

ABSTRACT

Title of Thesis: **DIACHRONIC DEVELOPMENT OF KINSHIP TERMINOLOGY
IN PRE- AND POST-EXILIC BIBLICAL TEXTS**

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Much of the linguistic analysis of Biblical Hebrew (BH) is concerned with assigning dates of writing to the books, or with categorizing features of BH as “early” or “late.” Accurate linguistic dating and categorization is beyond our abilities at this time with the limitations of the available data, and this preoccupation distracts from what linguistic analysis is possible.

The current study examines kinship terminology in Samuel-Kings and Chronicles and compares these books for evidence of semantic and lexicographical changes that support a theory of diachronic change. Language change between Samuel-Kings and Chronicles reflects a difference in writing time and different stages of the language. These changes are thought to be triggered by language contact and societal disruption during the Babylonian exile and its aftermath. This study uses corpus analysis to identify changes in frequency and usage of kinship terminology, and finds statistically significant differences in usages of terms which indicate semantic drift and metaphorical usages derived from the primary meanings available only in the language of Chronicles.

This study demonstrates that modern linguistics-informed methodology can be applied productively to biblical texts and that linguistic analysis can provide information about language change without getting caught up in the impossible task of dating. Chapter One explores the historical and linguistic backdrop of Samuel-Kings and the difficulties involved in language analysis with a limited corpus. Chapter Two examines the data to identify differences in the language of Samuel-Kings and Chronicles. Chapter Three discusses language change and examples of language change in kinship terminology, and draws conclusions about these changes.

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by

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Table of Contents

Acknowledgements	ii
Table of Contents	iii
Chapter 1: THE PROBLEMS OF THE EXILE AND SEMANTIC CHANGE	1
INTRODUCTION	1
HISTORICAL BACKDROP	2
Dating of Samuel-Kings and Chronicles	7
KINSHIP AND KINSHIP TERMINOLOGY	10
LINGUISTIC CHANGE AND LANGUAGE CONTACT	13
Scribal Schools	18
METHODOLOGY	20
The Corpus	21
Linguistics Methodology in Biblical Studies	23
Methodology of the Present Study	26
Chapter 2: DATA ANALYSIS	30
FREQUENCY	33
USAGE	36
SUMMARY	41
Chapter 3: EVIDENCE OF DIACHRONIC DEVELOPMENT	43
DIACHRONIC CHANGE/LINGUISTIC CYCLES	43
Semantic Change	45
Metaphorical Expressions	46
Semantic Drift	48
Lexicographical Change	54
CONCLUSION	56
APPENDIX 1: FREQUENCY OF KINSHIP TERMINOLOGY	58
Bibliography	60

CHAPTER 1: THE PROBLEMS OF THE EXILE AND SEMANTIC CHANGE

INTRODUCTION

The biblical books of Samuel-Kings and Chronicles present parallel histories of the monarchic period, but reflect two different perspectives, one from before the Babylonian exile and one from after. This provides a unique opportunity to compare the texts and learn more about the societies that wrote them, based not only on the literary evidence of the narratives and framing found in the texts, but also on the linguistic evidence of the texts themselves. In particular, the specific vocabulary used and any changes in this vocabulary may offer insight into the way that society as a whole was changed in the period following the exile. Kinship terminology—that is, language used to refer to familial relations and social structures—is a relatively stable and closed category of words, meaning that it is not common for words in this category to change meaning or be replaced. Additionally, all biblical material was passed through scribes trained in a standardized form of the language who presumably attempted to normalize irregularities. Because of these factors, any changes in kinship terminology are likely to be indicative of a significant change at the level of society, language, or scribal standards (these levels are dependent on one another and may not be able to be isolated). With this in mind, I will use linguistics-informed methodology to investigate the biblical books of Samuel, Kings, and Chronicles for evidence of change in kinship terminology in order to construct a more accurate

social history of early Judaism and life in Judah in the post-exilic period, and to demonstrate diachronic change between the books of Samuel-Kings and Chronicles in order to date these books relative to each other.

HISTORICAL BACKDROP

The Bible is a literary text that has come to modern times through many stages of revisions and religious recontextualizations. As such, it is not a historic document giving an objective account, but a collection of documents each written with intention and edited together to reflect a particular ideology. Despite this, there is much historical information that can be gained from it, about the time in which the narratives are set and especially about the time in which the texts were written down. The books of Samuel-Kings and Chronicles describe the time of the monarchic period in Israel and Judah in the 10th-7th centuries BCE, but were not written until the 8th century at the earliest. This means that much of the texts were written after the events they describe and may not be entirely historically accurate, even if scribes were using earlier texts as references. Some historic information can be corroborated with extra-biblical texts and archaeological findings, and even that which can not be confirmed can be informative of the ideologies of the time of writing and revisions.

