of my palace, all of them--altogether 69,574 (including) those summoned from all lands and the people of Kalach--for ten days I gave them food, I gave them drink, I had them bathed, I had them

[68]Ibid., § 414.

[69]Grayson, *ARI II*, 125-26. Luckenbill, *ARAB I*, § 445, reads 600 instead of 800.

[70]Grayson, *ARI II*, 126.

[71]Grayson, *ARI II*, 128. Luckenbill, *ARAB I*, § 448 reads 12,000 here.

[72]Grayson, *ARI II*, 185.

anointed. (Thus) did I honor them (and) send them back to their lands in peace and joy.[73]

This provides a rare example of the use of larger numbers in a context outside of a building or military account in a royal inscription.[74]

Shalmaneser III (ca. 859-824)[75]

This very important Neo-Assyrian king left many annalistic accounts of his military conquests which occurred in over thirty-four expeditions. Notice the increase in the number size over a period of time and over geographical distance concerning the battle at Qarqar.[76] First, from the Monolith inscription, erected just after the battle:

> Karkar, his royal city, I destroyed, I devastated, I burned with fire. 1,200 chariots, 1,200 cavalry, 20,000 soldiers, of Hadad-ezer, of Aram(? Damascus); 700 chariots, 700 cavalry, 10,000 soldiers of Irhulêni of Hamath; 2,000 chariots, 10,000 soldiers of Ahab, the Israelite, 500 soldiers of the Gueans, 1,000 soldiers of the Mureans, 10 chariots, 10,000 soldiers of the Irkanateans. . . . .these twelve kings he brought to his support; to offer battle and to fight, they came against me. . . .From Karkar, as far as the city of Gilzau, I routed them. 14,000 of their warriors I slew with the sword.[77]

Then, from the Black Obelisk inscription, the account of the same battle includes a higher total: "Their chariots, their cavalry, their weapons of war, I took from them. 20,500 of their warriors I slew with the sword."[78] From a bull

[73]Ibid., 176. In this case, the total is equal to the sum of the parts.

[74]Grayson calls this Banquet Stele unique among royal inscriptions (Grayson, *ARI II*, 172.

[75]The initial paragraph for Shalmaneser III is repeated verbatim from chapter one above at this point for the sake of completeness and for the ease of the reader.

[76]Despite Shalmaneser's claims, the battle was a stalemate at best.

[77]Luckenbill, *ARAB I*, § 611.

[78]Ibid., § 563.

inscription which records the same battle: "I fought with them. 25,000 of their warriors I slew with the sword. Their chariots, their cavalry, their weapons of war, I took from them. To save their lives they fled (lit., went up)."[79] Olmstead states that the Monolith inscription offers the original total, and that later editions of the battle, including the Black Obelisk and bull inscription, aggrandized the total.[80] In fact, he goes on to say that the real victory was that of the scribe![81]

The Black Obelisk offers still another campaign of Shalmaneser III: "In my eighteenth year of reign I crossed the Euphrates for the sixteenth time. Hazael of Aram(? Damascus) came forth to battle. 1,121 of his chariots, 470 of his cavalry, together with his camp, I captured from him."[82]

The highest total recorded in Shalmaneser's inscriptions comes from the Bronze Gates of Balâwat: "44,000 mighty warriors I carried away from their lands and reckoned them with the people of my land. . . ."[83]

Shamshi-Adad V (ca. 824-811)

This king provided many colorful depictions of his military victories in his monolith inscription:

[79]Ibid., § 647.

[80]Olmstead, *Assyrian Historiography*, 22. Even Millard, who argues that in many cases the large numbers of Assyrian royal inscriptions are to be accepted at face value, concedes that "It is hard to interpret these figures as anything but exaggeration. . . ." Millard, "Large Numbers," 219.

[81]Olmstead, *Assyrian Historiography*, 22.

[82]Luckenbill, *ARAB I*, § 575.

[83]Ibid., § 617.

In my second campaign, Mutarris-Assur, the Rabshekê, a clever, experienced soldier (lit., learned in battle), a man of judgment (sense), I dispatched and sent against Na'iri with my army and camp. As far as the upper sea of the setting sun he marched. 300 cities of Sharshina (or, Hirsina?), son of Merktiara, 11 strong cities, together with 200 (small) cities of Ushpina, he captured.[84]

Dûr-Papsukal, the royal city [of Akkad], which was situated in an expanse of waters, like the shoot (or, stalk, of a plant) in a stream, (and which) was not easily approached by my armies, they (i.e., the people of Akkad) with (the inhabitants of) the 457 cities which were therein (i.e., Akkad), entered. That city I captured in the (course) of my advance. 13,000 of their warriors I cut down with the sword. Their blood like the waters of a stream I caused to run through the square of their city. The corpses of their fighters I piled up in heaps. 3,000 I captured alive.[85]

Tiglath-Pileser III (ca. 745-727)

As Assyria continued to grow in military strength, the numbers grew in the official accounts. Witness the following inscription: "My officials I set over them as governors. 30,300 people [I carried of from] their cities and placed them in the province of the city of Ku--. 1,223 people I settled in the province of the land of Ulluba."[86] The largest number used since Arik-dên-ilu (ca. 1319-1308) comes from a large clay tablet containing an historical section in a building inscription of Pul:

Sarrabani (and) Bit-Sa'alli I laid waste (lit., tore up) to their farthest borders. Nabû-Ushabshi (and) Zakru, their kings, my hands captured . . . Tarbasu, Iaballa, Dûr-Illatai, their great royal cities, I captured by means of earthworks and siege engines. 154,000 people, together with their possessions, ... their . . . . . and their grazing herd(?), I carried off in countless numbers. Those lands I brought within the Assyrian border.[87]

[84]Ibid., § 717.

[85]Ibid., § 725.

[86]Ibid., § 770.

[87]Ibid., § 608.

Sargon II (ca. 722-705 B.C.)

Sargon is of course the king who incorrectly receives the credit for having carried Samaria into exile in 722 B.C. The account of this event can be seen in the annals recorded at his capital Khorsabad (Dûr-Šarrukin): ". . . [At the beginning of my rule, in my first year of reign] . . . . [Samerinai] (the people of Samaria) . . . [of Shamash] who causes me to attain victory . . . . [27,290 people, who lived therein] I carried away; 50 chariots for my royal equipment, I selected . . . ."[88] Sargon also used large numbers in recording his victory at Haldia in his eighth campaign. The following is found in his letter to Assur: " . . . 25,212 bronze shields, great and small, siprat of bronze, qurpissi of bronze, gulgulat of bronze; 1,514 lances of bronze, great and small, large lance blades of bronze, pûrdi of bronze, kutahi of bronze together with their bronze bases; 305,412 daggers of bronze, heavy and light, bows of bronze. . . ."[89] One must note the precision with which these numbers are used,[90] compared to the rounded off figures most often employed by his predecessors. However, as the following paragraphs will hopefully demonstrate, precision for Sargon II may have had another significance than actual value.

[88]Daniel David Luckenbill, *Ancient Records of Assyria and Babylonia* (Chicago: The University of Chicago Press, 1927), volume II: *From Sargon to the End* (*ARAB II*), § 4.

[89]Ibid., § 173.

[90]There are at times discrepancies between Sargon's letter to Assur and his annals. Millard notes the differences between Sargon's letter to Assur and his later annals with regard to sheep taken as spoil from Muṣaṣir (1,235 and 100,225 respectively). Arguing on the basis of the agrarian economy of the region, he suggests that the larger number more accurately reflects the spoil taken. However, the numbers of captives and other animals taken as spoil in both accounts are low and more in line with the smaller figure above. This would argue against his position and for either scribal error (which he admits for the smaller figure) or scribal embellishment in the annals (cf. Millard, "Large Numbers," 216, 218).

One of the most intriguing phrases comes from the reign of Sargon II. The account cited below comes from a cylinder inscription, but is also found on a bull inscription,[91] a bronze inscription,[92] and a display inscription.[93]

> In the month of Abu, the month of the descent of the fire-god, destroyer of growing (cultivated) vegetation, when one lays (lit., who lays) the foundation platform for the city and house, I laid its foundation wall, I built its brickwork. Substantial shrines, built firm as the foundation of eternity, I constructed therein for Ea, Sin and Ningal, Adad, Shamash, Urta. Palaces of ivory, mulberry, cedar, cypress, juniper, and pistachio-wood I built at their lofty command for my royal dwelling place. A bit-hillani, a copy of a Hittite (Syrian) palace, I erected in front of their doors. Beams of cedar and cypress I laid over them for roofs. 16,283 cubits, the numeral of my name, I made the circuit (lit., measure) of its wall, establishing the foundation platform upon the bedrock of the high mountain.[94]

What did Sargon mean by the expression "the numeral of my name"? Friedrich Delitzsch, in an 1878 article entitled "Soss, Ner, Sar", suggested that by dividing up Sargon's Akkadian name into its three component parts, one could read 16,283 as the total of the numerical value of the cuneiform wedges![95] He apparently based this proposal in part on the fact that Assyrian

[91] D. G. Lyon, *Keilschrifttexte Sargons* (Leipzig: J. C. Hinrichs'sche Buchhandlung, 1883), 45.

[92] Ibid., 54.

[93] Luckenbill, *ARAB II*, § 85.

[94] Ibid., § 121.

[95] Friedrich Delitzsch, "Soss, Ner, Sar," *Zeitschrift für Ägyptische Sprache und Altertumskunde* 16 (1878): 63. The total can vary between 16,283 to 16,280 depending on how one interprets the value of 3 kânê, or, as some accounts read, 1 1/2 GAR. Apparently, the original understanding was that 1 kânê = 1/2 GAR = 6, but by Late Babylonian literature had become 1 kânê = 1/2 GAR = 7: "Das alte, wie wir sehen werden auch hier vorliegende 'Rohr' (1/2 ) hatte sechs Ellen, wahrend es in neubabylonischer Zeit sieben Ellen hatte." Fritz Hommel, "Die Zahl 'Meines Namens' in Sargons Zylinderinscrift," *Orientalistische Litteratur-Zeitung* 10 (1907): 225. Delitzsch (p. 63) attempted to divide Sargon's name into the three parts: the determinative, the name for king, and the root kûn: "Der Name Šarrukin zerfällt, er mag geschrieben werden wie er will, in 3 Hauptheile: 1)

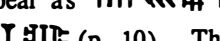
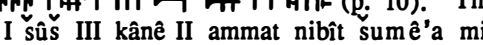
deities had numerical value in their names.[96] Could this have occurred elsewhere in the ANE with regard to large numbers? That is, did others use their names as a basis for the large numbers they selected to use in an historical document? The answers to these questions could affect one's understanding of the use of large numbers both in the ANE and in the Old Testament, but the present writer is unaware of any similar passages.

Sennacherib (ca. 705-681)

The following account of Sennacherib's first campaign comes from his earliest cylinder inscription. The account is significant for this study because of the large numbers it employs:

> I returned to Assyria with 208,000 captive people, a huge spoil, 7,200 horses and mules, 11,073 asses, 5,230 camels, 80,500 cattle, 800,000 ewes.--This does not include the men, asses, camels, cattle and sheep which my troops carried off and parceled out among themselves.--And the enemy citizens, strong and proud, who had not submitted to my yoke, I cut down with the sword and hung on stakes.[97]

From the famous Taylor Prism, which records the final edition of his

den Einen vertikalen Keil als Determinativ, 2) Šarru 'König', 3) eine Form der Wurzel kûn 'feststehen' (kînu oder ukîn)." This would then appear as  (p. 64). Lyon records this as  (p. 10). The entire line Lyon transcribes as: "IV šar III nêr I šûš III kânê II ammat nibît šumê'a mišêḫtê dûrišu aškunma êli aban šadê zaḳri ušaršida têmênšu" (p. 38). Apparently the key phrase in Akkadian is nibît šumê'a, which has been variously translated. Lyon translates "So viel mein Name bedeutet" (p. 39). Delitzsch translates "die Nennung meines Namens" (p. 63). Hommel translates "als Nennung meines Namens" (p. 225). The precise translation is not as important as the significance. Unfortunately, this significance is difficult to determine.

[96]Delitzsch, "Soss, Ner, Sar," 63.

[97]Luckenbill, *ARAB II*, § 267. The totals for cattle and sheep in the Bellino Cylinder are 80,100 and 800,509 respectively (cf. *ARAB II*, § 274). In the final edition of the annals, they are simply "without number" (*ARAB II*, § 234). Does this shift suggest that definite numbers are interchangeable with indefinite phrases when using large numbers as literary hyperbole?

annals, we have the account of his third campaign, which included his siege of Jerusalem:

> As for Hezekiah, the Jew, who did not submit to my yoke, 46 of his strong, walled, cities, as well as the small cities in the neighborhood, which were without number,--by escalade and by bringing up siege engines(?), by attacking and storming on foot, by mines, tunnels and breaches(?), I besieged and took (those cities). 200,150 people, great and small, male and female, horses, mules, asses, camels, cattle and sheep, without number, I brought away from them and counted as spoil. Himself like a caged bird, I shut up in Jerusalem, his royal city. Earthworks I threw up against him,--the one coming out from his city gate I turned back to his misery. The cities of his, which I had despoiled, I cut off from his land and to Mitinti, king of Ashdod, Padî, king of Ekron, and Silli-bêl, king of Gaza, I gave them. And (thus) I diminished his land. I added to the former tribute, and laid upon him (v., them) as their yearly payment, a tax (in the form of) gifts for my majesty. As for Hezekiah, the terrifying splendor of my majesty overcame him, and the Urbi (Arabs) and his mercenary(?) troops which he had brought in to strengthen Jerusalem, his royal city, deserted him (lit., took leave) [. . . . .] To pay tribute and to accept (lit., do) servitude he dispatched his messengers.[98]

This is not the place to delve into the question as to the number of invasions of Judah that Sennacherib may have made.[99] He himself records only one. In this account, he fails to mention any great defeat, which Scripture clearly indicates (2 Kings 19:35, 2 Chronicles 32:21). Perhaps Olmstead is correct in his analysis of these events when he writes: "So when Sennacherib tells us that he took from little Judah no less than 200,150 prisoners, and that in spite of the fact that Jerusalem itself was not captured, we may deduct the 200,000 as a product of the exuberant fancy of the Assyrian scribe and accept the 150, as somewhere near the actual figure captured and carried off."[100] The numbers

[98]Ibid., § 240.

[99]For a thorough discussion from the perspective of the two campaign view, see John Bright, *A History of Israel*, 3rd edition (Philadelphia: Westminster Press, 1981), 298-310.

[100]Olmstead, *Assyrian Historiography*, 8.

certainly do seem suspect in this account, and probably reflect a bias. Notice as well the numerous figures of speech involved in the context, such as spoil "without number" and Hezekiah being shut up "like a caged bird." One reiterates here that figurative language is a natural part of the royal inscription annalistic genre.

In the account of his eighth campaign, Sennacherib exhibits a large number. The following comes from the Nebî Yunus Slab Inscription:

> These, with the king of Babylon, drew near en masse, and set upon me, offering battle. (Trusting) in the might of Assur, my lord, I fought them in the plain of the city of Halulê, I defeated them, cutting down with the sword 150,000 of their warriors. Their chariots, wagons and royal tents I took from them.[101]

This appears to be the last example of a number over 100,000 used in Assyrian historical literature. One may compare this royal inscription to an earlier military report he offered as crown prince to Sargon II concerning collected tribute and gifts:

> Two talents of silver, 20 minas of silver in place of ivory, 50 tunics, 10 togas, 3 potfuls of iced fish, 20 creels with 1,000 fish, as tribute; one mural crown of gold, 20 silver bowls, 4 togas of byssus, 15 Hasaean tents, 10 tunics, 10 large togas, all audience gift: all this to the Palace.[102]

This account may demonstrate that size of numbers employed was a function of the type of literature. Whereas royal inscriptions could employ literary hyperbole, letters of report required numbers of actual value.

Sennacherib was also a builder, as the following inscription reveals.

> Nineveh, whose site in former days measured 9,300 cubits in

[101]Luckenbill, *ARAB II*, § 352.

[102]Simo Parpola, *The Correspondence of Sargon II*, part I: *Letters from Assyria and the West*, State Archives of Assyria 1 (Helsinki: University Press, 1987), 35.

> circumference, (for which) the princes who lived before me had built neither wall nor outer wall; 12,515 (cubits) of the land of the plain around the city I added to its earlier site (lit., survey). 21,815 great cubits I made its circumference.[103]

One wonders if this last figure is also based on the numerical value of his name! At any rate, the number is larger that that of Sargon, his predecessor.

Esarhaddon (ca. 680-669)

Esarhaddon differs significantly from his predecessors in that the largest number recorded in his historical inscriptions is 1,000:

> Als das Geschick den Hazael dahinraffte, setzte ich seinen Sohn Iata' auf seinen Thron. 10 Minen Gold, 1000 erlesene Edelsteine, 50 Kamale und 100 lederne Beutel(?) mit Gewürzen fügte ich dem Tribute seines Vaters hinzu und legte sie ihm auf.[104]

Esarhaddon also gives us one of the most fascinating usages of numbers in Assyrian literature in his account of the restoration of the city of Babylon. Although the numbers are small, they provide an interesting glimpse into what could be done with the cuneiform wedges:

> [Seventy] years as the period (lit., measure) of it desolation he wrote (down in the Book of Fate). But the merciful Marduk--his anger lasted but a moment--turned (the Book of Fate) upside down and ordered its (the city's [Babylon]) restoration in the eleventh year.[105]

Luckenbill states at this point that "the Babylonian numeral '70,' turned upside down or reversed, becomes '11,' just as our printed '9' turned upside down,

[103]Luckenbill, *ARAB II*, § 396.

[104]Riekele Borger, *Die Inschriften Asarhaddons Königs von Assyrien*, reprint edition, Archiv für Orientforschung 9 (Osnabrück: Biblio-Verlag, 1967), 54. Ernest A. Budge, *The History of Esarhaddon* (London: Trubner and Co., 1880), 59, reads the last number as "one thousand dromedaries."

[105]Luckenbill, *ARAB II*, § 643.

becomes '6.'"[106] It is at least possible that similar manipulation occurred elsewhere with larger numbers due to scribal activity.

Assurbanipal (ca. 669-627)

Assurbanipal used large numbers up to 16,000, but none of the usages refer to captured, killed or otherwise defeated peoples. At one point he referred to 16,000 bows of the enemy, but the text is too broken to determine any other factual matter.[107]

Summary of the Assyrian Period to 609 B.C.

Several observations may be made about the use of large numbers in Assyrian historical inscriptions during this period. First, although hyperbole still occurs, the penchant for using numbers divisible by 6 or 60, as seen prominently in Sumerian literature and to a lesser amount in earlier Assyrian literature, has for the most part disappeared. Second, numbers are recorded with minor variations from one type of inscription to another, though both record the same event. Third, there is at least one account wherein the numbers were left out, for whatever reason. Fourth, it seems obvious from the inscriptions of Shalmaneser III and Sennacherib that enlargement of the amounts recorded took place due to scribal activity. Fifth, Sargon has given us a clear example of the use of a number as representing a name. Sixth, as the might of Assyria grew, the numbers recorded in their historical inscriptions

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[106]Ibid., § 639. Luckenbill is confirmed by Borger, *Die Inschriften Asarhaddons*, 15, n. 9.

[107]Luckenbill, *ARAB II*, § 1113.

grew in size; as it diminished, the size of the numbers also diminished.[108] Seventh, there are no census lists revealing the military strength of Assyria in these historical documents. Eighth, there is no number greater than 208,000 used with reference to humans in this period of Assyrian royal inscriptions.[109] All things considered, Assyrian records are the most significant in the study of the use of large numbers in the ANE during the period under consideration.

Old Babylonian Period

Perhaps the most notable fact about the Old Babylonian period is the absence of any comparable royal inscriptions. Though they utilized the royal inscription genre, they did not exploit it for propaganda purposes.[110] The historical records which are extant tended to avoid the use of large numbers, precise or otherwise. For example, Nūr-Adad of Larsa (ca. 1920) included only small numbers on a cone inscription: "During my good reign, according to the market value which was in my land, thus one shekel of silver purchased 2 *gur* of barley, 2 *ban* of oil, 10 minas of wool, 10 *gur* of dates."[111] Similarly, small

[108]It is interesting to note that the last appearance of a number in excess of 100,000 in Assyrian historical literature occurred with the reign of Sennacherib, whose army Yahweh had destroyed.

[109]There are only two confirmed accounts wherein numbers larger than this occur. One is the 305,412 bronze daggers of Sargon; the other is the 800,100 (or, 800,509) sheep of Sennacherib. Both refer to spoil taken in battle.

[110]Luckenbill, *ARAB I*, § 10.

[111]Albert K. Grayson, et al., eds., *The Royal Inscriptions of Mesopotamia*, volume 4, *Early Periods: Old Babylonian Period (2003-1595 B.C.)*, by Douglas R. Frayne (*RIME*) (Toronto: University of Toronto Press, 1990), 148.

numbers occur in the inscriptions of Sîn-iddinam of Larsa (ca. 1905),[112] Warad-Sîn of Larsa (ca. 1890),[113] and others.[114]

In other genres, examples of number use from the Old Babylonian period are found in the legal codes of Lipit-Ishtar of Isin (ca. 1934-1924) and of Hammurabi (ca. 1792-1750), the sixth king of the Old Babylonian Dynasty. Lipit-Ishtar recorded:

> 9 If a man entered the orchard of (another) man (and) was seized there for stealing, he shall pay 10 shekels of silver.
> 10 If a man cut down a tree in the garden of (another) man, he shall pay 1/2 mina of silver.[115]

Hammurabi likewise recorded small numbers of precision:

> 57: If a shepherd has not come to an agreement with the owner of a field to pasture sheep on the grass, but has pastured sheep on the field without the consent of the owner of the field, when the owner of the field harvests his field, the shepherd who pastured the sheep on the field without the consent of the owner of the field shall give in addition twenty kur of grain per eighteen iku to the owner of the field.[116]

In both cases the numbers are used here with extreme precision, reflecting the casuistic law of the period.

The successor to Hammurabi, Samsu-iluna (ca. 1749-1712) on a clay cylinder inscription illustrates the practice of Babylonian rulers to not exploit numbers when they could easily do so:

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[112]Ibid., 166.

[113]Ibid., 240, 243.

[114]Samsu-iluna of Babylon (*RIME*, 392); Sîn-kāšid of Uruk (*RIME*, 454-63); and Sîn-abūšu of the Diyala region (*RIME*, 689) all employed small numbers.

[115]Kramer, *The Sumerians*, 337.

[116]*ANET*[3], s.v. "The Code of Hammurabi," translated by Theophile J. Meek, 168.

> The year was not half over when he killed Rīm-Sîn (II), who had caused Emutbala to rebel, (and) who had been elevated to the kingship of Larsa. In the land of Kiš he heaped up a burial mound over him. Twenty-six rebel kings, his foes, he killed; he destroyed all of them. He defeated Iluni, the king of Ešnunna, one who had not heeded his decrees, led him off in a neck-stock, and had his throat cut. He made the totality of the land of Sumer and Akkad be at peace, made the four quarters abide by his decree.[117]

Summary of the Old Babylonian Period

It appears from the extant evidence that the literature of the Old Babylonian period avoided the extremities of exaggeration found in the Sumerian and Assyrian periods. Where numbers are found, they are found with extreme precision and are usually small.