The Bible presents the Babylonian exile as perhaps the most significant event in early Jewish history. In 586 BCE, the southern kingdom of Judah and critically, the capital, Jerusalem, fell to the Neo-Babylonians. The royal court, scribes, and other elites were brought to Babylon and remained there for approximately 50 years until the decree of Cyrus in 539 BCE when they

were allowed to return to Judah. Most of the rest of the population remained in Judah, although there is evidence of redistribution of settlements to the north, suggesting that many people fled from the area around Jerusalem following the fall of the city.¹ The exile and the return from exile affected not only language and culture, but also the development of a communal Jewish identity and a renewed focus on Jerusalem. This development is reflected in the various biblical histories, including the Deuteronomistic History (DtrH) and the book of Chronicles (the Chronicler's History). The DtrH includes the books of Joshua, Judges, Samuel, and Kings (i.e. the Former Prophets), and can be described as the history that has been revised by the Deuteronomist, or scribes of the Deuteronomistic school of thought—an exilic theological school focused on centralization of religion and faithfulness to the Israelite god and the temple in Jerusalem.² In fact, following the return from exile, there was a significant religious reform and a shift in worldview, as the newly formed post-exilic Jewish community had to reconcile their belief in their god as a national god with the reality of the exile.³ That said, according to Kings and Chronicles, the post-exilic religious reforms began before the exile, during King Josiah's reign, with the discovery of a new law scroll (likely an early version of Deuteronomy). These reforms were the beginnings of the Deuteronomistic school, and shaped a new perspective of the Jewish people's duty to their god and the consequences for unfaithfulness, which was solidified by the destruction of Jerusalem and the temple, and the subsequent exile.

¹Hans M Barstad, "After the 'Myth of the Empty Land': Major Challenges in the Study of Neo-Babylonian Judah", in *Judah and the Judeans in the Neo-Babylonian Period*, ed. Oded Lipschits and Joseph Blenkinsopp (Penn State Press, 2003), 3–20.

²Raymond F. Person, *The Deuteronomistic History and the Book of Chronicles: Scribal Works in an Oral World* (Society of Biblical Literature, 2010), 31–40.

³Krijn Van Der Jagt, "Changing Worldviews in Post-Exilic Israel", *The Bible Translator* 61.1 (2010): 19–30.

Following the exile, theology continued to shift to view the God of Israel not as a national deity, but as a universal one, with a plan for all people.⁴ This shift in worldview, among other factors, is why the theology of the texts written in the post-exilic period is so different from pre-exilic texts, and why Deuteronomistic revisions can be traced so clearly.

The books of Samuel-Kings contain a series of narratives about the kings of Judah and Israel, beginning in 1 Samuel with the Israelites asking for a king and the prophet Samuel appointing Saul. The narratives continue with stories of David's appointment and rule, and Samuel concludes with the story of David building an altar on the threshing floor of Araunah the Jebusite. Kings follows, with Solomon succeeding David as king, the end of the United Monarchy and division into Judah and Israel, stories of kings from both kingdoms, and culminates in the destruction of Jerusalem. As part of the DtrH, the purpose of Samuel-Kings seems to be to provide a theological explanation for the destruction of Jerusalem and the Babylonian exile; according to the Deuteronomistic theology, the failure of the kings to keep their promise to the Israelite god to worship only him resulted in the fall of the kingdoms and the destruction of the temple. This theology is apparent in the repetition of the themes of apostasy and judgement, and Jerusalem as God's chosen city.

The agenda of the book of Chronicles is rather different, however. The book opens with genealogical lists, beginning with Adam and continuing through the founding of the United Monarchy. From here, Chronicles proceeds in a narrative format, describing the reigns of David and Solomon, then the reigns of many kings—mostly those of Judah—and ends with the decree of Cyrus allowing the return of the people to the land of Judah. The main theme of Chronicles is

⁴Van Der Jagt, "Changing Worldviews in Post-Exilic Israel".

the long relationship of the Jewish people with their god and their historic claim to the land of Judah/Israel. This is evident in the genealogies, which emphasize the special relationship that God had with the Jewish people since the very beginning, as well as the narrational focus on the kings of the kingdom of Judah. Some of the narratives in Chronicles reflect those in Samuel-Kings, but the material is not identical; about 40% of the book of Chronicles is shared synoptic material, while about 5% of Samuel and about 15% of Kings is synoptic.⁵ The high percentage of shared material is indicative of shared source material, although what exactly that source material was is heavily debated. The narrative style of Samuel-Kings and Chronicles allows an interesting look into the social structures of monarchic society, or at least as they were perceived by the scribes writing at a later date.

In the monarchic society described in Samuel-Kings and Chronicles, the social structures are based on tribes, clans, and large family units, similar to those described in biblical accounts of pre-monarchic society. As such, there are many specific terms used to convey different levels of social structures, from the tribal level to territories to specific lineages. Biblical sources point to a patriarchal and patrilinear society, as genealogies are almost always given according to the father, with blood-relations through the mother mostly ignored, and inheritance passed from father to son with few exceptions. Marriage was usually endogamous, or within the clan, in order to maintain the clan's territory.⁶ Families lived in clusters of multi-generational homes, passing on particularized knowledge of their land.⁷ Carol Meyers gives a useful description of

⁵Robert Rezetko, "Dating Biblical Hebrew: Evidence from Samuel-Kings and Chronicles", in *Biblical Hebrew : Studies in Chronology and Typology*, ed. Ian Young (A&C Black, 2003), 215–50.

⁶David S Vanderhooft, "The Israelite Mishpaha, the Priestly Writings, and Changing Valences in Israel's Kinship Terminology", *Exploring the Longue Durée: Essays in Honor of Lawrence E. Stager*, 2009, 485–96.

⁷Carol Meyers, "The Family in Early Israel", in *Families in Ancient Israel*, ed. Leo G. Perdue et al. (Westminster John Knox Press, 1997), 1–47; Susan Ackerman, *Women and the Religion of Ancient Israel* (Yale

early smallholder families, explaining that they functioned in this way because difficult farming conditions led to extremely specific regional knowledge of agriculture and land arability being passed through families that were tied to their specific region.⁸ During the monarchic period, most of the population of Judah and Israel would have lived in small farming villages, and life for them would have looked very similar to before the monarchy.⁹ Although there was some movement towards towns and larger settlements, archaeological evidence suggests that rural life proceeded in much the same way throughout the Iron Age and the monarchic period. This means that the same language would likely have been used for social structures and kinship, with very little change in semantic value.

That said, it is not entirely clear how the exile affected the majority of the people living in the land of Judah. Those who were displaced to Babylon were the elite royal court and city-dwellers, not the rural agrarians that populated most of the land. Some Judeans may have been resettled into towns by the Babylonian state,¹⁰ while others would have remained on their land or resettled themselves nearby.¹¹ Still, much of Judah experienced heavy destruction, and the population was affected as victims of war, famine, and disease.¹² There is some controversy about how much of the population was killed or displaced at this time, with estimates ranging widely from 10% to 80% of the population. Economic records indicate that although there was a

University Press, 2022).

⁸Meyers, “The Family in Early Israel”.

⁹Vanderhooft, “The Israelite Mishpaha”.

¹⁰Rainer Albertz, “More and Less Than a Myth: Reality and Significance of Exile for the Political, Social, and Religious History of Judah”, in *By the Irrigation Canals of Babylon: Approaches to the Study of the Exile*, ed. John J. Ahn and Jill Middlemas (T & T Clark, 2012), 20–33.

¹¹Barstad, “After the ‘Myth of the Empty Land’”.

¹²Avraham Faust, “Judah in the Sixth Century BCE: A Rural Perspective”, *Palestine exploration quarterly* 135.1 (2003): 37–53; Albertz, “More and Less Than a Myth”.

decline, there was still some economic activity, especially in the region of Benjamin.¹³

However, archaeological evidence also shows a discontinuation in four-room houses—a staple of Judean culture in the monarchic period—during the sixth century.¹⁴ Thus, while it is not clear what the extent of the effects of the exile were on the rural population of Judah, it is clear that they were affected, with regard to population as well as living situations.

Dating of Samuel-Kings and Chronicles

Scholarly consensus holds that the book of Chronicles was written using the books of Samuel and Kings as a source text,¹⁵ though some scholars argue that both Samuel-Kings and Chronicles are alternate developments of a common early source text.¹⁶ Despite some overlap in content, however, Samuel-Kings and Chronicles have different motivations and goals. Samuel and Kings, as part of the DtrH, are preoccupied with the failings of the kings of Judah and Israel and their perceived contribution to the collapse of the monarchy and the exile. Chronicles, on the other hand, is concerned with genealogy and connecting the time of writing back to the historical time of the pre-monarchy and monarchy. The different perspectives and motivations of these books, as well as linguistic dissimilarities and variant writing styles, provide evidence that these books were written at different times. The books of Samuel and Kings are generally dated to the end of the pre-exilic period, and the book of Chronicles is generally dated to the

¹³Albertz, “More and Less Than a Myth”.

¹⁴Avraham Faust, “Social and Cultural Changes in Judah during the 6th Century BCE and their Implications for our Understanding of the Nature of the Neo-Babylonian Period”, *Ugarit-Forschungen* 36 (2004): 157–76.

¹⁵Gary N. Knoppers, “The Relationship of the Deuteronomistic History to Chronicles: Was the Chronicler a Deuteronomist?”, in *Congress Volume Helsinki 2010*, ed. Martti Nissinen (Brill, January 2012), 307–41.