Later Data from Babylonia

As was the case in the above section of this endeavor, the data from later Babylonia are very scarce, owing to the fact that they tended not to use their royal inscriptions for political aggrandizement.[118] In fact, the present writer was able to find only two examples of the use of large numbers in these historical inscriptions. The first is a building inscription of Nebuchadrezzar II (ca. 605-562): "A thing which no king before me had done (I did): for 4000 cubits beside the city at a great distance from the outer wall, to the westward of Babylon I constructed an enclosing wall."[119] The second is a rare example of a Babylonian royal inscription which resembles those from Assyria, in that it

[117] *RIME*, 387.

[118] See the comments of Luckenbill, *ARAB I*, § 10.

[119] Stephen Langdon, *Building Inscriptions of the Neo-Babylonian Empire* (Paris: Ernest Leroux, Editeur, 1905), 65.

contains a large number (divisible by 60!). It is from Neriglissar (ca. 560-536): "The city of Pitusu, a mount which is in the midst of the ocean, (i.e., an island), and 6,000 fighting men who had set themselves up within it from boats he captured. He demolished that city and captured its people."[120]

Summary of the Babylonian Period from 1150-539 B.C.

Babylonian royal inscriptions of this period contribute essentially nothing to the discussion of the use of large numbers in the ancient Near East. They are most likely to refer to a general term such a "great quantity" rather than a definite number.[121] This fact may add greater credibility to the numbers when they are used, however.

Elam

Apparently there were no historical additions to the Elamite royal inscriptions which employed large numbers until the time of Sutruk-Nahhunte I (ca. 1180-1160 B.C.). The following segment provides an example:

§ 24 (Gott) Inšušinak, meinem Gotte, (als) Depositum stifte ich,
§ 25 und Bildnisse? des Gros(sen) Gottes [und des (Gottes) In]šušinak, meines Gottes hier sie (Pl.) fertige ich an
§ 26 und stellte sie auf der Akropolis im Heiligtum dem (Gott) [Inšušinak], meinem Gotte, zur Weihe auf.
§27 Weihekessel?. . , 30 Pfannen (oder Masseinheiten) reines? Kupfer? [. .wie)? für hal-haptis- (opfer), 2655 Pfannen (oder

[120]D. J. Wiseman, *Chronicles of the Chaldean Kings* (London: Trustees of the British Museum, 1956), 75.

[121]Ibid., 65.

Masseinheiten) reines? pukrir (wie im)
Feldlager. . , insgesamt 2475 Weihekessel?. . .[122]

It is difficult to determine if these large numbers should be taken at face value, but their preciseness coupled with the inability to divide them by six or 60, as well as their then-potential verifiability, would argue for their actual value here.

The Data from Syria/Palestine

Ebla[123]

One of the most glaring omissions in the Eblaite material is the lack of royal inscriptions.[124] However, there is a great volume of economic (business) texts. Large numbers are to be found in this early material (ca.

[122]Friedrich Wilhelm König, *Die elamische Königsinschriften*, Archiv für Orientforschung, herausgegeben von Ernst Weidner, beiheft 16 (Graz: Im Selbstverlage des Herausgegebers, 1965), 82. A suggested translation of the German:

> (God) Inšušinak, my god, (as) I donated a deposit and images of the great god [and of the (god) In]šušinak, my god, I manufactured them here and set them up on the Acropolis in the sanctuary of the (god) [Inšušinak], my god, for consecration. Consecrated kettles. . , 30 pans (or, measuring devices) of pure? copper? [as)? for] the hal-haptis (offering), 2655 pans (or, measuring devices) of pure? pukrir (as in the) field camp [[perhaps, warehouse]]. . , total 2475 dedicated kettles?. . . .[[lacunae]].

[123]The Eblaites used the sexagesimal system as did the Mesopotamians, but only for numbers under 100. Pettinato explains:

> Having borrowed Sumerian writing, the Eblaites knew all the cuneiform signs expressing numbers, but they still prefer a system with a decimal base. This appears most clearly in the numbers above 100 which are always expressed by this system and not by the sexagesimal present in Mesopotamia. . . . From 100 up the decimal system takes over again and the numbers have precise names.

See the interesting discussion in Giovanni Pettinato, *The Archives of Ebla* (Garden City, New York: Doubleday and Co., Inc., 1981), 182-83.

[124]Ibid., 46. *RIME*, 807-8, names a solitary royal inscription from the son of one Indilimgur. No numbers are present in the two line inscription.

2500 B.C.). As an example:

2 li-im 1 mi-at udu-udu ab-ru$_y$-um^{ki}	2,100 sheep from Abrum,
1 li-im 3 mi-at udu-udu ti-di-NI^{ki}	1,300 sheep from Tigini,
3 li-im 7 mi-at udu-udu ne-er^{ki}	3,700 sheep from Neer,
3 li-im 5 mi-at udu-udu ne-er^{ki} min	3,500 sheep from Neer, a second time,
2 li-im 2 mi-at udu-udu la-da-bi-i^{ki}	2,200 sheep from Ladabi,
4 li-im 8 mi-at udu-udu x-ra-ad^{ki}	4,800 sheep from X-rad.[125]

Though these figures for the most part are not easily divided by 6, they do appear to be rounded off to the nearest 100.

On the only mathematical text found thus far at Ebla we find very large numbers:

		Obverse	
I	1).	600 gal	600 large
	2).	3,600 gal	3,600 large
	3).	36,000 gal	36,000 large
	4).	360,000 gal	360,000 large
	5).	360,000 x 6 gal nu-da-šid	360,000 x 6 large not done
II.	1).	ki-gar	problem
	2).	dub-sar	of the scribe
	3).	kiš^{ki}	of Kish,
	4).	iš-ma-`ia	Išma-Ya[126]

The very nature of mathematics demands the actual value and precision

[125]Pettinato, *The Archives of Ebla*, 202.

[126]Ibid., 239.

reflected in this example.

Mari

Among the vast literature available from Mari are two representative royal inscriptions. Iaḫdun-Līm of Mari (ca. 1860?) chose not to embellish numbers in his building inscription, thus following the Babylonian pattern:

> In that same year, -- La'um, king of Samānum and the land of the Ubrabium, Baḫlu-kullim, king of Tuttul and the land of the Amnānum, Aiālum, king of Abattum and the land of the Rabbum -- these kings rebelled against him. The troops of Sūmû-Epuḫ of the land of Iamḫad came as auxiliary troops (to rescue him) and in the city of Samānum the tribes gathered together against him, but by means of (his) mighty weapon he defeated these three kings of . . . He vanquished their troops and their auxiliaries and inflicted a defeat on them. He heaped up their dead bodies. He tore down their walls and made them into mounds of rubble.[127]

On the other hand, Zimrī-Līm of Mari, a contemporary of Hammurabi, may or may not have come close to the Assyrian pattern in his use of numbers in a very broken tablet inscription:

> He [also] brought back his [h]erds. [He defe]ated [x hun]dred (troops). The Suḫeans brou[ght x th]ousand cows and 30 thou[sand sheep even] to the gate of Ekallātum. [(Zimri -Lim) d]efeate[d x th]ousand, two hundred sixty (troops and) Iasmaḫ-A[ddu at] Tizraḫ. [x] hundred of the enemy, escor[ts of the ki]ng of Babylon, re[turned t]o Babylon. [On their] return, having followed them [to . . .] in silence, he confronted them [and] he defea[ted x hundred] troops.[128]

There is also an Akkadian letter from the time of Hammurabi of Babylon in which numbers are used:

> Thus Hammurabi spoke to me. I am sending Sakirum with three hundred troops to Sabazum, (20) and the troops which I have sent are one hundred fifty [Hanu], fifty Suhu, and one hundred troops from the bank of

[127] *RIME*, 606.

[128] Ibid., 624.

the Euphrates River; and there are three hundred troops of Babylon. These six hundred troops are based in Sabazum.[129]

In military operations, exact knowledge of troop strength is imperative to insure victory. These figures must be close to actual value in this correspondence from a ruler to his field commander.

On the other hand, the following account is found in the census lists of Mari:

Ia-ri-im-^{il} Addu iš-pu-ra-am um-ma šu-ú-ma	Iarim-Addu m'a écrit comme il suit:
Ḫa-na^{meš} ša na-wi-e-em ap-qí-id-ma	"J'ai inspecté les Ḫanéens de la steppe et à 2.000 hommes j'ai fixé
2 li-im ṣa-ba-am ša it-ti Ia-ás-ma-ah-^{il} Addu	(le nombre de ceux) qui devront aller en expédition avec Iasmah-Addu.
a-na ḫarrânim i-la-ku úkin ù ṣa-bu-um šu-ú ka-lu-šu šu-mi-ša-am	Déja, tous ces hommes, nommément,
i-na tup-pí-im ša-te$_4$-er an-ni-tam iš-pu-ra-am	sont inscrits sur tablette." Voilà ce qu'il m'a écrit.
2 li-im Ḫa-na^{meš} ša na-wi-e-em ša it-ti-ka i-{i}l-la-ku	2.000 Ḫanéens de la steppe qui doivent aller avec toi et 3.000 hommes je t'ai donné.[130]
ù 3 li-mi ṣa-ba-am at-ta-di-in	

Such numbers are not unrealistic, but they are most likely rounded off figures. They certainly pale in comparison with the large numbers both of the Assyrian royal inscriptions and of the biblical censuses.

[129] *ANET*^{3}, s.v. "The Mari Letters," 482.

[130] J.-R. Kupper, "Le recensement dans les textes de Mari," in *Studia Mariana*, ed. Andre Parrot (Leiden: E.J. Brill, 1950), 104.

Alalakh

The Alalakh tablets, dating from the 18th and 15th centuries B.C., reflect the close political ties of this North Syrian city state with Hammurabi and Babylon. The people for the most part bear Hurrian names with some West-Semitic influences. The following examples should suffice to represent the use of numbers in this culture. In a military memorandum is found:

> 80 of the chariot warriors of the SA.GAZ man making a total of 1,360. 51 warriors were not entered in the total and now the total is 1,436 in all. 670 belonging to the puru-class for the šananu-warriors, 213 to the haniahu-class and 35 (?) to the ehele-class.[131]

On a craftsman's list is found the following account of work accomplished:

> [x] smiths made [a] namharu (part of a waggon) and 9 copper tišnu-vessels, 5 pair of garuwe, 20 copper daggers and 1,500 copper arrow heads. 22 leather workers. 5 houses of the martatu-trade, 3 houses of the jeweller...[132]

On an expenditure account is found the following:

> Account of 50 1/2 silver shekels expended (ZI.GA). Items include 12 1/2 shekels for wine for the king from (al) Unika and (al) Hutamme 'when the great king came up.' 5 shekels for the king himself, 1 shekel for the controller (GIR) of Supahali for a man (or the Governor) of (al) Nuranti (KI).[133]

A payment to the temple is found in a religious text: "Payment to the temple of IŠTAR. Iarimlim has paid a total of 708 shekels and has 1,800 shekels,

[131]D. J. Wiseman, *The Alalakh Tablets*, Occasional Publications of the British Institute of Archaeology at Ankara 2 (London: The British Institute of Archaeology at Ankara, 1953), 79.

[132]Ibid.

[133]Ibid., 102. This is Wiseman's paraphrase of the tablet inscription.

the rest of the silver, debited against him."[134]

The present writer is unaware of any Alalakh literature of the royal inscription genre, but perhaps such will yet be discovered.

Ugarit[135]

Most of the literature from Ugarit (Ras Shamra) contains the literary genres of myth, legend, and epic. There are economic texts as well, but no royal inscriptions or other historical genres have yet been discovered. However, in one text, the legend of King Keret (or, better, Kirtu), is found the largest number encountered in the research for this present work:[136]

> Let a multitude be provisioned
> and let it go out.
> Let the mightiest army be provisioned.
> Yea, let a multitude go out.
> Let your strong army be numerous,
> three hundred ten-thousands.
> Conscripts without number,
> soldiers beyond counting.[137]

The language of this epic literature is of course hyperbolic. One notes the hyperbolic terms "without number" and "beyond counting" in synonymous parallelism to the specific 3,000,000. This may support the hypothesis of the

[134]Ibid., 63.

[135]The citizens of Ugarit utilized both ideograms and actual words to express their number system. The manner in which they used words to express numbers is somewhat similar to Biblical Hebrew. See Cyrus H. Gordon, *Ugaritic Textbook* (Roma: Pontificium Institutum Biblicum, 1955), 34-42.

[136]The 8,640,000 cited by Cooper for Enmetena is questionable (cf. Cooper, *Presargonic Inscriptions*, 56, n. 6). If actual, it is the largest without peer in the ANE milieu.

[137]This is the present writer's translation of KRT, column II, lines 85-91; cf. Andrée Herdner, *Corpus des tablettes en cunéiformes alphabétiques* (Paris: Paul Geuthner, 1963), 63.

present dissertation that at times the large numbers in other genres are also to be understood as literary hyperbole.

Later Data from Syria-Palestine

From a survey of the cumulative data of this chapter, the present writer notes that there are no military census lists to be found in the ANE similar to those of the Old Testament. Indeed, nowhere are there census lists with the very large numbers of Number 1, 2 and 26 or of 2 Samuel 24/1 Chronicles 21. Census lists do appear in the Mari tablets of the 18th century B.C., but the largest number therein was 20,000, as near as can be determined at this present time.[138] The Alalakh tablets of the 15th century B.C. contain some 53 census lists, but the numbers therein are very small and deal primarily with the population of small villages around Alalakh.[139] The statement of Mendenhall to the effect that "census lists seems to be ubiquitous and early in ancient cultures"[140] may be true in cultures outside of the region, but such lists are not ubiquitous in the historical literature of the ancient Near East as a whole. There are none in Sumer, in Assyria, in Babylon, or in Persia, insofar as the present writer can determine.

As to the remainder of the data from Syria and Palestine, it is sparse.

[138]W. W. Hallo, *The Book of the People* (Atlanta: Scholar's Press, 1991), 153. Cf. J.-R. Kupper, "Le recensement dans les textes de Mari," 104. It is evident that the passages Hallo and Kupper list, though apparently military in nature, do not have the larger numbers which are present in the biblical census lists.

[139]D. J. Wiseman, *The Alalakh Tablets* (London: The British Institute of Archeology at Ankara, 1953), 10.

[140]George E. Mendenhall, "The Census Lists of Numbers 1 and 26," *JBL* 77 (1958): 53.

The Moabite stone with the inscription of Mesha' the king provides the largest number of this region's historical documents outside of the Old Testament. It reads in part:

> And Chemosh said to me, "Go, take Nebo from Israel!" So I went by night and fought against it from the break of dawn until noon, taking it and slaying all, seven thousand men, boys, women, girls, and maid-servants, for I had devoted them to destruction for (the god) Ashtar-Chemosh.[141]

Another inscription from the region in this period which contains a large number is the Siloam inscription: "And when the tunnel was driven through, the quarrymen hewed (the rock), each man toward his fellow, axe against axe; and the water flowed from the spring toward the reservoir for 1,200 cubits, and the height of the rock above the head(s) of the quarrymen was 100 cubits."[142] This probably should not be considered a royal inscription of Hezekiah, as it was probably not commissioned by him and is possibly the account by one of the tunnel workers. The numbers by the way, are very close to precise, as the tunnel is measured at total length of 1750 feet.[143] Based on a cubit of 17.5 inches, the inscription would indicate its length at 1741 feet.

Canaanite and Aramaic inscriptions from this time period are often taken from grave markers and are thus little help for our study. Royal inscriptions or other historical literature which might contain large numbers

[141] *ANET*[3], 320.

[142] Ibid., 321.

[143] G. A. Cooke states that the tunnel's length is 1706.8 feet, but more recent measurements suggest 1750 feet. See G. A. Cooke, *A Textbook of Nortwest Semitic Inscriptions* (Oxford: Clarendon Press, 1903), 17; and *Zondervan Pictorial Encyclopedia of the Bible*, ed. Merrill C. Tenney; s.v. "Siloam," by J. B. Payne, 5:434.

are conspicuously absent.[144]

Summary of the Data from Syria

Due to the paucity of historical genres in the extant material from Syria, it is difficult to make comparisons with the use of numbers in Mesopotamia. The evidence we do have suggests precision even in the higher numbers. Further archaeological discoveries will hopefully add new data for further discussion.

The Data from Asia Minor

Of course the most important documents of the Hittites are the treaties of the mid to late 2nd millennium B.C. Though there are no royal inscriptions available, it may be that the historical prologues found in the treaties would offer some data on the use of numbers in that region. However, the present author was unable to find such numbers. There are Hittite laws which are as precise as those of Lipit-Ištar or Hammurabi. As an example: "If anyone kills a Hittite merchant, he shall give 100 minas of silver and pledge his estate as security."[145]

The Data from Persia

The data from the period of the Persian Empire (ca. 700-330) are also sparse in the area of royal inscriptions which contain large numbers. Even

[144]For a recent edition of these texts, see John C. L. Gibson, *Textbook of Syrian Semitic Inscriptions*, 3 volumes (Oxford: Clarendon Press, 1971; reprint, 1981); or, H. Donner and W. Röllig, *Kanaanäische und Aramäische Inschriften*, 2 Bände (Wiesbaden: Otto Harrassowitz, 1964).

[145]*ANET*[3], s.v. "The Hittite Laws," 188.

the famous cylinder of Cyrus (ca. 559-530) utilizes a general term when a large number could have been inserted: "His widespread troops--their number, like that of the waters of a river, could not be established--strolled along, their weapons packed away."[146] Darius Hystaspes (ca. 522-486), on the other hand, used large numbers in his historical accounts. The following accounts concerning the exploits of two of his generals are found in the Behistun Inscription:

> By the will of Ahuramazda my army defeated that rebel army exceedingly. Twenty-seven days were past of the month of Anamaka (Tebētu) they fought a battle. (They killed 3827? among them and took 4329 prisoners.[147]

> Then we fought the battle. Ahuramazda bore me aid. By the will of Ahuramazda I defeated the army of Fravartish exceedingly. In the month of Adukanaisha (Nisannu), twenty-five days had passed when we fought the battle. (We killed 34,425? of them and took prisoner?)[148]

Though the data are scarce, there seems to be a tendency toward the use of general terms (as evidenced by the representative example from the Cyrus Cylinder). Where large numbers are used, they are used with great definiteness (as in the Behistun Inscription). Whether they were intended to be hyperbolic cannot be determined; their precision argues against it.

[146] *ANET*[3], s.v. "Cyrus," 315.

[147] Richard N. Frye, *The History of Ancient Iran* (München: C. H. Beck'sche Verlagsbuchhandlung, 1984), 364. Other than the fact that almost every large number in Frye's translation is questionable, the present writer cannot explain the omission of the large numbers of these passages in Kent's Persian grammar. Cf. Roland G. Kent, *Old Persian: Grammar, Texts, Lexicon*, second revised edition (New Haven, Connecticut: American Oriental Society, 1953), 116-34.

[148] Frye, *The History of Ancient Iran*, 365.

The Data from Egypt

Egypt to Dynasty XIX

In contrast to the historical information offered in Syrian and Hittite literature, the information from Egypt which contains large numbers is quite abundant.[149] As early as the second Dynasty (ca. 2890-2686 B.C.) large numbers can be found on statue inscriptions of Khasekhem:

> On two statue bases from Hierakonpolis a mass of fallen enemies is depicted with legends indicating on one statue 48,205 defeated and on the other 47,209; and a relief fragment from Hierakonpolis shows the king kneeling on a prostrate enemy representing Nubia.[150]

An early use of large numbers in historical inscriptions with a general sense is seen in a text describing the Asiatic campaigns of Pepi I (ca. 2300 B.C.?): "When his majesty imposed punishment upon the Asiatics Who-are-Upon-the-Sands, his majesty made an army of many ten-thousands, in the entire Upper Egypt."[151] About this number, Wilson notes: "The figure is flamboyant, not to be taken literally."[152]

In a text concerning the expulsion of the Hyksos by Amosis I (ca. 1570-1545 B.C.), the following is recorded:

> Then Avaris was despoiled. Then I carried off from there: one man, three women, a total of four persons. Then his majesty gave them to me to

[149]The Egyptian hieroglyphic is somewhat similar to the cuneiform regarding the number system. One is designated by a single vertical stroke |, two by two such strokes ||, etc. Ten is designated by the sign ∩, twenty by ∩∩ and so on. The system is decimal. For a full discussion, see Alan Gardiner, *Egyptian Grammar*, 3rd revised edition (London: Oxford University Press, 1957), 191-206.

[150]William W. Hallo and William Kelly Simpson, *The Ancient Near East: A History* (New York: Harcourt, Brace, Jovanovich, 1971), 212.

[151]*ANET*[3], s.v. "Egyptian Historical Texts," translated by John A. Wilson, 227-28.

[152]Ibid., 228, n. 4.

be slaves.[153]

A vast amount of historical data is found in the temple inscriptions of Karnak and on the Barkal, Memphis, and Karnak stelae, many of which record numbers both great and small. On the Barkal stele is found a description of the first Syrian campaign of Thutmose III (ca. 1490-1436 B.C.). In this inscription, one sees a large general number used to express a great multitude:

> Now I am speaking to you again; listen, O people! It was on my first campaign that he conferred the foreign land of Retjenu on me when they came to engage my Majesty with (their) vast numbers of men, hundreds of thousands from among the finest of all the foreign lands, standing in their chariots, 330 chieftains, each one with his army.[154]

This inscription with its large number was perhaps uncharacteristic of Thutmose III, however, since most of his inscriptions deal with more realistic numbers. Consider the account found among the temple inscriptions of Karnak: "List of the children of princes carried off in this year: 36 men, 181 male and female slaves; 188 horses; and 40 chariots, worked with gold and silver or painted."[155] On the other hand, when just booty was involved, he could record vast numbers, up to 207,300+ sacks of wheat.[156]

His successor, Amenhotep II (ca. 1447-1421 B.C.), continued making royal inscriptions, which were recorded on the Memphis and Karnak stelae. These record the results of his Asiatic campaigns:

> His majesty reached the town of Memphis, his heart appeased over

[153]Ibid., 233. One may contrast these small numbers with large numbers in other ANE inscriptions.

[154]W. Helck, *Egyptian Historical Records of the Later Eighteenth Century*, translated by Barbara Cumming (Warminster, England: Aris & Phillips, Ltd., 1982), 1:3.

[155]*ANET*[3], s.v. "Egyptian Historical Texts," 239.

[156]Ibid.

> all countries, with all lands beneath his soles. List of the plunder which his majesty carried off: princes of Retenu: 127; brothers of princes; (30) 179; Apiru: 3,600; living Shasu: 15,200; Kharu: 36,300; living Neges: 15,070; the adherents thereof: 30,652; total: 89,600 men. . . .[157]

These numbers are considerably higher than those used by his predecessor, even though Amenhotep II could and did use smaller numbers:

> Amount of the booty of his Majesty on that day: 2 chieftains, 6 warriors of the Hurrian elite including their chariots and teams of horses, and all their weapons of war.[158]

The smaller numbers of this inscription have a better chance of being historically reliable than the larger numbers of the first, especially since the total suggested in the first inscription is incorrect by nearly 12,000!

In a summary of the northern wars of Ramses III (ca. 1195-1164 B.C.) we find:

> The Sherden and the Weshesh of the Sea were made non-existent, captured altogether and brought in captivity to Egypt like the sand of the shore. I settled them in strongholds bound in my name. Their military classes were as numerous as hundred-thousands. I assigned portions for them all with clothing and provisions from the treasuries and granaries every year.[159]

Summary of Data from Early Egypt

Large numbers in historical inscriptions were in use in Egypt from the earliest times. There is apparently less tendency in Egypt to round off numbers in the manner of the Mesopotamians, but that fact does not necessarily ensure historical accuracy nor actual value. As in early Mesopotamia, the largest of numbers are used to generally define vast

[157] Ibid., 247. Though there is nothing offered at this point to explain it, the total given is too low for the figures stated, suggesting either erroneous data or poor math!

[158] Helck, *Egyptian Historical Records*, 1:30.

[159] *ANET*[3], 262.

multitudes.

Egypt from Dynasty XX

The data from later Egypt are likewise sparse. The period begins with the end of Dynasty XX and ends with the beginning of Persian domination. It is otherwise known as the third intermediate period of Egypt. Historical records are scarce in comparison with earlier dynasties. However, they do exist.

On the Medinet Habu Temple, built by Rameses III (ca. 1198-1166), is the representative use of hyperbolic language. The inscription concerns the building of the temple and its furnishings:

> I fashioned images of the gods and goddesses to rest in the midst of thy house. I made my image before thy front, the regalia of every splendid costly stone, in order to follow thee at every appearance, at thy every feast every day, when thou proceedest before its beautiful face. Thou multipliest for it the years in millions. Thou makest it like one among thy divine ennead, established before thee, forever. . . .[160]

A military account of spoil taken in battle also comes from this same inscription. The account describes the result of a victory over the Libyans during the fifth year of Rameses III:

> Total of foreskins (k'-r'-n'-ty), [1]2,535.
> Total of hands, 12,535.
> Total of _____, 12,758.
> Total of hands, 12,520 (+ x).
> Total of hands, 12,635 (+ x).[161]

Breasted's comments at this point are worthy of note. He claims that each total

[160]James Henry Breasted, *Ancient Records of Egypt* (New York: Russell & Russell, Inc., 1962), volume 4: *The Twentieth to the Twenty-Sixth Dynasties*, 7.

[161]Ibid., 4:30.

refers to a separate heap of spoil.[162] Then he insists that since "two of these five totals are identical (12,535), and a third is almost certainly the same, it is evident that the number 12,535 is the sum-total of dead; otherwise we should have over 60,000 dead, which is quite impossible."[163] However, this does not adequately explain three different heaps of hands of nearly equal number from an identical number of dead!

The Papyrus Harris is most significant. This document, the largest papyrus extant from Egypt, was written upon the death of Rameses III by his son, Rameses IV. It is significant in the study of the use of large numbers for two reasons. First, the sections which deal with the total acreages of temple holdings and the income derived from these holdings reveal that precision in the use of large numbers was in no way unfamiliar to the Egyptians of this period.[164] However, the historical sections of the Papyrus Harris revert to general hyperbolic language:

> I sent forth my messengers to the country of the Atika (''-ty-ka), to the great copper mines which are in this place. Their galleys carried them; others on the land-journey were upon their asses. It has not been heard before, since kings reign. Their mines were found abounding in copper; it was loaded by ten-thousands into their galleys. They were sent forward to Egypt, and arrived safely. It was carried and made into a heap under the balcony, in many bars of copper, like hundred-thousands, being of the color of gold of three times.[165]

Another significant inscription from this period comes from Rameses

[162]Ibid., 4:30, note b.

[163]Ibid., 4:30, note g.

[164]See the chart in Breasted, *Ancient Records of Egypt*, 4:97 for instance.

[165]Breasted, *Ancient Records of Egypt*, 4:204.

IV (1166-1160). It is essentially a listing of personnel engaged on an expedition of the pharaoh, the purpose of which was to investigate the goings on at the quarries. The stele commemorating this expedition records a list which should add up to 8,362 men. The total given on the stele appears as 8,368 men.[166] Breasted claims that this is a scribal error of addition.[167]

On a victory stele of King Piye (or, Piankhy, ca. 747-716), the following two inscriptions of significance appear:

> When you have reached Thebes at Ipet-sut, go into the water. Cleanse yourselves in the river; wear the best linen. Rest the bow; loosen the arrow. Boast not [to] the lord of might, for the brave has no might without him. He makes the weak-armed strong-armed, so that the many flee before the few, and a single one conquers a thousand men.[168]

> They closed their fort. They sent out troops against some of his majesty's troops, consisting of artisans, builders, and sailors [who had entered] the harbor of Memphis. And the Chief of Sais arrived in Memphis by night to charge his soldiers, his sailors, all the best of his army, consisting of 8,000 men, charging them firmly. . . .[169]

A victory stele of Psamtik II (Psammetichus, ca. 595-589) records the following account:

> The troops your majesty sent to Nubia have reached the hill-country of Pnubs. It is a land lacking a battlefield, a place lacking horses. The Nubians of every hill country rose up against him, their hearts full of rage against him. His attack took place, and it was misery for the rebels. His majesty has done a fighter's work. When the battle was joined, the rebels turned their backs. The arrow did not stray from piercing them. The hand did not let loose. One waded in their blood as in water. Not one bound pair

[166]Ibid., 4:226 for the inscription.

[167]Ibid., 4:226, note f.

[168]Miriam Lichtheim, *Ancient Egyptian Literature* (Los Angeles: The University of California Press, 1980), volume 3: *The Late Period*, 69. The words of the last line are similar to Deut. 32:30 and Isa. 30:17.

[169]Ibid., 75.

escaped of the 4,200 captives. A successful deed had been done![170]

Though not a royal inscription, a late stele of a certain Somtutefnekht who was a priest under Nectanebo II (359-341) records very large general numbers:

> My heart sought justice in your temple night and day,
> You rewarded me for it a million times.
>
> You gave me access to the palace,
> The heart of the Good God was pleased by my speech.
>
> You distinguished me before millions,
> When you turned your back on Egypt.[171]

Summary of the Later Data from Egypt

It appears from the available data that historical and building inscriptions in Egypt during this period use numbers in two different ways. First, if a deity is being addressed or referred to, nebulous hyperbolic language is used, and it may also be used in other contexts at times. Second, if the context is military, more definite numbers are used, albeit actual value is difficult to determine.

Discussion of the Cumulative Data

It is apparent that throughout the ANE, the use of numbers varied with the types of literary materials in which they were used. Numbers which were used in legal texts, letters, and business transactions were extremely precise, as is to be expected. There is no need to question their actual value, or veracity.

[170]Ibid., 85.

[171]Ibid., 42.

However, larger numbers found in royal inscriptions, historiographic writings, and historical inscriptions of various types may be questioned as to their actual value. The larger numbers used in Mesopotamian literature, especially in that of Sumer and Assyria, tended to be at least rounded off to a number which was easily divisible by 6 (or 60) and are sometimes hyperbolic. Any rhyme or reason to the particular numbers used, say in the Sumerian King List, remain to be identified (outside of legend of course).[172]

Perhaps further observations may be made. First, it appears that with regard to large numbers, only the king involved could use hyperbole, and then only in the proper genre. The rest of the populace was expected to exhibit precision and veracity in the numbers they used. Even the king was expected to use actual value when it came to weight inscriptions (without historical comment) and letters regarding military strength which had then current strategic importance.

Second, the tendency toward exaggeration of numbers related to military exploits is found mainly in Sumer and Assyria. The Syrian and Hittite records are noticeably devoid of such. Of the texts studied from Egypt, potentially hyperbolic numbers came early (in Dynasty II under Khasekhem) and then again reappeared in the annals of Amenhotep II, the pharaoh whose rule coincides with the early date for the Exodus.[173] As a whole, however, the

[172]Recently, Young has proposed understanding the large numbers of the Sumerian King List in terms of Babylonian mathematics. Cf. Dwight W. Young, "A Mathematical Approach to Certain Dynastic Spans in the Sumerian King List," *JANES* 47 (1988): 123-29.

[173]It may be that the reason for the expansion of the numbers of Amenhotep II could be that he was over-compensating after he had been humiliated when his army perished in the Reed Sea (cf. Exod. 14:28). At any rate, his royal inscriptions ceased after his ninth year, about the time of the early date for the Exodus!

largest numbers employed by the Egyptians are general rather than specific.

Third, nowhere in the texts researched have there been the consistently very high numbers (those over 100,000) such as are found in the Old Testament.[174] In the early periods at least, extremely high numbers usually refer to an innumerable multitude.

Several more observations may be made from the study of the use of large numbers in the ANE during the period from ca. 1150 B.C. to the Persian era. First, as might be expected, the greatest amount of historical literature outside of the Old Testament comes from the dominant world power of the era, Assyria. Within the historical inscriptions of Assyria one can observe several pertinent facts about the use of numbers: 1). Textual problems often exist at the point the number occurs in the text. 2). Obvious hyperbole took place at least at times. 3). General hyperbolic expressions often occurred in the contexts with large numbers.[175] 4). At least one example of the use of a large number to represent a name can be seen. 5). In nearly every instance wherein a large number is used, the context is military. In *every* case where the largest numbers in excess of 100,000 are used, the context is exclusively military. On the other hand, Babylonia, the other major world power in this time period, rarely used large numbers in their historical inscriptions. Their penchant for objectivity led them to prefer general terms for large numbers

[174]Exod. 12:37, Numbers 2:31, 32; 11:21; 26:51; 31:32; Judges 20:2, 17; 1 Sam. 15:4; 2 Sam. 24:9; 1 Kings 20:29; 2 Kings 3:4; 19:35; 1 Chron. 5:21; etc.

[175]Millard acknowledges that "In addition to thousands and tens of thousands, the scribes took refuge in vague phrases, 'beyond counting' (*la nībi, ša nība la išû*), 'countless as the stars of the sky' (*ša kīma kakkabē šamê menûta la išû*)." Cf. Millard, "Large Numbers," 214.

in their historical writings and enabled them to avoid the extremes of exaggeration involved with hyperbole.

The only pertinent data from Syria-Palestine outside of the Old Testament came from the Moabite Stone, which depicted military operations, inasmuch as the Siloam inscription cannot be considered of the royal inscription genre.

The data from Persia include some very precise large numbers used in the military contexts of royal inscriptions, but the readings are questionable. In other places there seemed to be a tendency toward the use of general terms.

Egypt also used definite large numbers in their military accounts, though such accounts are fewer in number than in earlier dynasties. There was a tendency to use indefinite numbers in certain other contexts.

Several observations on the biblical text may now be made in view of the results of the present study.

The Old Testament is unique among all other ancient historical literatures in that it uses definite numbers in excess of 100,000 with great frequency.[176] Such numbers of this great size may have been used in ancient Sumer, but they were obviously used to refer to a great multitude or an indefinitely lengthy time period. They may have been used in Assyria, but they are certainly questionable as to their actual value. They may have been used in Egypt, but they were always used in general terms. They were never used in Babylonia, and have not been found elsewhere in the literature of the

[176]There are over 50 occurrences of numbers in excess of 100,000 in the Old Testament. In fact, the largest definite number found anywhere in the *historiographical* military inscriptions of the ancient Near East available to the present writer is the 1.1 million men recorded in 1 Chronicles 21:5.

ancient Near East.

Secondly, as historical literature, the Old Testament historical accounts are unique, in that they share elements of the literatures of the cultures around them. They employ large numbers in military and building contexts as do other cultures (especially in the manner of the Assyrians). They employ census lists as did the cultures in Alalakh and Mari, but with much larger numbers in clearly military contexts. They maintain the objectivity of the Babylonians by recording their own great military defeats. They employ the decimal system used by the Egyptians instead of the sexagesimal system of Mesopotamia, yet the syntax of the large numbers of Scripture most mirrors that of the Assyrians.

In actual use of the largest numbers (over 100,000), the Old Testament most clearly resembles the Assyrian style. These numbers are used with definiteness in military contexts. This being the case, can a conclusion be drawn about the large numbers of the Old Testament?

It is certain that numerous textual problems exist at times in the Old Testament accounts at the point the numbers occur. As to scribal exaggeration, this is also possible in the transmission of the texts, especially prior to standardization. One may hesitate to adopt the view that the Old Testament's use of large numbers reflects an ancient Near Eastern genre in which literary hyperbole was expected and accepted, but this appears to be the only viable option open to the conservative in view of the results of chapters two and three of this dissertation. It certainly seems to be the case in Sumerian literature, wherein the vast majority of numbers used were divisible by 6 or 60, and in the Assyrian annalistic commemorative inscriptions. If hyperbole is accepted as fact in Old Testament accounts which employ large numbers, the largest numbers could potentially be reduced by 90%, because of

its use of the decimal system.

Finally, another possibility remains. The large numbers used in the Old Testament are for the most part original and accurate (with the exceptions of some textual problems). If this is the case, the Old Testament stands alone among all other historical inscriptions of the ANE in the size and frequency of occurrence of these large numbers, and demographic studies to this point have been severely misleading.

Chapter Conclusions

It was the original purpose of this study to analyze the use of large numbers within the historical literature of the ancient Near East to see if any insight could be gleaned in to the use of large numbers in the Old Testament. It is evident from this study that no other culture used numbers in excess of 100,000 with the same frequency as does the Old Testament. It is evident that other ancient Near Eastern cultures, when using large numbers in a definite manner, did so primarily in their military accounts, and secondarily in their building inscriptions (similar to the OT accounts in military contexts and tabernacle/temple construction). Where numbers in excess of 100,000 occur, they are found exclusively in military contexts.[177]

[177]The running totals given in the Sumerian King list at times exceed 100,000, but it could be argued that this is not meant as a military account. It certainly is not a royal inscription.

CHAPTER 5

A PLAUSIBLE SUGGESTION

A Word About Historiography

Historiography may be defined as the writing down of history. In order to make a particular point, historiography is often selective in the data it offers. In other words, the intention of the historiographer is not always to give an actual chronological accounting of every event. Younger has recently written that: ". . . history is artistically constructed and does not necessarily follow a strict chronological format of presentation."[1] Rather, the historiographer offers events selectively according to his own purposes. If it is the author's purpose to list every event chronologically as it happened, including every pertinent detail, he will do so. This type of record one could call true history. If the author desires to concentrate on one period, one event, or one person of history, the author will select materials which support that task. For instance, we do not have every detail of every event which occurred in the period covered by the Old Testament. We do not even have details of every major event which occurred. At times, the chronological order has been altered in order to support a certain theme. This chronological restructuring may be seen in the book of Ezra and in the rēš šarrūti pattern of

[1]K. Lawson Younger, Jr., *Ancient Conquest Accounts* (Sheffield: Academic Press, 1990), 35.

David's reign, for example.[2] The Old Testament historical literature concentrates rather on people in their relationship with God. At times this comprises the whole of Israel, at times the leaders of Israel, at times other significant individuals. Though much of the Old Testament literature is primarily historiographical, it is history written with a particular purpose in mind. That purpose is theological in intent. The Old Testament's theologically-centered historiographical literature intends to demonstrate how Yahweh dealt with his covenant people Israel. It is written to reflect his glory and their humanity.

Much of what is found in the historical inscriptions of the ANE world is history written with a particular purpose or point of view. This is not to say that what is written therein does not constitute the record of factual events (though inaccuracy might be the case in certain instances). It is to say that historiography is literature. The Old Testament in great part is historiographic literature consistent in numerous ways within its ANE milieu. It is intended to be literature and therefore employs various literary devices common to other literature. Younger, in a comparison of various ANE Conquest accounts, claims that "historical narrative is always figurative."[3] One aspect of figurative language is the use of rhetorical devices in the accounts.[4] One of those rhetorical literary devices is hyperbole. Though

[2]For a thorough study of the significance of this term, see Eugene H. Merrill, "The 'Accession Year' and Davidic Chronology," *JANES* 19 (1989): 101-12.

[3]Younger, *Ancient Conquest Accounts*, 45.

[4]Ibid., 46.

modern historiographers might eschew the use of literary hyperbole, it may be that the ANE historiographers, including the biblical writers, did not.

The purpose of this chapter is to suggest a plausible use of large numbers in the Old Testament. In chapter two of this dissertation, it was demonstrated that in most cases the texts which contain large numbers can withstand thorough textual analysis. In most cases, the MT can be retained as the best text; in passages where this is not the case, large numbers still remain.[5] Chapter two also established that the term אלף must be accepted in most cases as a numeral representing the number 1,000, except where the meanings of "cattle" or "clan" are clearly in view. In chapter three, it was suggested that demographic analysis of Palestine reveals that accepting the largest numbers of the census lists at face value appears to run contrary to fact. It is likely that Palestine never sustained a population in excess of 1,000,000 at any point in ancient history. Chapter four offered data as to the use of large numbers within the ANE milieu, in order to demonstrate how frequent and prevalent the use of literary hyperbole was in the world outside of Israel, particularly in annalistic and royal inscriptional material. It is the purpose of this chapter to examine the possibility that the Old Testament often uses large numbers in its historiographic literature much the same way as the nations around them, i.e., as the literary device of hyperbole. The purpose of this hyperbole is to glorify the reigning monarch, whether that be Yahweh or his theocratic representative David, or Solomon, or a few other leaders of Israel and Judah.

[5]The one exception would be 1 Sam. 6:19, where the best text probably reads only 70 individuals.

Literary Hyperbole

It is evident from a study of the literature available from the ANE that in the royal inscriptional and annalistic genres, purposeful embellishment of numbers was the norm rather than the exception.[6] The reason for this was to glorify the then-reigning monarch. Therefore, the amount of forced labor involved with a building project, the amount of animals taken as spoil or of animals possessed were all significantly enlarged. Though any number would do, just as long as it was sufficiently large enough to glorify the king, there is evidence that at least in Sumer and Assyria most of the large numbers were divisible by six or by sixty. This may suggest that under a sexagesimal system, numbers were purposefully enlarged six-fold (or even sixty-fold). Might the same have been happening in the Old Testament? If the original numbers were inflated for the purpose of glorifying the king (and it must be acknowledged here that a given number used rhetorically as literary hyperbole may not be based on an actual figure), they employed the decimal system with which they were familiar.[7] With a decimal system, the multiplicative factor could have been ten, a hundred, or even one thousand![8] It is interesting to note that precisely at the very point where the largest and most troubling numbers of Scripture are found, the context either enumerates the warriors utilized, killed or captured, or speaks of spoil taken in battle, or speaks of the number of corvée labor, or the number of sacrifices made. Even

[6]However, see note 17 in chapter four of the present dissertation.

[7]G.R. Driver, "Sacred Numbers and Round Figures," in *Promise and Fulfillment*, ed. by F. F. Bruce (Edinburgh: T & T Clark, 1963), 67.

[8]As to exactly which multiplicative factor would have been employed may be impossible to determine.

in the contexts where there was no earthly king, Yahweh was the king over Israel. Should it surprise us if the largest numbers to be found anywhere in the ANE literature are there in the Hebrew scriptures to reveal the superiority of Yahweh over any earthly king or any so-called god?[9] Too, the contexts of ANE accounts often contain other figurative or hyperbolic language, and if one can demonstrate this feature as occurring in the near environment of the biblical accounts, support may be gained for seeing the largest numbers as hyperbolic. If this is indeed happening in the Old Testament, it is a hermeneutical issue, not one of inerrancy. All that would remain for the exegete would be to explain problems within immediate contexts, or between parallel passages. The large numbers themselves would no longer present difficulties.

Consider the implication of this. If the largest numbers could be safely reduced by at least 90%, the armed men of Israel coming out of Egypt in the Exodus could be reduced from 603,550 to 60,355 in Numbers 1 and from 601,730 to 60,173 in Numbers 26,[10] yielding a total population of perhaps as few as 200,000-300,000 immediately prior to the entrance into the land.[11] The land of

[9]There are over fifty occurrences of numbers in excess of 100,000 in the Old Testament. There are probably fewer than thirty such occurrences in all other ANE royal inscriptional and annalistic genres combined.

[10]One may contrast the larger figures to the legions of Rome, which are thought to have numbered less than 180,000 armed men at its height: "Man bedenke nun, dass das Imperium Romanum in seiner Blütezeit unter Kaiser Hadrian nur 30 Legionen in der Stärke von 180.000 Mann aufstellte, wovon zur Niederwerfung des überaus erbitterten Bar-Kockba-Aufstandes etwa 35.000 Mann eingesetzt wurden." Claus Schedl, "Biblische Zahlen -- unglaubwürdig?" *Theologisch-praktische Quartalschrift* 107 (1959): 59; cf. *International Dictionary of the Bible*, s.v. "Army." which suggests 25 legions and a total of 150,000 for Rome.

[11]The lower figure of 200,000 is suggested here in view of the fact that there were fewer elderly remaining after the end of the wilderness wanderings (cf. Deut. 1:35-36; 2:16).

Palestine could still hold "seven nations greater and stronger than you" (Deut. 7:1).[12] Israel could still be seen as "the fewest of all peoples" (Deut. 7:7), yet still be as numerous as the stars of heaven (cf. Gen. 22:17; only about 3,000 stars are visible to the unaided eye).[13] The figures would agree with what is known about population figures and demographics. Small numbers would be unaffected, as would numbers within other genres (including prophecy). In Numbers 3, the number of Levites versus the number of first born in Israel would remain a problem, but the 273 in excess would be safe (reducing the thousands only). The number of sheep offered by Solomon at the dedication of the Temple could be reduced to 12,000 or 1,200 or even 120, the important theological and polemical point being that Solomon was the mightiest king in the world at the time. The angel of Yahweh might have slain only 18,500 of Assyria's hordes, or even 1,850, though no one would question Yahweh's ability to have slain 185,000. The point was that Assyria's army was demolished, God's people saved, and Yahweh glorified. Perhaps only 27 were killed by the falling wall of 1 Kings 20:30!

The present writer does not intend to state that all of the following passages must be seen as employing numerical hyperbole; the intent is rather to demonstrate that numerical hyperbole is at least a possibility in many cases. In order to establish this hypothesis, one must demonstrate that the passages where the largest and most problematic numbers occur in Scripture are

[12]Though admittedly, a figure of 1.4 million already in the land may still be too large, it is still more reasonable than 21,000,000! See chapter three of the present dissertation.

[13]One notes the similarity of this phrase to the Akkadian "'countless as the stars of the sky' (*ša kīma kakkabē šamê menûta la išû*)." Cf. Millard, "Large Numbers in the Assyrian Royal Inscriptions," 214.

indeed contexts which at least reflect the royal inscriptional or annalistic genres as to general context. To so demonstrate is the purpose of this chapter.