¹⁶A Graeme Auld, “The Relationship Between Textual and Literary Study of the Former Prophets of the Hebrew Bible” (PhD diss., Aberdeen University, 1994).

post-exilic period. Conventionally, the language of Samuel-Kings and other books dated to the pre-exilic period is referred to as Standard Biblical Hebrew (SBH) or Early Biblical Hebrew (EBH) and the language of Chronicles and other books dated to the post-exilic period is referred to as Late Biblical Hebrew (LBH). EBH and LBH are distinguished by linguistic features associated with early and late books.

That said, there are some scholars who argue that it is possible that Samuel-Kings was written at approximately the same time as Chronicles, and put the date of writing of both in the early exilic period.¹⁷ Robert Rezetko in particular, along with Ian Young and Martin Ehrensverd, argues that “many distinctive linguistic features of Chronicles and other ‘late’ BH compositions are stylistic idiosyncrasies devoid of any diachronic value or are explicable by (strictly speaking) non-chronological factors such as dialect, diglossia, and editorial and scribal activity.”¹⁸ In other words, Rezetko argues that it is possible that the linguistic differences between EBH and LBH can be explained in terms of synchronic factors and may not reflect different stages of language development. Instead, he argues “on the basis of literary-critical and text-critical criteria that Samuel–Kings cannot be reduced to the early or preexilic period only, and therefore, to some degree the production of Samuel and Kings was contemporary and even later than Chronicles.”¹⁹ In sum, Rezetko argues that Samuel, Kings, and Chronicles should be not be assigned to discrete periods or that their language should be described as being uniformly from an earlier or later stage of the language. To be clear, this argument is not saying that there

¹⁷Rezetko, “Dating Biblical Hebrew”.

¹⁸Rezetko, “Dating Biblical Hebrew”, 222.

¹⁹Robert Rezetko, “Evaluating a New Approach to the Linguistic Dating of Biblical Texts. A Review of ‘Early Biblical Hebrew, Late Biblical Hebrew, and Linguistic Variability: A Sociolinguistic Evaluation of the Linguistic Dating of Biblical Texts’”, *The Journal of Hebrew Scriptures* 13 (September 2013): 6.

is no language development in the Bible or that all biblical books should be arbitrarily given late or post-exilic dates, but rather that linguistic evidence can be attributed to many factors and needs to be studied more thoroughly before it is assumed that all differences are due to diachronic development.

I do not disagree with this assessment, but I do find the push for synchronic explanations to be lacking as well. It is not enough to wave away evidence of change and say that it may be explained as a different style or dialect without significantly more evidence for these styles being contemporary than they are currently able to provide. Additionally, while it may be true that parts of the books are earlier or later than other parts, that does not mean that the books as a whole can not be generally dated. Without more evidence in support of synchronic differences, it is preferable to find stronger evidence for diachronic development as well as evidence of revision and redaction history. Thus, while the precise dating of these books is not secure, the relative dating of Samuel-Kings being written before Chronicles is supported by the majority of scholars and is the view I will argue in support of.

In this section I have reviewed the historical background of the books of Samuel-Kings and Chronicles, and shown how the Babylonian exile set the stage for significant social and cultural changes in Judah. In the next sections, I will review kinship terminology and the ways in which it may have been affected by the exile and return from exile.

KINSHIP AND KINSHIP TERMINOLOGY

Kinship is a system of social relations which are often understood to be based on genealogy and genetic relationships, with those who are genealogically related being “kin” and assigned kin terms as signifiers of the particular genetic relationship, such as “father,” “mother,” and “daughter,” etc. There are many examples of societies that do not fit within this understanding, however. For example, the Tiwi, an aboriginal people of Australia, assign the role of “father” and the corresponding kinship term to the man to whom the child’s mother is married, who is not necessarily the man who impregnated the mother.²⁰ With this in mind, it is clear that a genealogically based understanding of kinship is not adequate for a universal definition. An alternative to a genealogically based understanding of kinship is a system wherein kin terms are symbols, or “signs” in the Saussurian sense, given meaning by culturally-specified instantiation rules.²¹ Dwight Read proposes precisely this system, saying that “What must be determined for a given terminology is the set of atomic kin terms, the hypothesized structural equations and any other rules that give the structure its form.”²² In other words, any given kin term signifies a particular structure of relationships, and this structure may be different in different cultures and societal contexts. For example, the English term “aunt” signifies the relationship “Sister of Parent of Self,” but in some languages, such as Arabic and Biblical Hebrew, the parent is specified such that there is a term that means “Sister of Mother of Self” and another term that

²⁰Dwight W. Read, “Formal Analysis of Kinship Terminologies and its Relationship to what Constitutes Kinship”, *Anthropological Theory* 1.2 (2001): 239–67.