Analysis of Significant Biblical Passages[14]

Exodus 12:37

Exodus 12:37 actually provides no real problem to the literary hyperbole hypothesis, since it is evident that it is meant to be a rounded off figure of the number of armed troops based on the census taken in Numbers 1. The Hebrew term employs the term commonly accepted in such contexts as "about" (כְּשֵׁשׁ מֵאוֹת אֶלֶף רַגְלִי הַגְּבָרִים).

Exodus 38:24-31

This passage on the surface provides the greatest intra-biblical difficulty in adopting the hypothesis offered in this dissertation, inasmuch as the large figure of 603,550 appears to be directly proportional to the smaller figures included in the passage. There seems to be little in the way to suggest significant textual variants, although Allen suggests that there might have been early scribal activity which tied in the large numbers of this passage with the numbered men of the census.[15] One does note in the context that in verses 25-27 the totals of silver are figures based upon the census taken in

[14]The reader will find it advantageous to read this section before an open Bible or appendix three of this dissertation.

[15]Ronald B. Allen, "Numbers," in *The Expositor's Bible Commentary*, ed. Frank E. Gaebelein (Grand Rapids: Zondervan, 1990), 2:690, note 47. Allen states therein:

> The one problem remaining is the payment of the half-shekel in Exod. 38:25-26. This 100 talents + 1,775 shekels is the one number that does not easily arise from a purposeful tenfold increase. I suggest, with some temerity, that the numbers in this passage may have been inserted into the text of Exodus on the basis of the census of Num. 1-4.

Numbers 1, similar to the ransom offered in Numbers 3. Yet, the larger context as a whole and vv. 24 and 28-31 of Exodus 38 seem to indicate figures based on a freewill wave offering. Indeed, nothing is said in 35:20-36:7 about there being any sort of per capita payment. Rather, "everyone whose heart lifted him and whose spirit moved him" came with an offering. These facts may lend some support to Allen's premise. However, converting the figures for the weight of the silver into shekels alone (100 talents, 1775 shekels = 301,775 shekels) the problem may be alleviated, as both the figure for the number of men and the figure for the total of silver could be hyperbolic, even reflecting the ten-fold increase Allen suggests.[16] If so, postulating undocumented early scribal activity for this reason would not be necessary.

Numbers 1:20-46

The first census taken of the nation Israel reflects a military muster of the standing militia in the second year following the Exodus from Egypt. The census was made in obedience to a direct command from Yahweh, and the terms used seem to indicate the need for precision (1:2, 18). A casual reading of the text leads one to expect an actual accounting of the number of men available to go to war. However, it may be that the numbers are intended to be understood as hyperbolic. Several factors, both biblical and extra-biblical, weigh heavily in this direction.

Biblically, it is said several times of Israel that they shall be innumerable (Genesis 13:16, 15:5, 16:10, 22:17, 26:4, and 32:12). In each verse, a comparison is made between the descendants of the patriarchs and innumerable objects (stars, dust, sand). These are all examples of literary

[16]Ibid. The 60,355 men would yield 30,177.5 shekels at one-half shekel each.

hyperbole.[17] In Numbers 1 (and subsequently in Numbers 2 and 26), Moses is commanded by God to attempt such an enumeration. Though one may argue that the promises of national enlargement to the patriarchs are ultimately fulfilled by the aggrandized total at the end of time, it may be that Moses attempts to show that those promises are fulfilled in his time by the use of hyperbolic numbers.[18] Thus Yahweh would be glorified over the gods of Egypt who attempted to destroy God's people and venerated by others who would read the accounts and realize this significance in the enormity of the numbers.

Is there any other indication within the passage that these numbers are understood to be hyperbolic? A study of the uses of large numbers which contain אֶלֶף in the Old Testament reveals that often when the Standard Military Formula[19] (or portion of it) is employed, hyperbolic numbers often occur in the near vicinity.[20] This is particularly the case in Numbers 31:14-54; 2 Samuel 18:4-7; 1 Chronicles 12:21-38, 27:1-15; 2 Chronicles 1:2-2:17, and 25:5-6). Though the phrase in 1:16 employs the term "heads" (ראש) rather than the standard "leaders" (שר), its presence may serve to indicate that hyperbolic numbers follow.

[17]Literary hyperbole may also be seen in the larger context of Numbers 13:30-33 and Deut. 1:28 in the report of the twelve spies (cf. E. W. Bullinger, *Figures of Speech Used in the Bible*, reprint [Grand Rapids: Baker Book House, 1968], 423).

[18]Cf. Allen, "Numbers," 680. Allen refers to these large numbers as "power words" (689), while Scolnic calls them "hyperboles of infinity." Cf. Benjamin E. Scolnic, "Theme and Context in Biblical Lists," (Ph.D. dissertation, Graduate School, The Jewish Theological Seminary of America, 1987), 95.

[19]The Standard Military Formula (SMF) is "leaders of thousands, hundreds, fifties, and tens."

[20]See appendix three of this dissertation for a listing of these occurrences.

Extra-biblically, chapter three of this dissertation has demonstrated that taking these numbers at face value is untenable in light of the demographic data currently available. Chapter four of this dissertation has demonstrated that oftentimes in the ANE, numbers were indeed purposefully embellished in order to glorify a given monarch. This occurred most often in royal inscriptional and annalistic literature. Though it is admitted that this is a census, it does share a major trait with ANE genres which employ hyperbolic numbers, in that this is a military census of armed men prepared to enter into battle. It thus may be compared to numerous examples of extra-biblical literature which enumerate military strength in a hyperbolic fashion.

How did these large figures arise? Barnuoin has pointed out the unlikelihood of a random occurrence of the figures.[21] If indeed many of the large numbers of the Old Testament are examples of literary hyperbole common in the ANE world, it may be that an analogy can be made. The original figures may have been multiplied by a factor of ten in the decimal system of Israel as discussed above. It very well may be however, that the hyperbolic numbers employed here arose by some other means. As will be noted in chapter six of this dissertation, it is at least possible that these origins may be yet found in the realm of gematria.

Numbers 2:4-32

The numbers given for the twelve tribes in this chapter are the same as in Numbers 1, arranged in a differing fashion and subtotaled at the end of each three tribes. They may therefore also be hyperbolic.

[21] M. Barnuoin, "Remarques sur les tableaux numériques du livre des Nombres," *RB* 76 (1969): 351-64.

Numbers 3:11-51

The problems concerning this passage have been noted in the introduction to this dissertation. If one retains the MT reading at 3:28, the problem of a sum of numbers not equalling a stated total remains. At the risk of redundancy, a small portion of chapter two is reiterated in the paragraph below.

There are a number of examples in ancient Near Eastern literature wherein lists of numbers are given followed by a total which does not equal the sum of those numbers. These lists occur in contexts similar to Numbers 3 in that they are historiographical.[22] This reckoning is foreign to Western technologically precise mentalities, but it may be the case in Numbers 3 (MT). If so, there no longer remains a textual problem in the lack of agreement. If this is the case here, it may be the only such case in the Old Testament.[23]

The second problem involved with this passage in Numbers 3 is that the numbers suggested for a total of Israelite first-born is too high. The requisite Israelite family size suggested would be enormous in light of the population totals required by taking the census totals at face value. Gray has pointed out that this would mean at least 25 sons per family given a population between

[22]As an example, Amenhotep II (ca. 1450-1425 B.C.) recorded his Asiatic campaigns on the Memphis and Karnak stelae. The total offered for the number of killed and captured is 89,600 men, but the sum of the individual listings is 108,128 (*ANET*[3], s.v. "Egyptian Historical Texts," 247). There do not seem to be any lacunae. Earlier, Rimush of Akkad (ca. 2300 B.C.) on a tablet inscription, lists the killed and captured at a sum of 45,856, and then cites the total at 54,016 (Gelb and Kienast, *Die Altakkadischen Königsinschriften*, 191-93).

[23]Ezra 1:11 may include a similar phenomenon, but I have not worked through it text-critically as yet. It might be that the Ezra passage lists only the most important before giving the total.

two and three million persons.[24] While not entirely impossible, such a family size is highly improbable.

Allen suggests that the 22,000 figure given for the Levites is hyperbolic, but the 22,273 given for the first born of Israel is actual.[25] Though this is irregular, it may not be without precedent in the Old Testament. Such admixture of hyperbolic and actual numbers may indeed be the case in 1 Chronicles 12:25-38 wherein the initial four figures for the tribes may be actual and the next several are in all likelihood hyperbolic. A similar thing may be happening in 2 Chronicles 14:9 where Zerah is said to have 1,000,000 men but only 300 chariots. This practice of mixing actual and hyperbolic numbers may also be observed in ANE literature.[26] Too, the very fact that 22,273 is a precise number argues for its actuality. Out of over 220 larger numbers of the Old Testament, there is only one other occurrence of a larger number which includes both the tens place and digits (1 Chronicles 7:7--22,034).[27]

If Allen is correct in his supposition, the Levites may have numbered only 2,200, and first-born Israel an actual 22,273. This latter figure would fit well with a population of 250,000-300,000 suggested by accepting literary hyperbole in the census figures and reducing the numbers there by 90%. The

[24]G. B. Gray, *Numbers*, International Critical Commentary (Edinburgh: T & T Clark, 1963), 13.

[25]Allen, "Numbers," 730.

[26]Notice the proportion of the spoil of camels *vis à vis* the spoil of sheep recorded as taken by Sennacherib in chapter four of this dissertation. Admittedly, both figures may be hyperbolic.

[27]Observe appendix three of this dissertation.

end result would yield an Israelite family size of about 2.5 male children, based on Gray's calculations mentioned above.

Another option remains in taking the figure 22,000 for both the Levites and Israelite first-born as hyperbolic without suggesting a multiplicative factor of ten. The point of the passage is that Israelite first-born outnumbered the Levites by 273, and it was on this base that the redemption amount of 1,365 was calculated.

Numbers 4:34-49

In keeping with the hypothesis of this dissertation, one may safely reduce the numbers cited by 90% (a factor of 10). The actual total may have been 858, a figure reasonably consistent with the 2,200 males for the entire tribe suggested by Allen's calculations.[28]

Numbers 11:21

The figure 600,000 may be hyperbolic; it is clearly rounded off. The passage includes other figurative language in 11:18 ("you have wept in the ears of Yahweh"--anthropomorphism) and 11:22 ("all the fish of the sea"--hyperbole).

Numbers 17:14 (16:49)[29]

The total 14,700 is given here for the number who died in the plague following the murmuring of Israel. This figure may reflect hyperbole in that it shows the large number of enemies among his own people defeated by King Yahweh.

[28]Allen, "Numbers," 728.

[29]The English verse numbers are in parentheses.

Numbers 25:9

A similar passage involving a plague occurs in Numbers 25. Here it is said that 24,000 died as a result of certain of Israel's leaders following Baal of Peor. Again, the glory of God is revealed in the large number of those who opposed him and were killed.

Numbers 26:7-51

The census taken prior to the entry into the land reflects how God had done away with all of Israel who rebelled at Kadesh-Barnea and replaced them with a new, more willing generation. That the new generation had been purified is noted in the slightly fewer numbers (601,730 versus 603,550), a lessening ostensibly due to the punishments involved in 16:35, 17:14, and 25:9. Still the totals are sufficiently close to those of Numbers 1 to indicate that Israel was still a nation made great by Yahweh her redeemer, a nation as numerous as the sands of the sea or the stars of heaven. The hyperbolic totals may be seen as reflecting 10 times the original total of perhaps 60,173. Though the problem of the radical changes in the numbers in the individual tribes is outside of the purview of this present work, one comment is in order. If the totals are taken as hyperbolic, the actual change reflected in Simeon's totals from Numbers 1 to Numbers 26 is less severe.

Numbers 26:62

The number given for the tribe of Levi has increased to 23,000. This might be expected due to the significance of this tribe who remained faithful throughout the various revolts. It may still be seen as hyperbolic.

Numbers 31:1-12

The large numbers of this passage may or may not reflect hyperbolc.

These numbers as given are certainly of feasible size, even for a reduced militia of 60,173. The context is similar to other ANE inscriptional literature in that it is in a military context of battle.

Numbers 31:13-54

This passage fits the inscriptional pattern of ANE literature in that it lists a very high amount of spoil taken in a military conflict. Too, the Standard Military Formula is present in 31:14, 48, 52, and 54. These facts may indicate that hyperbolic numbers are in the near vicinity.

Joshua 4:13

Joshua 4:13 is again a military context, recording the total of the men equipped for war from the tribes of Reuben, Gad, and the half-tribe of Manasseh. Verse 14 speaks of Yahweh exalting Joshua "in the eyes of all Israel," a phrase which may evoke a hyperbolic number to reflect that glory.

Joshua 8:1-29

Joshua 8:3 may or may not be hyperbolic. The figure of 30,000 given for the number of those selected for ambush could reflect roughly half of the men available for conflict, with Joshua retaining the other half. It may be noted that the figure 30,000 is ten times that of the initial number employed against Ai (7:4). Since this is a military context, the figure could be viewed as hyperbolic to glorify Yahweh.

The "about 5,000 men" of 8:12 is obviously rounded off. However, it may or may not be hyperbolic. These may represent yet a second contingent set in ambush, but the passage is difficult to interpret. It is certainly a military

context, and therefore may be hyperbolic in order to glorify Joshua (and Yahweh).[30]

The account of the number of people of Ai who were killed in the battle in 8:25 is possibly hyperbolic. Shiloh estimates the surface area of Ai in the early Bronze age at 108 dunams,[31] but it is unclear which of the sites he considers to be Ai. This would yield a population at that time (ca. 2300 B.C.) of about 4,860. It certainly could have achieved an adult population of 12,000 by the Iron Age, and a proportionate increase in the area of the city proper would not be necessary if suburban refugees had entered the city for protection.

Judges 1:4

This is perhaps typical inscriptional or annalistic genre. It is a military context of the continuing work of conquest following the death of Joshua. The King is Yahweh (cf. 1 Samuel 8:7) who sends his emissary Judah to fight, and the victory is won. Ten thousand are defeated. The pattern is similar to that of the monolith inscription of Shamshi-Adad V (ca. 824-811) in that an emissary is sent to fight for the king.[32]

Judges 7:1-18

Note 7:12 which includes the hyperbolic expressions: "as numerous as

[30]For a survey of the various interpretations of this conflict at Ai, see Marten H. Woudstra, *The Book of Joshua*, New International Commentary on the Old Testament (Grand Rapids: Eerdman's, 1981), 132-43.

[31]Yigal Shiloh, "The Population of Iron Age Palestine in the Light of a Sample Analysis of Urban Plans, Areas, and Population Density," *BASOR* 239 (1980): 31. For a discussion of the various sites thought to be Ai, see E. M. Blaiklock and R. K. Harrison, editors, *The New International Dictionary of Biblical Archaeology* (Grand Rapids: Regency, 1983), s.v. Ai.

[32]See chapter four of this dissertation.

locusts, and their camels were without number, as numerous as the sand on the seashore." It may be that such hyperbolic language includes the large numbers in the context as well.

Judges 8:4-27

This passage is similar to ANE inscriptional or annalistic genre in 8:10 (15,000 men remain after 120,000 have fallen) and similarly in 8:26 (a record of spoil), though the latter could certainly be understood as actual value.

Judges 12:6

The text reveals that 42,000 were slain for mispronouncing "Shibboleth,"[33] a slaughter which in number exceeds either census total for that tribe in Numbers 1 (40,500) or in Numbers 26 (32,500). Even allowing Ephraim to increase its population of warriors after the Conquest to the period of the Judges from 32,500 to 42,000 does not alleviate the problem of the enormity of the number of slain. By seeing the numbers as similar to ANE inscriptional or annalistic genre employing hyperbolic numbers one has no problem regarding historicity nor demographic data. It is unusual in that it is Israel's own Ephraimites rather than some other enemy who perished in the battle and at the river ford. Jephthah may be seen as the judge-emissary of King Yahweh.

Judges 15:9-20

It may be that the 3,000 men who came to Samson and the 1,000 Philistines he killed with the jawbone of an ass are meant to be understood hyperbolically. Samson as judge is the emissary of King Yahweh, to whom

[33]See note 13 on this passage in chapter one of this dissertation.

Samson gives credit for the victory (v. 18). There is figurative language (simile) in verse 14 and poetry included at verse 16. These factors may indicate the hyperbolic use of the numbers as a literary device.

Judges 20:1-48

This passage also serves as an example of annalistic literature which incorporates hyperbolic numbers. The major problem here is that there is no king in Israel, nor even a judge as an emissary (cf. 21:25). However, Yahweh's presence was represented by the ark of the covenant which was there at that time (20:27) and Yahweh may in this manner serve in the role of the king here. The interplay between the large numbers and the very small (20:31, 39) may also be an indicator that the large numbers are hyperbolic. Figurative language is also involved in the passage at 20:40: "the entire city went up to heaven."

Judges 21:10

Inasmuch as this passage is a continuation of the story of Judges 20:1-48, the figure of 12,000 is perhaps also hyperbolic.

1 Samuel 4:1-11

The totals of Israelite slain are very high (4:4, 10). Appealing to Mendenhall's thesis (see chapter six below), McCarter states that "a figure of 30,000 is out of the question."[34] Though there is no king involved to glorify, Yahweh is present using the Philistines to defeat Israel (cf. 4:3), and thus the figures may be hyperbolic.

[34]P. Kyle McCarter, Jr., *I Samuel*, The Anchor Bible 8 (Garden City, New York: Doubleday & Co., Inc.), 107.

1 Samuel 6:19[35]

The fact that this text originally probably indicated only 70 individuals and was later embellished to 50,070 is perhaps indicative that the practice of literary hyperbole was not completely dead at the time the variant was added.

1 Samuel 11:6-11

This passage is similar to ANE inscriptional or annalistic accounts which includes hyperbolic numbers, glorifying Saul in his early days as king. One notes the higher numbers of the LXX, 4QSam^{a} and Josephus (see chapter two above).

1 Samuel 13:2-7

Notice particularly 13:5, which includes the hyperbolic expression "like sand which is on the seashore." Its presence may indicate that the large numbers also are hyperbolic. The variant of Lucian and the Syriac version (3,000 chariots versus Masoretic Text's 30,000) would alleviate the problem if accepted and the numbers could simply reflect a rounding off.

1 Samuel 15:4

This is still another of the typical inscriptional or annalistic accounts with a battle context. Saul is king, yet an emissary of Yahweh.

1 Samuel 17:5

The weight of the scale armor would have been 125 pounds @ .4 oz. per shekel. This would not be an impossible weight for a giant to bear. However, reading (with good evidence in the near environment) the variant ארבה

[35]Reading with the preferred variant of 70 versus the MT's 50,070 eliminates the hyperbole. See chapter two of this dissertation for the text-critical discussion.

(supported by Lucian and several LXX manuscripts) for MT's ששׁ in 17:4 would suggests Goliath's height to be 6' 9" instead of 9' 9". If accepted, a 5,000 shekel helmet may have been too large and the figure therefore hyperbole. This is *not* to affirm that the event did not happen, nor that Goliath was not a giant, nor that he did not possess terrifying strength. It is to affirm that there may have been hyperbolic numbers used as a literary device to heighten both the terror Goliath brought to Israel and the glory of Yahweh who could defeat the giant by using a mere slip of a lad bearing a slingshot.

2 Samuel 6:1

The figure 30,000 for all the chosen men of Israel under David's united command is certainly in line with known population data, and perhaps should not be considered hyperbolic. However, the account is typical and the fact that the LXX reads 70,000[36] may indicate that the numbers were understood as hyperbole. Could it be that the LXX translators understood the large numbers as such and therefore felt free to increase the numbers even more?

2 Samuel 8:1-18

This passage reflects classical royal inscription or annalistic literature. David is the king, emissary of Yahweh, and made a name for himself (8:13). There are numbers killed, captured, and spoil taken. The numbers are probably hyperbolic, as the author is attempting to demonstrate the greatness of David as a warrior (8:3-8), builder (8:13-14), and administrator (8:15-18). All this is done to demonstrate how Yahweh blessed him (cf. 7:18-29).

[36]See the text-critical discussion of this passage in chapter two above.

2 Samuel 10:1-19

One notes particularly verse 18 wherein it is said that David "killed 700 chariot(eer)s and 40,000 horsemen." This appears to be figurative language, initially synecdoche where the individual is put for the group (David represents the troops of Israel), but also in the numbers slain. The context reflects annalistic or inscriptional genre.

2 Samuel 18:1-8

One notes the Standard Military Formula in 18:1, the figurative use of comparing David to 10,000 troops in 18:3, and the Standard Military Formula reappearing in 18:4. One notes as well the figurative language used in 18:8, where the forest and the sword are personified as devouring people. The presence of the Standard Military Formula coupled with other figurative language in an immediate context may be an indicator that hyperbolic numbers are present. The purpose here would be to demonstrate the legitimate rule of David versus the revolt of Absalom.

2 Samuel 24:1-25

A census, meant for David's glory, reflects instead the glory of Yahweh. The numbers may therefore be hyperbolic.

1 Kings 5:1-5:30 (4:21-5:16)[37]

This passage reflects classical royal inscription and annalistic accounts by depicting Solomon's greatness. Notice the hyperbolic term concerning the numbers of the nation in 4:20: "as numerous as the sand of the sea." Notice as well that this section concerning Solomon's greatness closely follows his own

[37]See text-critical discussion in chapter two above.

prayer in a manner similar to that of David in 1 Samuel 7-8. Solomon is said to have ruled over a vast empire in a time of peace. He had numerous stables, horses, and horsemen. His wisdom was also said to be "like the sand that is on the shore of the sea" (5:9). He wrote 3,000 psalms and 5,000 proverbs (5:12). The passage is filled with large numbers which may be hyperbolic.

1 Kings 8:62-66

Though one may certainly affirm that a great sacrifice occurred at the dedication of the Temple, the pattern seems to reflect hyperbole which magnifies King Solomon and reflects an appropriate sacrifice to make to Yahweh.

1 Kings 10:26-29

One notes the hyperbolic language in 10:27 wherein silver was as common as stones and cedars as plentiful as sycamores. This may indicate that the numbers in 10:26 are hyperbolic--they certainly fit the annalistic pattern.

1 Kings 12:21-24

The figure of 180,000 may be hyperbolic in this military context to glorify King Rehoboam as the legitimate successor to all of Israel.

1 Kings 20:29-30

This is again similar to ANE inscriptional or annalistic literature. Note the figurative language in 20:27 depicting the smallness of Israel versus the vastness of the Syrians. The hyperbolic numbers describing those killed in battle (100,000) and those killed by the collapse of the wall (27,000) employ this imagery to demonstrate the greatness of the defeat of the Syrians by little Israel under the hand of Yahweh.

2 Kings 3:4

These large figures could be rounded off actual value, or may reflect hyperbole in that although Jehoram was not a good king (cf. 3:3), God still supported his people with the produce of the Moabites. One notes that the King of Moab at this time was Mesha', apparently the author of the Moabite Stone (Mesha' Inscription) which records a victory for Moab in typical royal inscriptional fashion. He even claims victory over Israel by defeating 7,000 of Israel's troops![38]

2 Kings 19:35

The whole context gives glory to Yahweh, and the large number of 185,000 is appropriate to the work of the angel of the Lord. It is not accidental that the largest numbers in military contexts in the Old Testament depict the numbers of the people of God or the numbers of those who are God's enemies who are slain (cf. 1 Chronicles 5:21-22).

1 Chronicles 5:18-22

This passage is similar to ANE annalistic or inscriptional literature which here reflects the glory of Yahweh in delivering his people who trusted in Him (cf. 5:20, 22).

1 Chronicles 7:1-40

This is the census type, which contains the unusual figure of 22,034.[39] The other numbers appear to be hyperbolic.

[38]See appendix one below.

[39]This number is a rare exception in that it contains digits and tens. There are only two such larger numbers in pre-Exilic literature. The other reference is Numbers 3:43.

1 Chronicles 12:9-41 (8-40)

This passage is unusual in that it includes large numbers, larger numbers, and largest numbers (as defined in chapter one of this dissertation). It is of the census type containing both poetical hyperbole in 12:15 (14) and the Standard Military Formula in 12:21 (20) either of which may indicate that hyperbolic numbers are present. The sudden elevation of the numbers of troops mentioned subsequent to Benjamin from large numbers to larger numbers may also indicate that the latter figures are hyperbolic.

1 Chronicles 18:1-17

This passage is similar to ANE annalistic or inscriptional literature which parallels 2 Samuel 8. See chapter two for a discussion of the textual difference between 18:4 and 2 Samuel 8:4.

1 Chronicles 19:1-19

This passage is similar to ANE annalistic or inscriptional literature, glorifying King David.

1 Chronicles 21:1-17

This is the Chronicler's census account. Is there an indicator of the actual number in Joab's words of 21:3? This would make the actual total of the standing army in the nation 15,700 as contrasted with a militia of the invading force of Joshua of 60,173. The number 70,000 may be hyperbolic, which is appropriate for the work of the destroying angel.

1 Chronicles 22:14

Converting the figures 100,000 and 1,000,000 into shekel weights yields 300,000,000 shekels (3,750 tons of gold) and 3,000,000,000 shekels (37,500 tons of

silver) respectively. It is easy to see how God could say in Haggai 2:8: "The silver is mine and the gold is mine." But it is difficult to see these figures as anything but hyperbolic.

1 Chronicles 23:1-6

This passage is similar to ANE annalistic and inscriptional accounts, glorifying King David. It is particularly Israelite in nature in that it includes numbers of Levites who served Yahweh under David.

1 Chronicles 26:20-28

This passage is significant in that it reflects typical inscriptional and annalistic genre which could include hyperbolic numbers (note the SMF in 26:26) but does not.

1 Chronicles 27:1-24

This is the census type, which includes the SMF in v. 1 and a reference to God's promise to Abraham in v. 23: "as the stars of heaven."

1 Chronicles 29:1-9

This passage is similar to ANE annalistic and inscriptional accounts which includes the SMF (29:6) and glorifies King David and Yahweh. The figures of verse 4 and 7 may be seen as even more gloriously significant if darics are translated into shekels[40] yielding 9,000,000 million shekels of gold (112.5 tons) and 21,000,000 shekels of silver (262.5 tons) in 29:4; and in 29:7

[40]The daric is equal to about 2.5 shekels. Cf. J. Barton Payne, "1, 2 Chronicles," in *The Expositor's Bible Commentary*, ed. Frank E. Gaebelein (Grand Rapids: Zondervan, 1988), 4:437. One must note below the incredible amount of doubtlessly refined iron so early in the Iron Age!

15,025,000 gold shekels (187.8 tons), 30,000,000 silver shekels (375 tons), 54,000,000 shekels of brass (675 tons) and 300,000,000 shekels of iron (3,750 tons). The present writer is not suggesting that these figures are in error. This is not an issue if the figures were originally understood to be hyperbolic.

2 Chronicles 1:1-2:17

This passage is similar to ANE annalistic and inscriptional accounts of Solomon's reign, parallel to the 1 Kings 4-5 passage. For textual differences involving the numbers, see chapter two of this dissertation.

2 Chronicles 4:5

The difference between the 3,000 here and the 2,000 in the parallel in 1 Kings 7:26 may be explained either text-critically or as literary hyperbole. The present writer prefers the former in this case.

2 Chronicles 7:4-7

See the parallel account in 1 Kings 8:63.

2 Chronicles 9:25-28

See the parallel account in 1 Kings 10:26-29.

2 Chronicles 11:1

See the parallel account in 1 Kings 12:21-24.

2 Chronicles 12:1-12

This passage is similar to ANE annalistic and inscriptional accounts, ostensibly offered here to magnify Shishak of Egypt. One notes the expression "the people. . . were without number" (12:2), a hyperbolic expression in the same verse as the large numbers which depict Shishak's troop strength.

2 Chronicles 13:1-19

This is similar to ANE annalistic and inscriptional accounts. Notice how God routed the men of Israel (13:5). The 500,000 listed as slain in 13:17 is the largest specific number of killed in all the ANE literature available to the present writer, a number appropriate for Yahweh in battle. It is ironic that not even Assyria's hordes destroyed by the angel of Yahweh (185,000) could match the size of those of Israel which God himself destroyed. The irony may be seen despite the hyperbole.

2 Chronicles 14:1-14

This passage is similar to ANE annalistic and inscriptional accounts, glorifying both Asa and Yahweh. Notice the figurative language in Asa's prayer of 14:11: "those who have no strength" although their combined numbers are given at 580,000 versus 1,000,000 for Zerah "the powerful" (רַב). Notice also the general terms for large amounts of spoil in 14:13-15. The large numbers may be hyperbolic.

2 Chronicles 17:10-19

This passage is the typical census account, complete with the SMF, but also reflective of the annalistic genre, glorifying Jehoshaphat (cf. 17:12).

2 Chronicles 25:5-13

This passage is similar to ANE annalistic and inscriptional accounts, including SMF and a census.

2 Chronicles 26:6-15

This passage is similar to ANE annalistic and inscriptional accounts, glorifying Uzziah.

2 Chronicles 27:1-9

This passage is similar to ANE annalistic and inscriptional accounts, glorifying Jotham.

2 Chronicles 28:1-15

This passage is similar to ANE annalistic and inscriptional accounts, but the large hyperbolic numbers are reflective of the glory of Yahweh who was punishing Ahaz for his wickedness.

2 Chronicles 30:23-27

This passage is similar to ANE annalistic and inscriptional accounts, glorifying Hezekiah.

2 Chronicles 35:7-10

This passage is similar to ANE annalistic and inscriptional accounts, glorifying Josiah.

Chapter Summary

This chapter has endeavored to demonstrate how the majority of large numbers in the Old Testament may fall into the category of literary hyperbole for the purpose of glorifying a given king. Indeed, it may be unusual for a large number not to fall into this category (see appendix two).

It may be noted here that although the scriptural passages considered do have features common to the ANE annalistic or inscriptional genre, the former are distinct from the latter in that these features in Scripture are usually woven into a rich tapestry of a theologically-centered historiography. The closest that Scripture offers to classic royal inscription genre are concerning David (2 Samuel 8:1-18; 1 Chronicles 18:1-17) and Solomon (1 Kings 5:1-32; 2 Chronicles 8-9) and are very close to the Neo-Assyrian pattern.

Hopefully, this chapter has demonstrated significant points of contact between the scriptural accounts which include large numbers and the common ANE royal inscription or annalistic genre which give credence to the hypothesis of this dissertation that hyperbolic numbers were both common in the ANE and were employed by the writers of Holy Writ in similar contexts and for similar purposes.

CHAPTER 6

ANALYSIS OF OTHER PROPOSALS

It is the purpose of this chapter to review and analyze other modern proposals in light of the data offered by this dissertation, in hopes of establishing that the hypothesis contained herein is a legitimate alternative for viewing the Old Testament's use of large numbers. These proposals include both those which have been published and a few other possibilities conjectured in the process of the research for this dissertation.

Published Attempts to Explain אלף

Perhaps the earliest modern attempt to explain the difficult problems associated with the Old Testament use of אלף was that of W. M. Flinders Petrie.[1] Petrie argued that אלף consistently meant "tent-group." As we have seen in chapter two of this dissertation, there does not seem to be much support for this rendering in every case. In fact, where אלף does not clearly mean "cattle" or "clan," it must be viewed as the numeral 1,000, because either the context or the syntax demands a number.

W. F. Albright attempted to point out the flaws in Petrie's reasoning.[2] He argued instead that the large numbers of the census lists of Numbers actually were derived from the population figures of the monarchy under

[1] W. M. Flinders Petrie, *Egypt and Israel*, 40-46.

[2] W. F. Albright, "The Administrative Divisions of Israel and Judah," *JPOS* 5 (1925): 20.

David.[3] However, this argument is based on the acceptance of the putative Priestly Code and on the assumption that the census lists of Numbers are "garbled versions" of the Davidic census, since "no census can well have been made before David's time."[4] For the scholar who prefers to understand that according to a normal reading of the biblical account there were indeed two censuses during the time of Moses, the first subsequent to the Exodus event and the second prior to the entrance into the land of promise, Albright's view is less than appealing.

A. Lucas in 1944 also found the numbers associated with the Exodus to be uncomfortably large. He argued for an adoption of Petrie's view on the basis of population growth figures and the actual population figures for the region in recent times.[5] Because of this reasoning by analogy, he states that the numbers offered in Scripture "are very much too high," and estimates the Exodus population at 10,363.[6] He thus reflects a common way of dealing with the large numbers in that he seeks a different meaning for אלף than that which is commonly understood. Accepting the large numbers as hyperbolic allows the meaning of אלף to fall within its normal semantic range.

Allrik in 1954 apparently accepted אלף as the numeral 1,000, although he did not specifically deal with the full implications of this choice in earlier historiographic literature. He concentrated rather on the divergent accounts

[3]Ibid., 21.

[4]Ibid.

[5]A. Lucas, "The Number of Israelites at the Exodus," *PEQ* 76 (1944): 167.

[6]Ibid.

of the censuses of Ezra 2 and Nehemiah 7.[7] He argued that the original account contained vertical and horizontal strokes (hieratics) which represented numbers rather than word-numerals found in current texts. This earlier numeral notation system can adequately explain the textual variations found in these two post-exilic censuses, according to Allrik. His study is valuable in that it points out a possible means by which numbers could have become corrupted in textual transmission.

Clark in 1955 spoke on the difficulty of accepting the large numbers at face value:

> Difficulties of this kind have long been urged as evidence of the unreliability of the Bible. It is alleged that the Bible writers let their fancies run away with them, that they exaggerated grossly in order to increase the seeming importance of the events they described, and so on. On the face of it this explanation does not seem likely. A modern writer wishing to make his readers believe in a wholly imaginary disaster would not say that a motor-car contained 2,500 persons, all of whom were killed in a road accident, or that a bomb fell on a school and slaughtered five thousand teachers and a quarter of a million children. Remarks of this kind would not impress a reader, they would at once raise suspicions as to the truth of the narrative. In this respect the position can hardly have been different in ancient times. How came it then that the stories were carried down and reverenced from one generation to another? There can be but one answer to this question. The original stories in the Bible must have been believable, and they cannot, therefore, have contained the huge numbers that we find in them to-day.[8]

One may take exception to Clark at this point. If the numbers were originally hyperbolic, they were not intended to be taken at face value. Rather, they were employed to make a point, either about the faithfulness of Yahweh to His covenant people in that He increased them from a family who

[7]H. L. Allrik, "The Lists of Zerubbabel (Nehemiah 7 and Ezra 2) and the Hebrew Numeral Notation," *BASOR* 136 (1954): 21-27.

[8]R. E. D. Clark, "The Large Numbers of the Old Testament--Especially in Connexion with the Exodus," *Journal of the Transactions of the Victoria Institute* 87 (1955): 83.

descended to Egypt and brought them forth a great nation like the sands of the seashore, or about the greatness of King David or King Solomon or other royal individuals. The Bible may indeed have included such numbers originally, and appeal to modern authors for comparison is untenable, since this particular style of literary hyperbole is not currently in vogue.[9]

Clark argued that we accept in the term אלף the meaning of "officers or mighty men of valor."[10] The totals offered in the censuses of Numbers 1, 2, and 26 were combinations of the meaning of אלף as 1,000 on the one hand and "officers" on the other. These two usages had been misunderstood at some point in the transmission process as both meaning "1,000," and the sums totaled accordingly. He at least attempts to deal with the problems derived from this viewpoint, specifically, Exodus 38 (the totals of gold and silver given to the Tabernacle fund based on the population of Israel's fighting men) and Numbers 3. His answers are not entirely satisfactory as there is no textual evidence of any variation of this kind in the totals given in those census lists, although one must at least admit the possibility of this having occurred prior to the standardization of the text. Understanding the numbers as literary hyperbole alleviates this tension, and allows the text to stand.

Mendenhall in 1958 attempted to build on the earlier views of Petrie,[11] who had argued that אלף consistently meant "tent-group," based in part on its use in passages such as Judges 6:15, Joshua 22:21, 1 Samuel 23:23, and Micah

[9]Indeed, there is evidence within the ANE and within Scripture itself that the practice of numerical hyperbole did not persist long beyond the period of the Exile.

[10]Clark, "The Large Numbers," 84.

[11]George E. Mendenhall, "The Census Lists of Numbers 1 and 26," *JBL* 77 (1958): 52.

5:1.[12] In a recent dissertation, Scolnic has argued that the burden of proof is on Mendenhall.[13] Scolnic writes:

> The writer of the Gideon story seems to know both meanings of the term 'eleph, "clan" and "thousand." In the same vein, Micah 5:1 knows the so-called "earlier" meaning of 'eleph, that of "clan," and Micah 6:7 has the so-called later meaning of "thousand." Mendenhall is forced to ask if Micah 5:1 is not "archaizing."[14]

After a thorough study of the use of אלף in early Hebrew poetry, Scolnic writes:

> A very important implication of the use of 'eleph in early poetry should be emphasized at this point. If it is used as a hyperbolic figure in such early texts, then the Mendenhall theory that its use in the census lists was misunderstood and "transformed" much later in history is cast in doubt. 'Eleph is used as a "poetic thousand" very early on, and in famous passages. We do not believe that this use of 'eleph, seen in early poetry, attested by Mendenhall himself in the period of the United Monarchy, and found in a large number of passages throughout the Biblical literature, was very misunderstood or transformed. 'Eleph as "thousand" and as "clan" co-exist in the Gideon story; the two meanings also seem to have co-existed early on in the development of literature. We believe that 'eleph meant "thousand," literally or hyperbolically/poetically, so early and so consistently in later periods that a misunderstanding would be impossible.[15]

Scolnic is to be commended for his analysis and refutation of Mendenhall.

Mendenhall also argued that the large numbers of the census lists of Numbers 1 and 26 are reflective of the military organization of the post-Exodus

[12]Ibid., 60-61.

[13]Benjamin E. Scolnic, "Theme and Context in Biblical Lists," (Ph.D. dissertation, Graduate School, The Jewish Theological Seminary of America, 1987), 54. Scolnic's conclusion is that the large numbers of the Old Testament should be considered "hyperboles of infinity" (p. 95). Though somewhat similar to the hypothesis of the present dissertation, Scolnic arrived at his conclusions by a differing path, and offers little in the way of textual analysis or ANE parallels of similar hyperbole.

[14]Ibid., 47.

[15]Ibid., 58-59.

Israel,[16] but have been inflated to mirror the numbers of the monarchial period. He writes:

> If the preceding reconstruction is correct, it follows that the author of the priestly history had access not only to earlier narratives, but also to documents of the sort recently discovered in the mounds of Alalakh and Mari. He did not merely copy them, but attempted to interpret them in the light of what he knew concerning military and social organization. Since what he knew was derived almost entirely from the period of the monarchy, this served as the analogy for the interpretation.[17]

This view is not satisfactory inasmuch as it neither encourages confidence in the text, nor considers the normal semantic understanding of אלף in contexts of other numbers. Too, the presupposition of the existence of a Priestly writer runs contrary to the traditional view of the origins of the text.

Driver in 1960 attempted to explain at least some of the problematic passages in terms of misunderstood abbreviations.[18] Although there is apparently some evidence that abbreviations were used for numerals at times, it is difficult at best to determine how frequently those abbreviations occurred. It is also doubtful that each problematic passage containing large numbers in the Old Testament can be explained away by this means. It therefore must be considered too incomplete to be of comprehensive use, although it may help in certain passages.

Segal in 1965 attempted to explain the large numbers of the historical passages as simply representative of the symbolic meanings of numerals as a

[16]Mendenhall, "Census Lists," 60.

[17]Ibid., 65.

[18]G. R. Driver, "Abbreviations in the Massoretic Text," *Textus* 1 (1960): 125; idem., "Once Again Abbreviations," *Textus* 4 (1964): 76-94.

whole.[19] He argued that 10,000 represents an army; 20,000 represents a large army; and 22,000 represents a large national force.[20] He concluded:

> In brief, then, where Israelite historians and story-tellers had freedom to choose numerals at their own discretion, in fact they were bound to follow certain traditional conventions. Each number had its own significance; and each context dictated the choice of a numeral.[21]

This view may have some merit; more research could be done along these lines. However, it currently suffers from two serious flaws. First, it does not support a high view of Scripture in that it does not allow smaller numbers (less than 1,000) to represent actual value. Second, it does not adequately explain the largest numbers of the census lists nor those which may exceed 22,000 by an odd amount (the 603,550 of Numbers 1 and 2 or the 185,000 of Isaiah 37:36 for instance).

Wenham in 1967 offered the most comprehensive attempt at explaining the difficulties of the large numbers of the Old Testament.[22] He argued that אֶלֶף and אַלּוּף were at times confused (*à la* Clark), and that מֵאָה can sometimes refer to a small military unit. He then attempted to demonstrate this theory throughout several problematic passages. He himself admitted that "there is too much conjecture and too many chains of reasoning behind many of the suggested solutions to the problems to allow great solidity of assurance as to the correctness of the details."[23] His conjectures involve some emendations of the text, a practice deemed unacceptable by many conservatives. Yet Payne,

[19]J. B. Segal, "Numerals in the Old Testament," *JSS* 10 (1965): 2-20.

[20]Ibid., 7.

[21]Ibid., 20.

[22]J. W. Wenham, "Large Numbers in the Old Testament," *TynBul* 18 (1967): 19-53.

[23]Ibid., 52.

who does not buy into all of Wenham's arguments, elects to follow Wenham's proposal concerning אֶלֶף and אַלּוּף in a number of passages in Chronicles.[24] Wenham's new meaning ascribed to מֵאָה seems to be a bit fanciful, having no cognate support. His work is valuable in its broad scope, and serves as a thorough introduction into this very complex issue.

Recently, M. Barnouin has tried to relate the large numbers of the censuses to Babylonian mathematics.[25] Barnouin's works are valuable in that they offer some valid insight into the unusual distribution of the individual numbers. For instance, the fact that the numeral eight does not appear at all in the twelve individual lists of Numbers 1 or 2,[26] and that the numerals one and nine occur only once each may indicate that the numbers are certainly not random.[27] However, although it may be that the enormous numbers of the

[24]J. Barton Payne, "The Validity of the Numbers in Chronicles," *BSac* 136 (1979): 206-20.

[25]M. Barnouin, "Remarques sur les tableaux numériques du livre des Nombres," *RB* 76 (1969): 351-64; idem., "Les recensements du livre des Nombres et l'astonomie babylonienne," *VT* 27 (1977): 280-303. Barnouin's difficult calculations are enlightened somewhat by the work of Martin Hoegger, "L'interpretation des grands nombres dans l'Ancien Testament," *Hokhma* 25 (1984): 2-12. Dwight Young has also recently suggested that Babylonian mathematics plays an important role in understanding numbers in the Old Testament, particularly those as applied to the lengths of life of the antediluvians and the Patriarchs. Cf. Dwight Wayne Young, "On the Application of Numbers from Babylonian Mathematics to Biblical Lifespans and Epochs," *ZAW* 100 (1988): 331-61; idem., "The Influence of Babylonian Algebra on Longevity among the Antediluvians," *ZAW* 102 (1990): 321-35. Young's work may be criticized for the same reasons as Barnouin's in that Israel used a decimal system similar to that of Egypt rather than that of Babylonia. Too, even relating the largest numbers to Assyrian inscriptions militates against the Babylonian sexagesimal method because, though Assyria employed a sexagesimal system at times, the number syntax employed in larger numbers is the same as in the decimal system used by Israel.

[26]One notes the numeral eight in the summary of the three tribes of Num. 2:9 at 186,400. Since this number does not fit Barnouin's system, it is omitted from his consideration. However, one might add to his point the lack of the numeral nine in all but two of the 220 larger numbers of the Old Testament. See appendix three.

[27]Barnouin, "Remarques," 353.

Old Testament arose as a result of exposure to Babylonian mathematics during the Exile, three facts remain. First, Israel utilized a decimal system, not the sexagesimal system of the Babylonians. Second, the number syntax employed by Israel in their large numbers is similar to the number syntax employed by the Assyrians in their royal inscriptional material.[28] Third, we have no textual evidence to support significantly smaller numbers in earlier texts.[29] These facts would seem to support the hypothesis of this present dissertation rather than the theories of Barnouin.

Barnouin may also be criticized on the following points. First, much of Barnouin's argument in the first article is based on reducing the tribe of Gad from 45,650 to 42,100 (Num. 1:24), and reducing the tribe of Reuben from 43,730 to 42,000 (Num. 26:7).[30] These reductions are justified respectively on the basis that 3,550 is the surplus over the basic 600,000 in Numbers 1 and that 1,730 is the surplus in Numbers 26:

> Quant à l'anomalie concernant les 12 nombres de tribus, à savoir que tous sont multiples de 100, sauf un, elle s'explique si l'on suppose que, d'abord tous étaient multiples de 100, puis que l'on a fait à l'un d'eux l'addition du supplément: 3,550 dans un cas, 1,730 dans l'autre. Les nombres primitifs auraient été pour Gad (premier recensement) de 42,110; pour Ruben (deuxième recensement) de 42,000.[31]

Secondly, other parts of Barnouin's argument are based on a solar year of 365 days.[32] This seems highly irregular in view of the fact that Israel employed a

[28] See chapter four of this present dissertation, footnote 20.

[29] Though it would not surprise the present writer if such texts were discovered, one would still doubt Barnouin on the basis of the first two points above.

[30] Barnouin, "Remarques," 356.

[31] Ibid. The 42,110 cited in Barnouin is obviously a typographical error for 42,100.

[32] Ibid., 355.

lunar year of 360 days. These two facts also bring Barnuoin's argumentation into question.