²¹Read, “Formal Analysis of Kinship Terminologies”; Dwight Read, Michael Fischer, and Murray Leaf, “What Are Kinship Terminologies, and Why Do We Care? A Computational Approach to Analyzing Symbolic Domains”, *Social Science Computer Review* 31.1 (February 2013): 16–44.

²²Read, “Formal Analysis of Kinship Terminologies”, 246.

means “Sister of Father of Self.” In this way, kin terms have highly specific definitions and stand for specific relationships, but are not identical in all languages or cultural contexts.

That said, kin terms can be used in ways other than this strictly literal use, three of which I will discuss here. The first type of non-literal use is extended meaning, where the kin term implies kinship, but at a higher degree than the literal meaning of the term. For example, in Biblical Hebrew, the term *ʾāb* “father” can also be used to mean “ancestor,” extending the meaning of the term from the literal “Father of Self” to mean any male individual along the genetic or kin line, including grandfather, great-grandfather, great-great-grandfather, etc. This kind of semantic broadening does not usually replace the original meaning, but may do so if another word is introduced that occupies the same semantic field.²³

Another way kinship terms may be used is fictively, where the term is extended to non-relations without implying relation. In some cultures, it is appropriate to show respect to someone older than oneself by using the terms “grandmother,” “grandfather,” “aunt,” or “uncle.” Also, in some cultures, colloquial usages allow speakers to refer to peers as “brother,” “cousin,” or variants of these terms. In some contexts, it may be appropriate for an older individual to refer to another, usually a younger individual, as “son,” to imply familiarity or responsibility. In each of these examples, it is not the case that the speaker is implying a genetic relationship; instead they are using kinship terms in a fictive way to show respect or camaraderie. The fictive use of the kin term is a secondary use, derived from the primary kinship meaning of the term, and it does not imply true kinship.

²³In this scenario, a word takes on a second, broader meaning, and another word is introduced that has roughly the same meaning as the original meaning of the first word. When this happens, the first word usually loses the original meaning entirely and only retains the broader meaning. An example of this is the English word “dog,” which once referred to a specific breed of dog until the meaning broadened to mean all dogs and breed names replaced the original meaning.

Finally, kinship terms may also be used separately from their kin-meaning. This usage is highly language-dependent, as it occurs when the kin term is grammaticalized into another function. For example, in Hebrew, the terms *ben* “son” and *bat* “daughter” are used in the construction *ben/bat* + [number] to mean “age” (e.g. *wəʿēlî ben-tišʿîm ûšmōne* “and Eli was ninety-eight years old” (1 Samuel 4:15)). In addition to terms being grammaticalized into function words, they may also take on additional meanings through metaphor. For example, the term *ʾāb* “father” also takes on the meaning of “head of house” and consequently is used metonymically to mean the entire family or lineage. These additional usages utilize secondary meanings of the terms, as they do not imply kinship.

In these ways, kinship terminology can be versatile and used in many contexts. Examining the contexts that these terms are found in can help to determine how kinship is structured in a given culture, as in the example of the Tiwi, who structure kinship around marriage and not around genetic relations. Terms for larger-scale kinship structures such as “family,” “clan,” “tribe,” and “people” are also valuable for understanding how a culture is structured, as well as how the social structures and kinship terminologies inform one another. One such case study of these kinship structures is the work carried out by Paul Friedrich on the evolution of kinship in Russia, in which he detailed the kinship terms available in Russian and their actual uses, as well as how these terms mapped onto behavior patterns and living situations.²⁴ He discovered that kinship terms in Old Russian were “bifurcate affinal,” that is, marked according to the sex of the linking spouse and the linking primary relative. This is largely due to the makeup of the household and the fact that for women, the household of birth and of post-marital identification

²⁴Paul Friedrich, “Semantic Structure and Social Structure; An Instance from Russian.”, in *Explorations in cultural anthropology; essays in honor of George Peter Murdock*, ed. Ward H. Goodenough (McGraw-Hill, 1964).

was not the same. Marking the sex of the linking relative implies relationship the individual has to their house, providing further information about the individual being named. Other cultures have other ways of conveying information about kinship and social structures in their languages.

In the Bible, early Israelite society was structured according to hierarchically related kinship units.²⁵ These units are laid out precisely in Joshua 7:14-18, where it is clear that the tribe is the largest unit, containing many clans, which themselves contain many ancestral houses. However, the clarity of these verses is exceptional, and throughout the rest of the Bible, these structural terms are often confused and conflated.²⁶ This makes any discussion of kinship and social structures more difficult and raises the possibility that these terms changed meaning or were used erroneously when writing about structures that were no longer in use (i.e. intentionally archaic language being used incorrectly). If patterns can be identified in the irregularities, they may be able to clarify how these terms changed meaning or use.

In this section I reviewed kinship terminology and some of its uses in order to show how this semantic field is a good subject for this study. In the next section, I will examine language change and how it can inform us about societal changes.

LINGUISTIC CHANGE AND LANGUAGE CONTACT

Language change is a normal function of natural languages. While some language purists strive to maintain prescriptive grammar rules and “correct” ways of speaking, change is unavoidable

²⁵Meyers, “The Family in Early Israel”; Yigal Levin, “From Lists to History: Chronological Aspects of the Chronicler’s Genealogies”, *Journal of Biblical Literature* 123.4 (2004): 601–36.

²⁶Aloo Osotsi Mojola, “The ‘Tribes’ of Israel? A Bible Translator’s Dilemma”, *Journal for the Study of the Old Testament* 23.81 (1998): 15–29.

and necessary. While all aspects of language, including phonology, morphology, syntax, and semantics are subject to change, semantics is arguably the most flexible and open to change.²⁷ As a result, semantics—simply, the meanings of words and complex expressions—is subject to relatively rapid change. This may be apparent even in written language, which tends to be more formal and slower to change than spoken language.²⁸ Thus, even though the Bible is a written document and diachronic language change therein is masked by layers of revisions, some evidence of language change can be found in semantic and lexical data. While this lexicographical evidence is considered by some to not be strong enough to linguistically date the books of the Bible,²⁹ I believe that it is strong enough to show language change as a consequence of societal change and language contact.³⁰ Furthermore, because the period of the Babylonian exile was so short, the semantic domain may be the best place to look for evidence of change, as morphological and syntactic changes would take longer to enter the language and especially the standardized written language.

Language contact is a particularly strong driving force of language change. This is made more complex when the languages in question are genetically related and share enough features

²⁷Ashwini Deo, “Diachronic semantics”, *Annual Review of Linguistics* 1.1 (2015): 179–97; Elizabeth Closs Traugott and Richard B. Dasher, *Regularity in Semantic Change*, Cambridge Studies in Linguistics (Cambridge University Press, 2001).

²⁸Jacobus A Naudé, “The Complexity of Language Change: the Case of Ancient Hebrew”, *Southern African Linguistics and Applied Language Studies* 30.3 (2012): 395–411.

²⁹Rezetko, “Dating Biblical Hebrew”.

³⁰While it is theoretically possible to disentangle these causes of change (see, e.g. William L. Hamilton, Jure Leskovec, and Dan Jurafsky, “Cultural Shift or Linguistic Drift? Comparing Two Computational Measures of Semantic Change”, in *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, ed. Jian Su, Kevin Duh, and Xavier Carreras (Austin, Texas: Association for Computational Linguistics, November 2016), 2116–21), in a corpus this limited, these methodologies do not work. Therefore, it is only possible to speculate about causes of individual changes at this point.

for mutual intelligibility or near-mutual intelligibility,³¹ as the West Semitic languages do. Although the traditional view of genetically related languages describes a “family tree” with individual languages meeting at nodes that represent common ancestors, this view does not apply well to the Semitic languages, which historically had a high degree of geographic overlap and intermingling. Instead, as Stephen Kaufman says, “we should no longer imagine [Semitic languages] to be descended from a single, limited common proto-language, but rather languages and dialects in contact within an area.”³² As such, we must consider the influence of the languages that Hebrew was in contact with.

Aramaic is a West Semitic language that has had a significant impact on Biblical Hebrew due to their close proximity and frequent contact. There is evidence based on shared syntactic constructions that Hebrew and Aramaic have had intensive contact since before either language was attested in writing, at some point in the second millennium BCE, and they remained in close contact as Aramaic became the language of empires and eventually replaced Hebrew as the vernacular spoken language.³³ Even during the monarchic period, there is evidence that elite members of society spoke Aramaic. Most famously, the request in 2 Kings 18:26 for the Assyrians outside the walls of Jerusalem to speak Aramaic and not Judean so that only the royal officials would understand and the conversation would not be public shows that officials in Judea were fluent in Aramaic well before the exile.

³¹Claire Bowern, “Relatedness as a Factor in Language Contact”, *Journal of Language Contact* 6.2 (2013): 411–32.

³²Stephen A. Kaufman, “Languages in Contact: The Ancient Near East”, in *Semitic Linguistics: The State of the Art at the Turn of the 21st Century*, Israel Oriental Studies XX (Eisenbrauns, 2002). See also, Lutz Edzard, *Polygenesis, Convergence, and Entropy: an Alternative Model of Linguistic Evolution Applied to Semitic Linguistics* (Otto Harrassowitz Verlag, 1998)

³³Aaron Koller, “Hebrew and Aramaic in Contact”, in *A Companion to Ancient Near Eastern Languages* (Wiley, 2020), 439–56.