Ronald Allen, professor of Hebrew Scripture at Western Conservative Baptist Seminary, suggested in 1990 that the largest numbers involved in the book of Numbers were "power words."[33] The largest numbers were "deliberately and purposefully exaggerated as a rhetorical device to bring glory to God, derision to enemies, and point forward to the fulfillment of God's promise to the fathers that their descendants will be innumerable, as the stars."[34] He suggests that the numbers of the census lists were embellished ten-fold.[35] It is apparent that Professor Allen and the present writer were simultaneously coming to somewhat similar conclusions independent of one another.[36] The present dissertation explores the issue of large numbers more broadly across numerous biblical passages, and offers significant text-critical, demographic, ancient Near Eastern, and contextual corroboration. These things Allen did not demonstrate, though his cursory work serves heretofore as the best overall survey of the issue from a conservative perspective.[37]

Hallo in 1991 proposed that אֶלֶף refers to a military unit averaging ten men (similar to Wenham's use of מֵאָה). He writes:

[33]Ronald B. Allen, "Numbers," in the *Expositor's Bible Commentary*, edited by Frank E. Gaebelein (Grand Rapids: Zondervan, 1990), 2:689.

[34]Ibid., 688.

[35]Ibid.

[36]Research for the present dissertation began in 1987.

[37]There is no need to adopt Allen's position concerning Exodus 38:25-26 that the numbers were "inserted into the text of Exodus on the basis of the census of Num. 1-4" (cf. Allen, "Numbers," 690, n. 47). If one breaks down the weight of silver into shekels alone, its number too may be seen as hyperbolic. See chapter five of the present dissertation.

> Specifically, it may be noted that both lists (unlike the comparable census in I Chron. 12) always include hundreds as well as thousands. In fact, then, it can be argued that the original lists used at most hundreds in a numerical sense, while the word translated (and indeed understood by the redactor) as "thousands" was actually here (and demonstrably elsewhere in the Bible) a term for a military unit. This unit averaged ten men, that is, less than a modern army's platoon but well attested in ancient warfare from the *usrātu* of Hammurabi's Babylon and the *emanti*-units of Hurrian Nuzi to the *decuriae* of Rome. On this basis the individual entries in both lists add up, not to the incredible 600,000-odd referred to in Numbers 2:32 (and Exodus 12:37 and 38:26), but to just under 600 platoons of 6,000 men. The latter figure is not incompatible with the armies of the ancient Near East.[38]

Several points need to be addressed concerning Hallo's work. His statement that the term for "thousands" (אֶלֶף) can be demonstrated as referring to a small military unit in other portions of Scripture has been shown to be untenable in view of the results of chapter two of the present dissertation.[39] His view that the large numbers of the censuses arose from the misunderstandings of a redactor does not engender confidence in the text.[40] Though his point is well taken that a 6,000 man army was typical for the ancient Near Eastern world, that fact in and of itself does not preclude the possibility of literary hyperbole in accounts of historiographical nature (witness the vastly higher numbers in other ANE literature in chapter four of the present dissertation).

Other Possibilities

These other possibilities are not offered as competition to the hypothesis of literary hyperbole in the use of large numbers in the Old Testament. They are rather included to demonstrate the thought processes of the present writer. Each of the possibilities below was rejected in the light of the evidence

[38]W. W. Hallo, *The Book of the People* (Atlanta: Scholar's Press, 1991), 82.

[39]Hallo offers no documentation for this statement.

[40]Too, he does not deal with the odd 50 in each of the two censuses of Numbers.

which supports the present hypothesis. While it is admitted that future research may yield answers more satisfying than those appearing above, and that those answers may be found in the realm of the following possibilities, at present these do not satisfy in the way that literary hyperbole does for the use of large numbers in the Old Testament.

אלף as a Determinative

It was conjectured in the research for this present dissertation that perhaps אלף served as a determinative indicating "a large number" in much the same way that DINGIR functioned in Sumerian to indicate a deity or that uru functioned in Akkadian to indicate a city. In the census lists of Numbers 1, for instance, taking אלף as a determinative would reduce the totals from 603,550 to 6,148. However attractive it may appear to reduce the larger numbers, there does not seem to be any evidence of any other determinatives functioning in this fashion in the Hebrew Old Testament. Nor does there appear to be any textual evidence to suggest different genders for those numerals which modify אלף, something which one might expect if אלף were meant to be taken as a determinative.[41] It would also be difficult to determine when אלף appeared as a numeral and when it appeared as a determinative. This hypothesis was therefore rejected as invalid.

אלף Means "Soldier"

If אלף were to be read as an indefinite "soldier" (or "troop"), many difficult passages could be rendered sensible. The 42,000 Ephraimites which perished because they could not pronounce "shibboleth" could be reduced to as

[41]There remains the possibility that אלף functioned in this manner before the aramaizing of the script.

few as 42 soldiers (Judges 12:6). The massive wall which fell on 27,000 Syrians at Aphek would have perhaps killed only 27 soldiers (1 Kings 20:30). This interpretation of אלף would satisfy most of the military contexts outside of the census lists, but it is not entirely without problems. For instance, Judges 20:35 or any other verse which included numbers less than 1,000 would provide a problem. Further research could be done in this area.

אלף Means the Numeral 1,000, but the Syntax has been Misread

If the largest numbers are read in the standard sequence of thousands, hundreds, tens, and digits, then the largest numbers (such as those found in the census lists) could be read as much smaller. The problem would have been reading them improperly in the past. Simeon's 46,500 could be seen to be only 1,546, for example. This would satisfy the specific and precise number seemingly demanded contextually. It would also reduce the total population of Israel at the time of the Exodus to about 72,000 people.[42] However, the normal gender disagreement of numerals would have to be violated to do this, and the totals given in the census lists themselves would have to be considered long in error (but not originally). There is no textual evidence to suggest different genders to result in different totals, but there is at least one group of LXX manuscripts which do invert certain of the largest numbers in just this fashion.[43] Overall, the bulk of the evidence is contrary.

[42]This figure would reflect normal population growth from a base of 70 people if population doubled every 40 years for 430 years.

[43]Minuscule 71 does so in Numbers 1; minuscules d (44) and m (72) do so in Chronicles. This could prove to be an interesting study for one inclined to pursue it throughout the OT.

The Large Numbers are Meant to be Factored

In this hypothesis, each large number is meant to be factored to find the hidden, secret value of the number. This was the practice of some earlier scholars (including E. W. Bullinger) who preferred to see symbolic or spiritual value in the numbers of Scripture.[44] However, this method quickly breaks down with the largest numbers of Scripture, as most do not neatly factor down into multiples of the prime numbers. This hypothesis must also be rejected as invalid.

Gematria

The practice of gematria is the practice of assigning numerical value to letters of the alphabet, names or phrases for the purpose of interpretation.[45] A classic case cited for the merit of gematria is Genesis 14:14. In this verse, Abram is said to have taken 318 armed men with him in his pursuit of the captors of Lot. Since the numerical value of the name of Abram's only heir at the time (Eliezer) was 318 (the total of the numerical value for each Hebrew letter of his name), some have been led to interpret this verse as meaning that Abram took only Eliezer with him![46] Another example is found in Revelation 13:18, which explains the number of the beast as being the number of a man,

[44]For such studies see M. Maham, *Palmoni; or, the Numerals of Scripture* (New York: D. Appleton and Company, 1863); Ethelbert W. Bullinger, *Number in Scripture*, reprint (Grand Rapids: Kregel Publications, 1967); and more recently Gerald T. Kennedy. "The Use of Numbers in Sacred Scripture," *American Ecclesiastical Review* 139 (1958): 22-35. J. B. Segal, "Numerals in the Old Testament," 2-20, seems to move beyond these writers to a more sensible approach (see above discussion).

[45]For a short history of the origin of the term gematria, see Shmuel Sambursky, "On the Origin and Significance of the Term Gematria," *Journal of Jewish Studies* 29 (1978): 35-38.

[46]Cf. Driver, "Abbreviations in the Massoretic Text," 126.

666. Could this sort of thing be happening in the census lists of Numbers, for instance? It is not without precedent in the ANE. Sargon II is said to have built a wall around Nineveh to a length of 16,283 cubits, "the number of my name."[47]

It was conjectured that the actual large numbers of Numbers 1 and 2, for instance, while reflecting literary hyperbole, may have originated in the practice of gematria. The census recorded therein may reflect the literary purpose of demonstrating how Yahweh had indeed increased the people of Israel from a family of 70 to a nation of several thousands. Though Davis argues against the practice of gematria in Scripture (save for the one example in Revelation 13),[48] one must not fail to notice the following comparison of the numerical value of the prophecies of the tribes in Genesis 49 with the totals given for the tribes of Israel after the Exodus. One notes especially the numbers for the tribe of Judah (in bold print). Taking the total numerical value of the prophecy[49] concerning Judah and multiplying it by the biblically complete number seven yields 74,536.[50] This figure rounded up to the nearest hundred yields the exact figure of Numbers 1 (74,600)! One notes

[47]Daniel David Luckenbill, *Ancient Records of Assyria and Babylonia* (Chicago: The University of Chicago Press, 1927), volume 2: *From Sargon to the End*, § 121. For a discussion of this unique expression, see chapter four of this present dissertation.

[48]John J. Davis, *Biblical Numerology* (Grand Rapids: Baker Book House, 1968), 149.

[49]It is readily admitted that this numerical value could fluctuate somewhat depending on the presence or absence of *matres lectionis*.

[50]For a discussion on the significance of the number seven, see G. R. Driver, "Sacred Numbers and Round Figures," in *Promise and Fulfillment*, ed. F. F. Bruce (Edinburgh: T & T Clark, 1963), 66-67.

as well that Judah is the largest of the tribes, hence the most significant, a fact which is in keeping with Jacob's prophecies of Genesis 49:8-12.

TRIBE	GEN. 49 VALUE	MULT. FACTOR	TOTAL	NUM. 1 TOTAL
Reuben	7,687	6	46,122	46,500
Simeon/Levi	8,557	7	59,899	59,300 (Simeon)
Judah	**10,648**	**7**	**74,536**	**74,600**
Zebulun	2,184	25	54,600	57,400
Issachar	4,565	11	50,215	54,400
Dan	3,990	16	63,840	62,700
Gad	310	147	45,570	45,650
Asher	1,673	25	41,825	41,500
Naphtali	2,295	23	52,785	53,400
Joseph	19,947			40,500: Ephr.
				32,200: Manas.
Benjamin	1,669	21	35,049	35,400

Although the possibility of gematria looks good for explaining the presence of such large numbers in the census list of Numbers 1, many questions remain. Why don't all the numbers utilize the same multiplicative factor of seven? Might it be that Moses used other contexts than Genesis 49 for the gematria values assigned to the other tribes? If so, which were used? This would almost certainly have to be the case for Ephraim and Manasseh, since they are unmentioned in Genesis 49. If the numerical values of the prophecies of Genesis 49 were used to provide the numbers, how were the

various multiplicative factors chosen? Ostensibly, if some form of gematria is involved here, the reason must be theological, in that Moses sought to demonstrate to Israel how Yahweh had blessed His people and how He had caused them to grow from a small number at the descent into Egypt to an innumerable host at the Exodus, all in accordance with the prophecies offered by Jacob as he neared his death in Genesis 49. Perhaps it will be later discovered that Moses (or a later redactor) used twelve different contexts from which to derive numerical values, all of which when multiplied by that good biblical number seven will yield (when rounded off) the numbers of Numbers 1. Unfortunately, this leaves Numbers 26 untouched. This hypothesis, at least for now, must be held to be tenuous at best.

Chapter Summary

This chapter has endeavored to demonstrate the various alternative views for understanding the use of large numbers in the Old Testament, both published and conjectured. It was determined that of the published views, that of Segal alone is worthy of further study. Of the conjectures, the use of אֶלֶף as an individual soldier may be worthy of further attention, as may be the early use of gematria. It is thought however that none of these suggestions, published or conjectured, satisfies as completely as does accepting the majority of the large numbers as reflecting the literary convention of hyperbole.

CHAPTER 7

CONCLUSION

Preliminary Remarks

This dissertation has attempted to demonstrate the usage of large numbers in the Old Testament. In the introduction it was pointed out that the large numbers are often stumbling blocks for both liberal and conservative scholars. The former are likely to dismiss them without comment or documentation as purposeless exaggeration, or worse, as simple error. The latter, oftentimes embarrassed by the presence of seemingly impossible large numbers, simply accepted them at face value or ignored them. After a review of representative examples of the problems caused by the presence of large numbers and a statement of the hypothesis, these varying positions were demonstrated in part by a study of the history of scholarship on the matter. It was determined that what was needed was a balanced approach which examines the numbers as they are encountered in the text and suggests a plausible explanation of their use which is consistent with other scriptural data and with the demographics demonstrated by regional archaeology. It is the hypothesis of this dissertation that for the most part only literary hyperbole can explain the presence of the large numbers.

The second chapter was arranged so that a solid foundation was established for the study by means of a textual study of the passages which contain the Hebrew word אֶלֶף (the numeral upon which the largest numbers are based) and a grammatical-syntactical analysis of this same word. This

chapter demonstrated two basic truths about large numbers in the Old Testament. First, the texts which contain large numbers have been handed down in remarkably good shape. For the most part, those passages withstand textual analysis. More significant perhaps is the fact that in most cases even when variants are chosen, large numbers remain. Second, this chapter has affirmed the semantic value of 1,000 for the term אֶלֶף as the most normal gloss in historiographic literature.

The third chapter continued to build the case for a usage of the large numbers of the Old Testament as something other than actual value. By a demographic analysis of the land of Palestine over three millennia, it was determined that at no time did the land contain a population necessary to sustain taking the census figures of Numbers 1, 26 and 2 Samuel 24/1 Chronicles 21 at face value. Since the numbers of the censuses may not be meant to be seen as reflecting actual totals, but rather have some other significance, it may be that other similarly large numbers of the Old Testament likewise have significance apart from reflecting actual totals.

Chapter four demonstrated the use of numbers in the ANE milieu, concentrating particularly on the royal inscriptional or annalistic genre. It was seen that quite often large numbers were employed in a hyperbolic fashion, particularly in the historiographic literatures of Sumer, Akkad, and Assyria.[1] The hyperbolic numbers occurred in military contexts expressing the number of troops engaged in battle, number of enemies slain or captured, amount of spoil taken, and amount of corvée labor employed. It is evident

[1]Babylonian monarchs rarely used large numbers in their royal inscriptions and Egyptians tended to use general rather than definite terms.

from this study that no other culture used numbers in excess of 100,000 with the same frequency as does the Old Testament. Where numbers in excess of 100,000 occur, they are found exclusively in military contexts.

In chapter five, the issues of historiography and literary hyperbole were briefly defined and discussed. Following this discussion, significant Old Testament passages which contain large numbers were analyzed. Several observations may be drawn from this study:

1. Scripture is unique among ANE literature in the size of the numbers it employs and in their frequency of occurrence.

2. Scripture is unique in that it admits defeats as well as victories, since Yahweh may be seen to be glorified in both.

3. Scripture differs from ANE annalistic inscriptional literature in that it does not offer the accounts in the first person singular, following instead the format of third person singular, i.e., the chronicle format.

4. Scripture is similar to annalistic inscriptional literature of the ANE in that the historical narratives of the Old Testament often employ figurative language in the near environment of the large numbers, a fact which may support the thesis that the large numbers themselves are hyperbolic.

5. It appears that all enumerated pre-Exilic censuses in the Old Testament may employ hyperbolic numbers.

6. Scripture is similar to other ANE historiography in that it may use large numbers hyperbolically in military contexts, either of troops employed, killed, or captured; or in spoil taken, or in corvée labor employed.

7. Scripture is similar to other ANE historiography in that the ostensible purpose of this usage is to demonstrate the relative magnitude of a given leader or king: Yahweh is greater than David is greater than Solomon is greater than Rehoboam is greater than others (see appendix four).

8. The passages concerning David (2 Samuel 8:1-18; 1 Chronicles 18:1-17) and Solomon (1 Kings 5:1-32; 2 Chronicles 8-9) are classical royal inscriptional genre, very close to the Neo-Assyrian pattern.

9. The use of figurative language, including numerical hyperbole, does not mitigate the historical reliability of an account.

10. The scriptural pattern is similar to the Assyrian syntactical use of large numbers.

11. It is fitting that Chronicles, which examines the history of Israel with emphasis on King David, consistently employs the largest numbers to be found in the Old Testament. This reflects a literary pattern of hyperbole, the purpose of which is to glorify both Yahweh and his theocratic ruler David (and his descendants). The Chronicler also uses the relative sizes of the numbers to demonstrate the relative importance of the kings of Israel and Judah. If this is the case, it should not surprise us to find differences between the numbers of Chronicles and their parallels in Samuel and Kings, because the choice of the size of the number may have been due to authorial intent rather than a strict accounting of factual figures.

Chapter six dealt with other suggestions, both published and conjectured. It was determined that of the published views, that of Segal is worthy of further study. Of the conjectures, the use of אֶלֶף as an individual soldier may be plausible, as may be the early use of gematria. It is thought however that none of these suggestions satisfies as completely as does regarding the large numbers as reflecting the literary convention of hyperbole.

As an option to seeing actual value in the large numbers of the Old Testament, accepting them as literary hyperbole allows the text to withstand

textual criticism (even if variants are selected, large numbers remain).[2] Accepting literary hyperbole allows אלף to retain its normal semantic value of 1,000 in the majority of cases. Accepting literary hyperbole maintains the historical reliability of the accounts which contain large numbers in Scripture. The conflict with such verses as Deuteronomy 7:1 and 7:7, for instance, is alleviated. Accepting literary hyperbole reconciles the data of Scripture with demographic analysis of ancient Israel. Too, literary hyperbole best explains the use of the majority of the large numbers of the Old Testament, rather than just those of the censuses.

Ramifications

One must wonder what implications the results of this study could have on Old Testament scholarship, particularly in the area of Conquest models. As has been noted earlier, the large numbers have often been a stumbling block for accepting the biblical accounts as legitimate records of history. However, if the numbers are simply reflective of a rhetorical device common in ANE literatures, one may no longer question the integrity of the record by use of this point of argument. The large numbers are often simply figures of speech

[2]It may well be that when the text was standardized and the script changed from paleo-Hebrew to Aramaic, the tradents did not understand the hieratic numerals which may have been used. They then installed numbers they felt would be appropriate, and made harmonizations where necessary. This is attractive and would certainly explain the numerous problems associated with the use of large numbers in the Old Testament, but is unlikely if earlier tradents were as conscientious as later scribes. The literary convention of hyperbole seems better to fit all the presently available data. It would not surprise the present writer if future archaeological discoveries reveal an ancient paleo-Hebrew papyrus or parchment of the book of Numbers which records much smaller numbers in hieratic notation. If such an event occurs, I will be the first to concede error. However, this eventuality still could not explain the consistently high numbers of the Chronicler. This fact serves to establish hyperbole in the use of large numbers.

employed to magnify King Yahweh, King David, or others in a theologically based historiographical narrative.

If the literary hyperbole of large numbers is accepted as fact, then the models of the Conquest suggested by Martin Noth, Norman Gottwald and others may have to be reconsidered. A proponent of the the tradition-history school, Noth was one of the earliest to propose that Israel originally existed as an amphictyony, or a confederation of tribes worshipping at a common sanctuary.[3] These twelve tribes had not come as a unit out of Egypt, but rather were part of the original Amorite migrations which had more or less independent origins. Their's was therefore a peaceful conquest. They merged together over a period of time, merging at the same time their various religious traditions. Their common faith in Yahweh then grew out of their alliance.

Gottwald developed the sociological model of Israel's history first proposed in 1962 by George Mendenhall.[4] This thesis proposes that the lack of archaeological evidence for massive destruction of a traditional conquest which mandates a late date for the Exodus is inconsequential. Rather, no major destruction is evident because neither Exodus nor Conquest took place (similar to Noth's peaceful conquest). Rather, a peasant revolt took place. Gottwald highly regards the Amarna material and equates the Hapiru with the Hebrews who were revolting. This revolt is evidenced by the archaeological data which

[3]Martin Noth, *Das System der zwölf Stämme Israels* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1966). Noth's work was originally published in 1930.

[4]Norman Gottwald, *The Tribes of Yahweh* (Maryknoll, New York: Orbis Books, 1979); cf. G. E. Mendenhall, "The Hebrew Conquest of Palestine," *Biblical Archaeologist* 25 (1962): 71-73.

reveals an increase in urbanization in the highlands of Canaan during this period and the sudden sophistication of the peasant people. The revolt attracted other peasants, with the result that Israel came into being. By the time of the Merneptah stele (ca. 1230) Israel is in possession of the land.

Recently, other models of the origin of Israel have come forth. Lemche[5] argues with the conclusions of Gottwald (as have many other scholars), but does not accept the biblical account of Exodus and Conquest, both of which concepts he believes arose late in the Monarchy. His own proposed model is unclear. Finkelstein writes: "In any case, Lemche fails to present a clear-cut answer to the question of the origin of the Israelites, from within or from without."[6]

Coote and Whitelam have presented a model similar to Gottwald in that they posit a revolt, but it is a revolt based on the inter-regional trade and economics of the thirteenth century B.C. rather than social unrest.[7] They too adopt the view that the early history of Israel recorded in the Pentateuch and Joshua were creations of the monarchial period. Israel itself emerged "from the sedentary Late Bronze population of the lowlands."[8]

[5]Niels Peter Lemche, *Early Israel: Anthropological and Historical Studies on the Israelite Society before the Monarchy*, Supplements to *Vetus Testamentum* 37 (Leiden: E.J. Brill, 1985).

[6]Israel Finkelstein, "The Emergence of Early Israel: Anthropology, Environment and Archaeology," *JAOS* 110 (1990): 679.

[7]Robert B. Coote and Keith W. Whitelam, *The Emergence of Early Israel in Historical Perspective.* The Social World of Biblical Antiquity Series 5 (Sheffield: The Almond Press, 1987).

[8]Finkelstein, "The Emergence of Early Israel," 683.

Finding fault with the works of Lemche and Coote and Whitelam, Finkelstein has recently offered his own model of the emergence of early Israel based on recent archeological and demographic analyses. He writes:

> Taking all this data into consideration, I would suggest that a significant portion of the population that settled in the hill country in Iron I came from a pastoral background. But these people did not immigrate into the country from without; they were local, pastoral nomads who were active in the Late Bronze Age in the frontier zones of Canaan--in highlands and steppelands alike. Internal unrest in the 16-15th centuries B.C.E. brought about a change in the ratio of nomads/sedentary groups in favor of the former.[9]

By his own admission, however, Finkelstein's model still cannot answer the crucial question "what were the reasons for the sudden sedentarization of the supposed pastoral groups?"[10]

Each of the models proposed above have a common pre-supposition: the Old Testament accounts of the Exodus and Conquest are not reliable sources of information and therefore must be discounted to varying degrees in favor of certain (but increasingly changing) archaeological data. As was stated above, one reason for this rejection is the presence of the large numbers. It may be that in accepting literary hyperbole of the large numbers, one does not have to postulate a non-Exodus sociological view of the Conquest. There may be no need to posit a peasant revolt, nor an economic upheaval. The Bible's testimony that the twelve tribes of Israel came forth from Egypt through the Red Sea (still a miracle) and conquered the promised land may explain a sudden sedentarization of nomadic people. If literary hyperbole is accepted, liberal and conservative scholars may be able to move closer to a consensus as to the history of Israel.