Material archaeological evidence as well as biblical and epigraphic evidence suggest that the first waves of returnees from exile at the beginning of the Persian period in the late 6th century BCE did not bring about a significant change in Judahite life.³⁴ It wasn't until the middle of the 5th century BCE that a second wave brought thousands of returnees from exile from Babylon to Yehud, settling in large numbers and bringing about the “Silver Age” of Hebrew.³⁵ This wave of returnees was a large group of Judeans who had lived in Babylon for several generations—enough time for their Hebrew to diverge from that of the people still living in Yehud and that of those who had returned from exile at the beginning of the Persian period. The Hebrew of these exiles was marked by intensive Aramaic influence, which appears in the Aramaisms of LBH (i.e. the Hebrew of post-exilic biblical books).

There are many instances throughout the Bible, in books dated by consensus to both early and late periods, of linguistic features that seem to be more like Aramaic than SBH. These include lexical, morphological, and syntactic similarities. It was first remarked upon by Chayim Rabin and later by Avi Hurvitz that there is an increase in the number of Aramaic features, which Hurvitz called “Aramaisms,” in texts dated to the Persian period, presumably due to the use of Aramaic as an administrative language and the corresponding change in status of Hebrew.³⁶ However, there are many instances of Aramaic-like features in books dated to earlier periods as well. Gary Rendsburg is very careful to distinguish between “Aramaic-like features,” which are features in texts he deems to have entered the language in the pre-exilic period, and

³⁴David Talshir, “The Habit and History of Hebrew During the Second Temple Period”, in *Biblical Hebrew : Studies in Chronology and Typology*, ed. Ian Young (A&C Black, 2003), 251–75.

³⁵Talshir, “The Habit and History of Hebrew During the Second Temple Period”.

³⁶Avi Hurvitz, “The Chronological Significance of ‘Aramaisms’ in Biblical Hebrew”, *Israel Exploration Journal*, 1968, 234–40.

“Aramaisms,” which he reserves for features which entered Hebrew from Aramaic in the post-exilic period.³⁷ This distinction is necessary because Hebrew and Aramaic were in contact and influencing one another for a very long time before the Babylonian exile, and even though the exile allowed for a huge influx of Aramaic into biblical texts, it is not the only source of Aramaic in the Bible.³⁸ It can be difficult to distinguish between Aramaic-like features and Aramaisms, and this makes it difficult to use these as convincing evidence for linguistic dating.³⁹ Nevertheless, there is an abundance of evidence of language contact between Hebrew and Aramaic that can be dated to the exilic and post-exilic periods.⁴⁰

To complicate matters further, it is not just the geographic proximity of the spoken languages that led to the influence of Aramaic in later biblical texts, but also the changes in the scribal schools as brought about by the Babylonian exile. The exile did not destroy the Judean scribal schools outright, but brought scribes as part of the royal court to live in Babylon, who would have subsequently returned to Judah after the exile.⁴¹ This allowed the Hebrew literary tradition to survive and continue its transmission during and after the exile. While they were in

³⁷Gary A. Rendsburg, “Hurvitz Redux: On the Continued Scholarly Inattention to a Simple Principle of Hebrew Philology”, in *Biblical Hebrew : Studies in Chronology and Typology*, ed. Ian Young (A&C Black, 2003), 104–28.

³⁸Koller, “Hebrew and Aramaic in Contact”; William Schniedewind, *A Social History of Hebrew: Its Origins Through the Rabbinic Period* (Yale University Press, 2013).

³⁹Rendsburg, “Hurvitz Redux”; Ian Young, “Biblical Texts Cannot be Dated Linguistically”, *Hebrew Studies* 46.1 (2005): 341–51; Robert Rezetko, “The Spelling of ‘Damascus’ and the Linguistic Dating of Biblical Texts”, *Scandinavian Journal of the Old Testament* 24.1 (2010): 110–28.

⁴⁰It is relevant to note that many of the arguments against linguistic dating of the Bible also propose very late dates for the entire Bible, including books which are usually given early dates (see for example, Rezetko, “Dating Biblical Hebrew”, Young, “Biblical Texts Cannot be Dated Linguistically”, and Jacobus A Naudé, “Linguistic Dating of Biblical Hebrew Texts: The Chronology and Typology Debate”, *Journal of Northwest Semitic Languages* 36.1 (2010): 1–22). There is no disagreement about whether or not there was influence from Aramaic in the exilic and post-exilic periods, only about how this influence should be considered in the linguistic analysis and dating of books.