[9]Ibid., 684-685.

[10]Ibid., 685.

A Final Word

Literary hyperbole as a rhetorical device seems to be the best understanding for the use of large numbers in the Old Testament. Though it had been hoped by the present writer to discover some other solution, countless hours engaged with a calculator proved unfruitful. Literary hyperbole best explains the majority of problems involved with the presence of the large numbers. It may also be the only viable option open to conservatives who desire to maintain a theological position of inerrancy in the original autographs. Hopefully, this dissertation has demonstrated that the problem is one of hermeneutics, not theology, best resolved by accepting the majority of the large numbers of the Old Testament as hyperbolic, employed to glorify the King.

APPENDIX 1

USE OF NUMBERS IN NORTHWEST SEMITIC INSCRIPTIONS

This appendix began as a study of the large numbers (over 1,000) occurring in the extant Northwest Semitic inscriptional materials. After perusing the material available in several original publications and in the anthologies of Gibson, and Donner and Röllig, it was discovered that in only two inscriptions were such large numbers to be found. These are the Mesha' and the Siloam inscriptions. Only the former follows the royal inscription genre. This may suggest that the literary convention of numeric hyperbole was dying out in the first millennium B.C. However, it was then thought profitable to at least scan the use of smaller numbers within these many varied inscriptions for any information which might prove useful in the writing of my dissertation. These will be discussed before the fuller discussion of the Mesha' and Siloam inscriptions proceeds.

Samarian Ostraca

The use of numbers in the Samarian ostraca is limited at best. Where numbers occur as numerals, they are in hieratic form. Otherwise they function normally, i.e., as they do in other Hebrew literature, with the exception that in the ostraca, the written out numbers do not exhibit gender disagreement as they do in the OT. It is interesting to note that in Ugaritic,

there is also gender agreement at times rather than the expected disagreement.[1]

All of the ostraca begin with a date, either the ninth, tenth, or fifteenth year. It is not the purpose of this paper to speculate as to the precise dating this affords. Suffice it to say that these dates probably correspond to the dates of the reigning monarch. These cardinal numbers (used as ordinals) are represented as words when the year is ninth or tenth, or as hieratics when the fifteenth year is in view. This latter numeral is formed by what looks like a L followed by an enlarged sign similar to the fourth Hebrew letter (ד). At times, this sign is preceded by the article ה. The meaning of the hieratic in ostracon number 63 is uncertain. Gibson notes that the "t" sign is the reverse of the hieratic for "4" cited by Milik in the Muraba'at B inscription.[2] The sign is ||tL. This could then be "16", which would make it the sixteenth year.

The only other place numbers are used is in the lists of ostraca numbers one and two. Hieratics are again used with | used for one and || used for two. There is no syntax involved with these, only a simple tabulation.

It is interesting to note that in one of the two cuneiform inscriptions from the same excavation, the phrase alpu 6 immeru 12+ occurs. Six cuneiform wedges are given for the numeral six (three stacked atop three), and the numeral 12 has the appropriate cuneiform sign. Two differing

[1]Note KRT, line 140: ṯalaṯa susiwima (three horses); cf. Andrée Herdner, *Corpus des tablettes en cunéiformes alphabétiques* (Paris: Paul Geuthner, 1963), 64.

[2]John C. L. Gibson, *Textbook of Syrian Semitic Inscriptions* (Oxford: Clarendon Press, 1981), 1:13.

notations are therefore used in the same phrase. No syntax is involved.[3]

Lachish Letters

Gibson is at odds with Torzcyner over letter nine. Gibson reads several hieratic numerals where Torzcyner sees none.[4] The letters Gibson sees are apparently a 10 and a two. In letter 19, numbers for 50 occur, as well as 10 and 11. These numbers appear to have been written in Egyptian hieratic,[5] although there seems to be some differences of opinion.[6] They seem to be mere tabulations, and no syntax is in view.

Arad Ostraca

Numbers are used in the Arad ostraca. In the ostraca examined, all of the numerals are hieratic, and as such offer no syntactical significance. Ostracon number two contains the hieratic for 300 (𓍢) referring to a supply of bread, as well as the hieratic for the number two, referring to baths of wine. Ostracon number three contains the hieratic numeral three. Ostracon 24 contains the hieratic for 50, but in the view of this writer, it looks identical to

[3] George Andrew Reisner, Clarence Stanley Fisher, and David Gordon Lyon; eds., *Harvard Excavations at Samaria 1908-1910*, vol. 1: *Texts* (Cambridge: Harvard University Press, 1924), 247. One also notes alpu ("cattle"), a cognate of אֶלֶף.

[4] Gibson, *Textbook*, 1:47; cf. Harry Torczyner, *The Lachish Letters* (London and New York: Oxford University Press, 1938), 137.

[5] Gibson, *Textbook*, 1:49.

[6] Ibid., 1:47. Albright apparently reads some of these as Hebrew letters used as abbreviations for numbers rather than hieratics. W. F. Albright, "The Oldest Hebrew Letters: The Lachish Ostraca," *BASOR* 70 (1938): 16.

the five in the 15 of the Samarian ostraca![7] This might have implications for the large numbers of the Old Testament. If in the early orthography hieratic, cuneiform, or some other numeral notations were used instead of written words, a small numeral, such as five, might be mistaken for the larger number 50, inasmuch as the shape of the signs were nearly identical except for relative size! To prove their early use would be difficult without the appearance of an early text, especially in the light of the fact that Ugaritic employed written words for their numbers. Ostracon 30 gives still another tabulation, using hieratics for the numerals five, six, seven, and eight, as well as the hieratic for 46, the sum of the tabulated entries. Other hieratics occur in ostraca 25, 33, 34, 46-49, and numerous other places. All are tabulations; most follow in sequence the items tabulated.

Tell Qasile

In the first of the two ostraca, there is the apparent use of the words for one thousand (אֶלֶף) and one hundred (מֵאָה). But the final ף of the former and the final ה of the latter are both reconstructions. Both are tabulations if they are indeed written numbers. The second of the ostraca contains a hieratic(?)[8] for the number 30.

[7]Note a similar problem in Lachish letter 19 mentioned by Donner and Röllig, *Kanaänaischen und Aramäischen Inschriften* (Wiesbaden: Otto Harrassowitz, 1964), 2:199: "Das Zeichen am Ende der Zeile ist wahrscheinlich ein Zahlzeichen für 5, obgleich es der aus Samaria bekannten Form nicht sehr ähnlich sicht. Torzcyner liest 50."

[8]Aharoni says that this is a Phoenician numeral, the only such in Palestinian texts. Yohanan Aharoni, "The Use of Hieratic Numerals in Hebrew Ostraca and the Shekel Weights," *BASOR* 184 (1966): 19.

Sefire

In the first inscription of Sefire the number seven is employed with frequency probably denoting its symbolic use of "fulness" in the context of the curses invoked upon the violators of the treaty. It is written as a word (שבע) rather than as a hieratic. The syntax is similar to Biblical Hebrew in this Aramaic document in that there is gender disagreement where it is used.[9]

On a clay tablet from Sefire which dates from 570 B.C. hieratic numbers representing the numerals 27 and 34 are used. The first refers to the amount paid for a piece of merchandise, and the second is a calendar date.[10]

Punic Texts

The only evidence found which indicated a combined use of written numerals and hieratic(?) numbers was in a Punic Text which originated in Carthage between the fifth and the second centuries B.C. It was discovered in Marseilles, France, in 1844 and pertains to a tariff on sacrifices.[11]

A Note on the Shekel Weights

Much of the early confusion which existed as to the use of hieratic numerals in these various inscriptions has been clarified somewhat by recent archaeological discoveries. It was originally thought by some that the hieratic numerals now known to be five and 10 were actually Hebrew numerals representing five and four respectively, yielding for instance a year nine in the Samarian ostraca. This was based in part in the fact that similar symbols

[9]Cf. Gibson, *Textbook*, 3:38-39.

[10]Ibid., 3:116-17.

[11]H. Donner and W. Röllig, *Inschriften*, 1:69 and 3: Table 6.

for the five (𐤄) appear on 4-shekel weights. The most recent discoveries of shekel weights at Shechem and Jerusalem have revealed 16 and 24 shekel weights which bear numerals similar to hieratic numerals for 20 and 30 respectively. Aharoni solves the riddle for us:

> The 8-shekel weight is identical with one Egyptian deben. The new 16 and 24 shekel weights leave no doubt that 8 shekels was the basic unit, and it becomes most plausible that this was selected, probably by Josiah, as an exact equivalent to that most common weight in international commerce. One Egyptian deben is divided into 10 qedet. That means that the 4, 8, 16, and 24 shekel weights are equal to 5, 10, 20, and 30 qedet, in complete agreement with the hieratic numerals marked on them. This is hardly accidental and makes the choice of these symbols more understandable.[12]

Summary to This Point

It appears that outside of the Mesha' and Siloam inscriptions, numbers in excess of 1000 are non-existent in Northwest Semitic.[13] Indeed, most numbers are 300 or less, most are written in hieratic notation,[14] and most involve tabulations. This latter fact is significant, inasmuch as the numbers follow the items tabulated and offer no help as to the syntax involved.

However, the possibility of easy confusion of hieratic numerals depending on their relative size could be of great significance. Note for instance the nature of the census lists of Numbers 1, 2, and 26. These lists seem almost to be in the same format as the examined tabulations. If Moses employed originally some type of number notation other than written words, might it be that later scribes confused the relative size (and hence the relative

[12] Aharoni, "The Use of Hieratic Numerals," 18.

[13] The one other exception might be the first Tel Qasile inscription (see discussion above).

[14] See note 12 in chapter two above.

importance) of the notations and assigned to them values much higher than originally intended? It is certain that Moses did not employ the square script we are familiar with today--possibly something more akin to the proto-Sinaitic orthography was used. This fact may argue in favor of some numeral notation other than written words being employed by Moses. Arguing against this possibility would be the use of spelled out numbers in the Ugaritic tablets, which date from the same general period as Moses, and the fact that we do have the Mesha' and Siloam inscriptions which do have the numbers in written out form.

Mesha' and Siloam Tunnel Inscriptions

Only within the Mesha' and Siloam tunnel inscriptions are numbers in excess of 1000 to be found after 1000 B.C. in NW Semitic inscriptional materials. However, these two inscriptions, though both carved in stone, differ in several significant points. These differences may determine how the veracity of their numbers is to be understood.

In previous studies dealing with inscriptional materials, this writer has noticed a significant difference between inscriptions which deal with military victory and those which may be described as building inscriptions. Military inscriptions are normally recorded on a stele which is erected on a conspicuous site in order to record the glorious victories of a given king. Normally the numbers recorded are not subject to verification: who would dispute the word of a king then ruling?--who could go count the remains of hundreds of thousands killed?--who would want to do so? The Mesha' inscription appears to follow this particular type of military inscription genre. Though it includes the recording of the rebuilding of cities, it does not include any specific large numbers at those points. The numbers it does

record have to do with the number of men employed as an army, or the number of enemy killed.

On the other hand, building inscriptions of the ANE were written on the building itself. The purpose was also to record the deeds of the sovereign, but the numbers were usually smaller and were inherently verifiable. If a king stated that he rebuilt a wall 4 1/2 bricks thick, anyone could count the bricks within the wall. If the king stated that the wall was 1800 cubits long, one could go out and pace off the distance. Too, it was not terribly important at all times to display the inscription openly. At times, the inscriptions were found at the base of door sockets! The Siloam inscription appears to fall in this category, with the exception that it may have not been commissioned by King Hezekiah, but rather simply may have been the recording of the event by a member of the work crew. It was written high on the tunnel wall, difficult for anyone to read without some type of assistance. At any rate, the length of the tunnel is given at 1200 cubits, which can even now be verified within inches.

The point to be made here is this: of all NW Semitic inscriptional materials, only the Mesha' inscription follows the older pattern of a royal military inscription.[15] Should the figure recording the number of Israelites slain at Nebo be taken as a literal 7,000, or rather as simply a large number? Probably the latter should be understood here. An illustration from the royal military inscriptions of Shalmaneser III should suffice.

In recording the numbers of enemy killed at the battle of Qarqar, Shalmaneser had several stele erected. On the monolith inscription which was

[15]Other inscriptions, particularly Aramaic, follow what could be considered a royal military inscription. Noticeably absent in these are any large numbers!

erected just after the battle, he records: "14,000 of their warriors I slew with the sword." The somewhat later Black Obelisk inscription uses the same terminology until the number slain occurs: "20,500 of their warriors I slew with the sword." The still later bull inscription reads "25,000 of their warriors I slew with the sword."[16] Which, if any, of these figures is to be believed? This type of recording of large numbers of military significance is common in the ANE. It is likely that the Mesha' inscription, which is of the same type of genre, records a number which is hyperbolic.

Conclusion

It might appear from this short study that little was gained toward the completion of the dissertation. On the contrary, this study has given the present writer greater understanding into the use of paleo-Hebrew scripts and the hieratic numeral notation system, both of which may have significant value in the understanding of the recording and transmission of large numbers in Scripture. Too, the fact that Northwest Semitic inscriptional materials contain only one inscription which may be considered of the royal military genre is significant in establishing the thesis that first, only significant powers would employ this genre and second, the type of royal military genre which employed hyperbolic numbers was dying out immediately prior to the exile. Obviously, future archaeological discoveries could confirm or preclude this latter observation.

[16]For a more complete discussion of these stele, see chapter four of this dissertation.

APPENDIX 2

THE USE OF אֶלֶף IN THE OLD TESTAMENT[1]

Genesis	20:16	1,000	Actual Value[2]
	24:60	1,000	Poetical with רִבָּבָה
Exodus	12:37	600,000	Hyperbole
	18:21	1,000s	Standard Military Formula[3]
	18:25	1,000s	SMF
	20:6	1,000s	General Term
	32:28	3,000	Actual Value/Hyperbole?
	34:7	1,000s	General Term
	38:25	1,775	Hyperbole[4]
	38:26	603,550	Hyperbole
	38:28	1,775	Hyperbole
	38:29	2,400	Actual Value
Numbers	1:16	1,000s	SMF or "Clans"
	1:21	46,500	Hyperbole
	1:23	59,300	Hyperbole
	1:25	45,650	Hyperbole

[1]References cited are based on the Masoretic Text. For alternative readings based on text-critical analysis, see chapter two of this dissertation.

[2]Actual, or face value; may or may not be rounded off.

[3]Standard Military Formula is "leaders of thousands, hundreds, fifties, and tens." Hereinafter this will be refered to as SMF, even if the phrase is incomplete in a given verse.

[4]Though such a precise number would not normally be seen as hyperbole, its juxtaposition with the number 100 talents (300,000) may result in a hyperbolic number. See chapter five of this dissertation for analysis of the passage.

1:27	74,600	Hyperbole
1:29	54,400	Hyperbole
1:31	57,400	Hyperbole
1:33	40,500	Hyperbole
1:35	32,200	Hyperbole
1:37	35,400	Hyperbole
1:39	62,700	Hyperbole
1:41	41,500	Hyperbole
1:43	52,400	Hyperbole
1:46	603,550	Hyperbole
2:4	74,600	Hyperbole
2:6	54,400	Hyperbole
2:8	57,400	Hyperbole
2:9	186,400	Hyperbole
2:11	46,500	Hyperbole
2:13	59,300	Hyperbole
2:15	45,650	Hyperbole
2:16	151,450	Hyperbole
2:19	40,500	Hyperbole
2:21	32,200	Hyperbole
2:23	35,400	Hyperbole
2:24	108,100	Hyperbole
2:26	62,700	Hyperbole
2:28	41,500	Hyperbole
2:30	53,400	Hyperbole
2:31	157,600	Hyperbole
2:32	603,550	Hyperbole
3:22	7,500	Hyperbole
3:28	8,600	Hyperbole
3:34	6,200	Hyperbole
3:39	22,000	Hyperbole
3:43	22,273	Hyperbole[5]

[5]It may be that the 22,000 part of this figure is hyperbolic and the 273 actual, since this latter is the figure upon which subsequent calculations are based.

3:50	1,365	Actual Value
4:36	2,750	Hyperbole
4:40	2,630	Hyperbole
4:44	3,200	Hyperbole
4:48	8,580	Hyperbole
7:85	2,400	Actual Value
10:4	"Clans"	
10:36	1,000s	Poetical with רבבה
11:21	600,000	Hyperbole
17:14 (16:49)[6]	14,700	Hyperbole
25:9	24,000	Hyperbole
26:7	43,730	Hyperbole
26:14	22,200	Hyperbole
26:18	40,500	Hyperbole
26:22	76,500	Hyperbole
26:25	64,300	Hyperbole
26:27	60,500	Hyperbole
26:34	52,700	Hyperbole
26:37	32,500	Hyperbole
26:41	45,600	Hyperbole
26:43	64,400	Hyperbole
26:47	53,400	Hyperbole
26:50	45,400	Hyperbole
26:51	601,730	Hyperbole
26:62	23,000	Hyperbole
31:4	1,000	Actual Value?
31:5	1,000s	General Term
31:5	1,000	Actual Value
31:5	12,000	Actual Value
31:6	1,000	Actual Value
31:14	1,000s	SMF
31:32	675,000	Hyperbole
31:33	72,000	Hyperbole

[6]Parentheses indicate English verse.

	31:34	61,000	Hyperbole
	31:35	32,000	Hyperbole
	31:36	337,500	Hyperbole
	31:38	36,000	Hyperbole
	31:39	30,500	Hyperbole
	31:40	16,000	Hyperbole
	31:43	337,500	Hyperbole
	31:44	36,000	Hyperbole
	31:45	30,500	Hyperbole
	31:46	16,000	Hyperbole
	31:48	1,000s	SMF
	31:52	1,000s	SMF
	31:52	16,750	Hyperbole
	31:54	1,000s	SMF
	35:4	1,000	Actual Value
	35:5	2,000	Actual Value
Deut.	1:11	1,000	General Term
	1:15	1,000s	SMF
	5:10	1,000s	General Term
	7:9	1,000s	General Term
	7:13	"Cattle"	
	28:4	"Cattle"	
	28:18	"Cattle"	
	28:51	"Cattle"	
	32:30	1,000	Poetical with רבבה
	33:17	1,000	Poetical with רבבה
Joshua	3:4	2,000	Actual Value
	4:13	40,000	Hyperbole
	7:3	2,000 or 3,000	Poetical Hyperbole
	7:4	3,000	Actual Value
	8:3	30,000	Hyperbole
	8:12	5,000	Hyperbole
	8:25	12,000	Hyperbole
	18:28	Personal Name	

	22:14	"Clans"	
	22:21	"Clans"	
	23:10	1,000	Poetical Hyperbole[7]
Judges	1:4	10,000	Hyperbole
	3:29	10,000	Hyperbole
	4:6	10,000	Hyperbole
	4:10	10,000	Hyperbole
	4:14	10,000	Hyperbole
	5:8	40,000	Poetical Hyperbole
	6:15	"Clan"	
	7:3	22,000	Hyperbole
	7:3	10,000	Hyperbole
	8:10	15,000	Hyperbole
	8:10	120,000	Hyperbole
	8:26	1,700	Actual Value?
	9:49	1,000	Actual Value?
	12:6	42,000	Hyperbole
	15:11	3,000	Hyperbole?
	15:15	1,000	Hyperbole
	15:16	1,000	Poetical Hyperbole
	16:5	1,100	Actual Value
	16:27	3,000	Hyperbole?
	17:2	1,100	Actual Value
	17:3	1,100	Actual Value
	20:2	400,000	Hyperbole
	20:10	1,000	Actual Value[8]
	20:10	1,000	Actual Value
	20:15	26,000	Hyperbole
	20:17	400,000	Hyperbole

[7]Poetical Hyperbole may be reflected by such expresssions as "one in a thousand" (similar to the English phrase "one in a million") as opposed to simple hyperbole, which may be seen in the use of a large number alone.

[8]Though this is similar both to the poetical hyperbole and to the SMF, the context is clearly meant to be actual.

	20:21	22,000	Hyperbole
	20:25	18,000	Hyperbole
	20:34	10,000	Hyperbole
	20:35	25,100	Hyperbole
	20:44	18,000	Hyperbole
	20:45	5,000	Hyperbole
	20:45	2,000	Hyperbole
	20:46	25,000	Hyperbole
	21:10	12,000	Hyperbole
1 Samuel	4:2	4,000	Hyperbole?
	4:10	30,000	Hyperbole?
	6:19	50,070	Hyperbole[9]
	8:12	1,000s	SMF
	10:19	"Clans"	
	11:8	300,000	Hyperbole
	11:8	30,000	Hyperbole
	13:2	3,000	Hyperbole?
	13:2	2,000	Hyperbole?
	13:2	1,000	Hyperbole?
	13:5	30,000	Hyperbole
	13:5	6,000	Hyperbole
	15:4	200,000	Hyperbole
	15:4	10,000	Hyperbole
	17:5	5,000	Hyperbole?
	17:18	1,000	SMF
	18:7	1,000s	Poetical with רבבה.
	18:8	1,000s	Poetical with רבבה.
	18:13	1,000	SMF
	21:12 (11)	1,000s	Poetical with רבבה.
	22:7	1,000	SMF
	23:23	1,000	General Term or "Clans"

[9]Reading with the preferred variant of 70 eliminates the hyperbole. See chapter two of this dissertation for the text-critical discussion.

	24:3 (2)	3,000	Hyperbole?
	25:2	3,000	Actual Value?
	25:2	1,000	Actual Value?
	26:2	3,000	Hyperbole?
	29:2	1,000s	SMF
	29:5	1,000s	Poetical with רבבה.
2 Samuel	6:1	30,000	Hyperbole?
	8:4	1,700	Hyperbole?
	8:4	20,000	Hyperbole
	8:5	22,000	Hyperbole
	8:13	18,000	Hyperbole
	10:6	20,000	Hyperbole
	10:6	1,000	Hyperbole
	10:6	12,000	Hyperbole
	10:18	40,000	Hyperbole
	17:1	12,000	Hyperbole?
	18:1	1.000s	SMF
	18:3	10,000	Poetical Hyperbole
	18:4	1,000s	SMF
	18:7	20,000	Hyperbole
	18:12	1,000	Actual Value
	19:18 (17)	1,000	Hyperbole?
	24:9	800,000	Hyperbole
	24:9	500,000	Hyperbole
	24:15	70,000	Hyperbole
1 Kings	3:4	1,000	Actual Value?
	5:6(4:26)	40,000	Hyperbole
	5:6 (4:26)	12,000	Hyperbole
	5:12 (4:32)	3,000	Hyperbole?
	5:12 (4:32)	1,005[10]	Hyperbole?
	5:25 (5:11)	20,000	Hyperbole

[10]The preferred reading is 5,000 here; see chapter two for discussion.

	5:27 (5:13)	30,000	Hyperbole
	5:28 (5:14)	10,000	Hyperbole
	5:29 (5:15)	70,000	Hyperbole
	5:29 (5:15)	80,000	Hyperbole
	5:30 (5:16)	3,300	Hyperbole
	7:26	2,000	Actual Value?
	8:63	22,000	Hyperbole
	8:63	120,000	Hyperbole
	10:26	1,400	Hyperbole?
	10:26	12,000	Hyperbole?
	12:21	180,000	Hyperbole
	19:18	7,000	Actual Value
	20:15	7,000	Actual Value?
	20:29	100,000	Hyperbole
	20:30	27,000	Hyperbole
2 Kings	3:4	100,000	Hyperbole?
	3:4	100,000	Hyperbole?
	5:5	6,000	Hyperbole?
	13:7	10,000	Hyperbole?
	14:7	10,000	Hyperbole?
	15:19	1,000	Actual Value
	18:23	2,000	Actual Value
	19:35	185,000	Hyperbole
	24:14	10,000	Actual Value?
	24:16	7,000	Actual Value?
	24:16	1,000	Actual Value?
1 Chron.	5:18	44,760	Hyperbole
	5:21	50,000	Hyperbole
	5:21	250,000	Hyperbole
	5:21	2,000	Hyperbole?
	5:21	100,000	Hyperbole
	7:2	22,600	Hyperbole
	7:4	36,000	Hyperbole
	7:5	87,000	Hyperbole

7:7	22,034[11]	Hyperbole		
7:9	20,200	Hyperbole		
7:11	17,200	Hyperbole		
7:40	26,000	Hyperbole		
9:13	1,760	Hyperbole?		
12:15 (14)	1,000	Poetical Hyperbole		
12:21 (20)	1,000s	SMF		
12:25 (24)	6,800	Actual Value		Judah
12:26 (25)	7,100	Actual Value		Simeon
12:27 (26)	4,600	Actual Value		Levi
12:28 (27)	3,700	Actual Value		Aaron?
12:30 (29)	3,000	Actual Value		Benjamin
12:31 (30)	20,800	Hyperbole?		Ephraim
12:32 (31)	18,000	Hyperbole?	1/2	Manasseh
12:34 (33)	50,000	Hyperbole		Zebulun
12:35 (34)	1,000	Hyperbole		
12:35 (34)	37,000	Hyperbole		Naphtali
12:36 (35)	28,600	Hyperbole		Dan
12:37 (36)	40,000	Hyperbole		Asher
12:38 (37)	120,000	Hyperbole		Reuben, Gad,
			1/2	Manasseh
13:1	1,000s	SMF		
15:25	1,000s	SMF		
16:15	1,000	General Term		
18:4	1,000	Hyperbole		
18:4	7,000	Hyperbole		
18:4	20,000	Hyperbole		
18:5	22,000	Hyperbole		
18:12	18,000	Hyperbole		
19:6	1,000	Actual Value		
19:7	32,000	Hyperbole		

[11]This number is a rare exception in that it contains digits and tens. There are only two such larger numbers in pre-Exilic literature. The other reference is Numbers 3:43.

19:18	7,000	Hyperbole
19:18	40,000	Hyperbole
21:5	1,100,000	Hyperbole
21:5	470,000	Hyperbole
21:14	70,000	Hyperbole
22:14	100,000	Hyperbole
22:14	1,000,000	Hyperbole
23:3	38,000	Hyperbole
23:4	24,000	Hyperbole
23:4	6,000	Hyperbole
23:5	4,000	Hyperbole
23:5	4,000	Hyperbole
26:26	1,000s	SMF
26:30	1,700	Actual Value?
26:32	2,700	Actual Value?
27:1	1,000s	SMF
27:1	24,000	Hyperbole
27:2	24,000	Hyperbole
27:4	24,000	Hyperbole
27:5	24,000	Hyperbole
27:7	24,000	Hyperbole
27:8	24,000	Hyperbole
27:9	24,000	Hyperbole
27:10	24,000	Hyperbole
27:11	24,000	Hyperbole
27:12	24,000	Hyperbole
27:13	24,000	Hyperbole
27:14	24,000	Hyperbole
27:15	24,000	Hyperbole
28:1	1,000s	SMF
29:4	3,000	Actual Value?
29:4	7,000	Actual Value?
29:6	1,000s	SMF
29:7	5,000	Hyperbole
29:7	10,000	Hyperbole
29:7	10,000	Hyperbole

	29:7	18,000	Hyperbole
	29:7	100,000	Hyperbole
	29:21	1,000	Actual Value?
	29:21	1,000	Actual Value?
	29:21	1,000	Actual Value?
2 Chron.	1:2	1,000s	SMF
	1:6	1,000	Hyperbole?
	1:14	1,400	Hyperbole
	1:14	12,000	Hyperbole
	2:1 (2)	70,000	Hyperbole
	2:1 (2)	80,000	Hyperbole
	2:1 (2)	3,600	Hyperbole
	2:9 (10)	20,000	Hyperbole
	2:9 (10)	20,000	Hyperbole
	2:9 (10)	20,000	Hyperbole
	2:9 (10)	20,000	Hyperbole
	2:16 (17)	153,600	Hyperbole
	2:17 (18)	70,000	Hyperbole
	2:17 (18)	80,000	Hyperbole
	2:17 (18)	3,600	Hyperbole
	4:5	3,000	Actual Value?
	7:5	22,000	Hyperbole
	7:5	120,000	Hyperbole
	9:25	4,000	Hyperbole
	9:25	12,000	Hyperbole
	11:1	180,000	Hyperbole
	12:3	1,200	Hyperbole
	12:3	60,000	Hyperbole
	13:3	400,000	Hyperbole
	13:3	800,000	Hyperbole
	13:17	500,000	Hyperbole
	14:7 (8)	300,000	Hyperbole
	14:7 (8)	280,000	Hyperbole
	14:8 (9)	1,000,000	Hyperbole
	15:11	7,000	Hyperbole?

	17:11	7,700	Hyperbole
	17:11	7,700	Hyperbole
	17:14	1,000s	SMF
	17:14	300,000	Hyperbole
	17:15	280,000	Hyperbole
	17:16	200,000	Hyperbole
	17:17	200,000	Hyperbole
	17:18	180,000	Hyperbole
	25:5	1,000s	SMF
	25:5	300,000	Hyperbole
	25:6	100,000	Hyperbole
	25:11	10,000	Hyperbole
	25:12	10,000	Hyperbole
	25:13	3,000	Hyperbole
	26:12	2,600	Hyperbole?
	26:13	307,500	Hyperbole
	27:5	10,000	Hyperbole
	27:5	10,000	Hyperbole
	28:6	120,000	Hyperbole
	28:8	200,000	Hyperbole
	29:33	3,000	Hyperbole?
	30:24	1,000	Hyperbole
	30:24	7,000	Hyperbole
	30:24	1,000	Hyperbole
	30:24	10,000	Hyperbole
	35:7	30,000	Hyperbole
	35:7	3,000	Hyperbole
	35:8	2,600	Hyperbole?
	35:9	5,000	Hyperbole?
Ezra	1:9	1,000	Actual Value
	1:10	1,000	Actual Value
	1:11	5,400	Actual Value
	2:3	2,172	Actual Value
	2:6	2,812	Actual Value
	2:7	1,254	Actual Value

	2:12	1,222	Actual Value
	2:14	2,056	Actual Value
	2:31	1,254	Actual Value
	2:35	3,630	Actual Value
	2:37	1,052	Actual Value
	2:38	1,247	Actual Value
	2:39	1,017	Actual Value
	2:64	42,360	Actual Value
	2:65	7,337	Actual Value
	2:67	6,720	Actual Value
	2:69	61,000	Hyperbole?
	2:69	5,000	Actual Value
	8:27	1,000	Actual Value
Nehemiah	3:13	1,000	Actual Value
	7:8	2,172	Actual Value
	7:11	2,818	Actual Value
	7:12	1,254	Actual Value
	7:17	2,322	Actual Value
	7:19	2,067	Actual Value
	7:34	1,254	Actual Value
	7:38	3,930	Actual Value
	7:40	1,052	Actual Value
	7:41	1,247	Actual Value
	7:42	1,017	Actual Value
	7:66	42,630	Actual Value
	7:67	7,337	Actual Value
	7:69	6,720	Actual Value
	7:70	1,000	Actual Value
	7:71	20,000	Actual Value?
	7:71	2,200	Actual Value
	7:72	20,000	Actual Value?
	7:72	2,200	Actual Value
Esther	3:9	10,000	Actual Value
	9:16	75,000	Hyperbole?

Job	1:3	7,000	Actual Value?
	1:3	3,000	Actual Value?
	9:3	1,000	Poetical Hyperbole
	33:23	1,000	Poetical Hyperbole
	42:12	14,000	Actual Value?
	42:12	6,000	Actual Value?
	42:12	1,000	Actual Value?
	42:12	1,000	Actual Value?
Psalms	8:8 (7)	"Cattle"	
	50:10	1,000	Poetical Hyperbole
	60:2 (title)	12,000	Hyperbole
	68:18 (17)	1,000	Poetical with רבבה.
	84:11 (10)	1,000	Poetical Hyperbole
	90:4	1,000	Poetical Hyperbole
	91:7	1,000	Poetical with רבבה.
	105:8	1,000	General Term
	119:72	1,000	Poetical Hyperbole
Proverbs	14:4	"Cattle"	
Eccles.	6:6	1,000	Poetical Hyperbole
	7:28	1,000	Poetical Hyperbole
Canticles	4:4	1,000	Poetical Hyperbole
	8:11	1,000	Actual Value?
	8:12	1,000	Actual Value (used as hypocatastasis)
Isaiah	7:23	1,000	Actual Value?
	7:23	1,000	Actual Value?
	30:17	1,000	Poetical Hyperbole
	30:24	"Cattle"	
	36:8	2,000	Actual Value
	37:36	185,000	Hyperbole
	60:22	"Clan"	

Jeremiah	32:18	1,000s	General Term
	52:28	3,023	Actual Value
	52:30	4,600	Actual Value
Ezekiel	45:1	25,000	Predictive Use[12]
	45:1	10,000	Predictive Use
	45:3	25,000	Predictive Use
	45:3	10,000	Predictive Use
	45:5	25,000	Predictive Use
	45:5	10,000	Predictive Use
	45:6	5,000	Predictive Use
	45:6	25,000	Predictive Use
	47:3	1,000	Predictive Use
	47:4	1,000	Predictive Use
	47:4	1,000	Predictive Use
	47:5	1,000	Predictive Use
	48:8	25,000	Predictive Use
	48:9	25,000	Predictive Use
	48:9	10,000	Predictive Use
	48:10	25,000	Predictive Use
	48:10	10,000	Predictive Use
	48:10	10,000	Predictive Use
	48:10	25,000	Predictive Use
	48:13	25,000	Predictive Use
	48:13	10,000	Predictive Use
	48:13	25,000	Predictive Use
	48:13	10,000	Predictive Use
	48:15	5,000	Predictive Use
	48:15	25,000	Predictive Use

[12]By "Predictive Use," the present writer seeks to refrain from comment as to whether these numbers represent actual value or hyperbole, with the exception of the following statements. First, these numbers, though large, are not of the annalistic or royal inscriptional genre. Second, the numbers used in Daniel 12:11, 12 do not fit the normal hyperbolic pattern, either in size or in context.

	48:16	4,500	Predictive Use
	48:16	4,500	Predictive Use
	48:16	4,500	Predictive Use
	48:16	4,500	Predictive Use
	48:16	4,500	Predictive Use
	48:18	10,000	Predictive Use
	48:18	10,000	Predictive Use
	48:20	25,000	Predictive Use
	48:20	25,000	Predictive Use
	48:21	25,000	Predictive Use
	48:21	25,000	Predictive Use
	48:30	4,500	Predictive Use
	48:32	4,500	Predictive Use
	48:33	4,500	Predictive Use
	48:34	4,500	Predictive Use
	48:35	18,000	Predictive Use
Daniel	8:14	2,300	Predictive Use
	12:11	1,290	Predictive Use
	12:12	1,335	Predictive Use
Amos	5:3	1,000	Poetical Hyperbole
Micah	5:1 (2)	"Clans"	
	6:7	1,000	Poetical with רבבה

Verbal forms include:

Proverbs 22:25
Job 15:15; 33:33; 35:11
Psalms 144:13

Aramaic cognates include:

Daniel 5:1 and 7:10

APPENDIX 3

THE LARGER NUMBERS OF THE OLD TESTAMENT

1,100,000	1 Chronicles 21:5	280,000	2 Chronicles 17:15
1,000,000	1 Chronicles 22:14	250,000	1 Chronicles 5:21
1,000,000	2 Chronicles 14:8	200,000	1 Samuel 15:4
800,000	2 Samuel 24:9	200,000	2 Chronicles 17:16
800,000	2 Chronicles 13:3	200,000	2 Chronicles 17:17
675,000	Numbers 31:32	200,000	2 Chronicles 28:8
603,550	Exodus 38:26	186,400	Numbers 2:9
603,550	Numbers 1:46	185,000	2 Kings 19:35
603,550	Numbers 2:32	185,000	Isaiah 37:36
601,730	Numbers 26:51	180,000	1 Kings 12:21
600,000	Exodus 12:37	180,000	2 Chronicles 11:1
600,000	Numbers 11:21	180,000	2 Chronicles 17:18
500,000	2 Chronicles 13:17	157,600	Numbers 2:31
500,000	2 Samuel 24:9	153,600	2 Chronicles 2:16
470,000	1 Chronicles 21:5	151,450	Numbers 2:16
400,000	Judges 20:2	120,000	Judges 8:10
400,000	Judges 20:17	120,000	1 Kings 8:63
400,000	2 Chronicles 13:3	120,000	1 Chronicles 12:38
337,500	Numbers 31:36	120,000	2 Chronicles 7:5
337,500	Numbers 31:43	120,000	2 Chronicles 28:6
307,500	2 Chronicles 26:13	120,000	Jonah 4:11
300,000	1 Samuel 11:8	108,100	Numbers 2:24
300,000	2 Chronicles 14:7	100,000	1 Kings 20:29
300,000	2 Chronicles 17:14	100,000	2 Kings 3:4a
300,000	2 Chronicles 25:5	100,000	2 Kings 3:4b
280,000	2 Chronicles 14:7	100,000	1 Chronicles 5:21

100,000	1 Chronicles 22:14
100,000	1 Chronicles 29:7
100,000	2 Chronicles 25:6
87,000	1 Chronicles 7:5
80,000	1 Kings 5:29 (5:15)
80,000	2 Chronicles 2:1 (2)
80,000	2 Chronicles 2:17 (18)
76,500	Numbers 26:22
75,000	Esther 9:16
74,600	Numbers 1:27
74,600	Numbers 2:4
72,000	Numbers 31:33
70,000	2 Samuel 24:15
70,000	1 Kings 5:29 (5:15)
70,000	1 Chronicles 21:14
70,000	2 Chronicles 2:1 (2)
70,000	2 Chronicles 2:17 (18)
64,400	Numbers 26:43
64,300	Numbers 26:25
62,700	Numbers 1:39
62,700	Numbers 2:26
61,000	Numbers 31:34
61,000	Ezra 2:69
60,500	Numbers 26:27
60,000	2 Chronicles 12:3
59,300	Numbers 1:23
59,300	Numbers 2:13
57,400	Numbers 1:31
57,400	Numbers 2:8
54,400	Numbers 1:29
54,400	Numbers 2:6
53,400	Numbers 1:43
53,400	Numbers 2:30
53,400	Numbers 26:47
52,700	Numbers 26:34
50,070	1 Samuel 6:19
50,000	1 Chronicles 5:21
50,000	1 Chronicles 12:34 (33)
46,500	Numbers 1:21
46,500	Numbers 2:11
45,650	Numbers 1:25
45,650	Numbers 2:15
45,600	Numbers 26:41
45,400	Numbers 26:50
44,760	1 Chronicles 5:18
43,730	Numbers 26:7
42,360	Ezra 2:64
42,360	Nehemiah 7:66
42,000	Judges 12:6
41,500	Numbers 1:41
41,500	Numbers 2:28
40,500	Numbers 1:33
40,500	Numbers 2:19
40,500	Numbers 26:18
40,000	Joshua 4:13
40,000	Judges 5:8
40,000	2 Samuel 10:18
40,000	1 Kings 5:6 (4:26)
40,000	1 Chronicles 12:37 (36)
40,000	1 Chronicles 19:18
38,000	1 Chronicles 23:3
37,000	1 Chronicles 12:35 (34)
36,000	Numbers 31:38
36,000	Numbers 31:44
36,000	1 Chronicles 7:4
35,400	Numbers 1:37
35,400	Numbers 2:23
32,500	Numbers 26:37
32,200	Numbers 1:35
32,200	Numbers 2:21
32,000	Numbers 31:35
32,000	1 Chronicles 19:7

30,500	Numbers 31:39
30,500	Numbers 31:45
30,000	Joshua 8:3
30,000	1 Samuel 4:10
30,000	1 Samuel 11:8
30,000	1 Samuel 13:5
30,000	2 Samuel 6:1
30,000	1 Kings 5:27 (5:13)
30,000	2 Chronicles 35:7
28,600	1 Chronicles 12:36 (35)
27,000	1 Kings 20:30
26,000	Judges 20:15
26,000	1 Chronicles 7:40
25,100	Judges 20:35
25,000	Judges 20:46
24,000	Numbers 25:9
24,000	1 Chronicles 23:4
24,000	1 Chronicles 27:1
24,000	1 Chronicles 27:2
24,000	1 Chronicles 27:4
24,000	1 Chronicles 27:5
24,000	1 Chronicles 27:7
24,000	1 Chronicles 27:8
24,000	1 Chronicles 27:9
24,000	1 Chronicles 27:10
24,000	1 Chronicles 27:11
24,000	1 Chronicles 27:12
24,000	1 Chronicles 27:13
24,000	1 Chronicles 27:14
24,000	1 Chronicles 27:15
23,000	Numbers 26:62
22,600	1 Chronicles 7:2
22,273	Numbers 3:43
22,200	Numbers 26:14
22,034	1 Chronicles 7:7
22,000	Numbers 3:39
22,000	Judges 7:3
22,000	Judges 20:21
22,000	2 Samuel 8:5
22,000	1 Kings 8:63
22,000	1 Chronicles 18:5
22,000	2 Chronicles 7:5
20,800	1 Chronicles 12:31 (30)
20,200	1 Chronicles 7:9
20,000	2 Samuel 8:4
20,000	2 Samuel 10:6
20,000	2 Samuel 18:7
20,000	1 Kings 5:25 (5:11)
20,000	1 Chronicles 18:4
20,000	2 Chronicles 2:9a (10a)
20,000	2 Chronicles 2:9b (10b)
20,000	2 Chronicles 2:9c (10c)
20,000	2 Chronicles 2:9d (10d)
20,000	Nehemiah 7:71
20,000	Nehemiah 7:72
18,000	Judges 20:25
18,000	Judges 20:44
18,000	2 Samuel 8:13
18,000	2 Samuel 10:6
18,000	1 Chronicles 12:32 (31)
18,000	1 Chronicles 18:12
18,000	1 Chronicles 29:7
17,200	1 Chronicles 7:11
16,750	Numbers 31:52
16,000	Numbers 31:40
16,000	Numbers 31:46
15,000	Judges 8:10
14,700	Numbers 17:14 (16:49)
14,000	Job 42:12
12,000	Joshua 8:25
12,000	Judges 21:10
12,000	1 Kings 5:6 (4:26)

12,000	1 Kings 10:26
12,000	2 Chronicles 1:14
12,000	2 Chronicles 9:25
12,000	2 Samuel 17:1
12,000	Psalms 60:2 (title)
10,000	Judges 1:4
10,000	Judges 3:29
10,000	Judges 4:6
10,000	Judges 4:10
10,000	Judges 4:14
10,000	Judges 7:3
10,000	1 Samuel 15:4
10,000	2 Samuel 18:3
10,000	1 Kings 5:28 (5:14)
10,000	2 Kings 24:14
10,000	2 Kings 14:7
10,000	2 Kings 13:7
10,000	1 Chronicles 29:7a
10,000	1 Chronicles 29:7b
10,000	2 Chronicles 25:11
10,000	2 Chronicles 25:12
10,000	2 Chronicles 27:5a
10,000	2 Chronicles 27:5b
10,000	2 Chronicles 30:24
10,000	Esther 3:9

APPENDIX 4

THE LARGEST NUMBERS AND THE KINGS THEY GLORIFY

Yahweh alone as King

675,000	Numbers 31:32
603,550	Exodus 38:26
603,550	Numbers 1:46
603,550	Numbers 2:32
601,730	Numbers 26:51
600,000	Exodus 12:37
600,000	Numbers 11:21
400,000	Judges 20:2
400,000	Judges 20:17
337,500	Numbers 31:36
337,500	Numbers 31:43
250,000	1 Chronicles 5:21
186,400	Numbers 2:9
157,600	Numbers 2:31
151,450	Numbers 2:16
108,100	Numbers 2:24
120,000	Judges 8:10
120,000[1]	Jonah 4:11
100,000	1 Chronicles 5:21

Yahweh and His theocratic ruler David

1,100,000	1 Chronicles 21:5
1,000,000	1 Chronicles 22:14

[1]This verse does not contain the term אלף and is not of the royal inscription genre.

800,000 2 Samuel 24:9
800,000 2 Chronicles 13:3
500,000 2 Chronicles 13:17
500,000 2 Samuel 24:9
470,000 1 Chronicles 21:5
400,000 2 Chronicles 13:3
120,000 1 Chronicles 12:38 (37)
100,000 1 Chronicles 22:14
100,000 1 Chronicles 29:7

Yahweh and Asa: Or Zerah alone
1,000,000 2 Chronicles 14:9

Solomon
153,600 2 Chronicles 2:16
120,000 1 Kings 8:63
120,000 2 Chronicles 7:5

Saul
300,000 1 Samuel 11:8
200,000 1 Samuel 15:4

Rehoboam
180,000 1 Kings 12:21
180,000 2 Chronicles 11:1

Ahab? Yahweh uses Ahab against the Syrians's hubris and blasphemy. ✓
100,000 1 Kings 20:29

Jehoram? Or Mesha of Moab?
100,000 2 Kings 3:4a
100,000 2 Kings 3:4b

Yahweh and Hezekiah:

185,000 2 Kings 19:35

185,000 Isaiah 37:36

Asa

300,000 2 Chronicles 14:7

280,000 2 Chronicles 14:7

Jehoshaphat

300,000 2 Chronicles 17:14

280,000 2 Chronicles 17:15

200,000 2 Chronicles 17:16

200,000 2 Chronicles 17:17

180,000 2 Chronicles 17:18

Amaziah

300,000 2 Chronicles 25:5

100,000 2 Chronicles 25:6

Uzziah

307,500 2 Chronicles 26:13

Pekah

200,000 2 Chronicles 28:8

120,000 2 Chronicles 28:6

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Origen *Homiliae in Numeros.*

Pseudo-Clement of Rome *Recognitiones.*

Rhabanus Maurus *Enarrationum in librum Numerorum.*

Tertullian *Aduersus Marcionem.*

. *Aduersus Praxean.*

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