⁴¹Schniedewind, *A Social History of Hebrew*.

the Babylonian court, some aspects of the local language and culture were integrated into the exiled Judeans' lives. This likely meant that most exiles living in Babylon were bilingual or at least competent in both Hebrew and Aramaic. Evidence for cultural exchange during this time includes the names of the months, which were borrowed into Hebrew during this time and still persist as the month names in the modern Jewish calendar. The month names are Akkadian, not Aramaic, but they nevertheless demonstrate that the exiles living in Babylon were in close contact with Babylonian culture and even adopted aspects of it. At the same time, scribal schools in Yehud quickly transitioned to Aramaic, so completely that "there is no epigraphic evidence indicating that Hebrew script was still being used during the Babylonian period."⁴² Hebrew continued to be spoken, but when it was written, it was in the Aramaic script. Thus, not only was Aramaic exerting influence on Hebrew as a spoken language, but also less directly through the scribal schools, where Aramaic became the standard. This is discussed further in the next section.

Scribal Schools

William Schniedewind has written extensively on the topic of scribal schools in the ancient Near East, including on their development and curriculum, and on the process of transmission itself.⁴³ He discusses the apprenticeship model of scribal education, in which master scribes took on "sons" or apprentices, and the standardized training curriculum involving abecedaries, word lists, letters, proverbs, and more advanced writings. Critically, this training curriculum was

⁴²Schniedewind, *A Social History of Hebrew*, 147.

⁴³William M. Schniedewind, *The Finger of the Scribe: How Scribes Learned to Write the Bible* (Oxford University Press, 2019); Schniedewind, "Scribal Education in Ancient Israel and Judah into the Persian Period", *Second Temple Jewish "Paideia" in Context*, 2017, 11–28.

adapted from the Mesopotamian scribal school tradition at the end of the Late Bronze Age.

Schniedewind also discusses the process of transmission, and the evidence within the Bible of editing and composition of sources. Some of this evidence includes the repetition of narratives with different, sometimes contradicting details, and unrelated passages presented consecutively. In the Masoretic Text (MT), the king of Aram-Damascus is referred to by the name Ben-Hadad. However, in other texts that reference this king, including the Aramaic of Ezra, the name Bir-Hadad is used, *bir* being the Aramaic cognate of *ben* “son.” This is evidence that the scribes were actively editing the text and attending to the details that they considered important, such as Hebraizing Aramaic names. It is not always clear what other edits or redactions have been made, and it is only through knowledge of biblical ideology and cultural context that these changes can be guessed at. This aspect of scribal transmission makes the job of the biblical scholar more difficult, as it adds an invisible layer of possible scribal influence atop the text.

As such, there are many things that cannot be determined based solely on the text. We can not know when the text was first written down or what the original version looked like, what other versions may have existed that have been lost in the process of transmission, or how the texts have been edited. Despite all these negative statements and the many things that are beyond our ability at this time to know, I believe that there are still things that can be learned from the Bible about biblical Hebrew and its stages, as well as about scribal transmission.

In this section I showed that language change is to be expected in the post-exilic period, as a result of the intensive language contact with Aramaic and the changes in education in the scribal schools. I discussed some of the avenues of influence as well as the issues with disentangling influence and change. In the next section, I will discuss the ways that this language change can be studied and what it may reveal.

METHODOLOGY

Although the field of biblical studies is often highly concerned with language, it is not the standard to employ methodology or tools from the field of linguistics. Rather, biblical studies often uses tools of comparative literature, examining the Bible as a literary work or as a historic text, but not as a source of information about language. I believe that linguistics has much to contribute and that inter-disciplinary collaboration is extremely useful for the furthering of both fields. In this thesis, I am attempting to demonstrate the overlap in the fields and that linguistics tools can help us to think about the language of the Bible in a new way. I am hardly the first to make this point, but I feel that it is necessary to use all resources available in order to make the most informed scholarly analyses.

While the language that I am using to discuss this topic comes in part from the field of linguistics, it is necessary to note that the goal of my work is different than what one might typically find in modern linguistics work. The goal of modern linguistics is to understand language in the mind. This typically means investigating living languages that have native speakers to inform the research. For example, the study of semantics does include examining the meaning of individual words, but is mostly concerned with the larger logical structure of language and how meaning is built up. Even corpus linguistics, which analyzes collections of linguistic data using statistics, similar to my approach here, is generally concerned with synchronic language variation and living languages.⁴⁴ My goal, on the other hand, is to analyze data collected from a written corpus of a language with no living native speakers and little

⁴⁴Alexander Koplenig, “Analyzing Lexical Change in Diachronic Corpora” [in en] (PhD diss., Universität Mannheim, 2016), 80.

information about when it was written, and attempt to draw conclusions about changes in the meanings of particular words. One of the very difficult things about this project and about studying the language of the Bible in general is that written language is often very different from spoken language, with regard from everything from word choice to syntax. In some situations, such as a diglossia, the written language may not even be closely related to the spoken language (e.g. Arabic, where the vernacular spoken language is dialectal, but the written language is standardized MSA and can be quite different from the spoken dialects). Even when the written and spoken languages are the same, written language tends to be more formal and careful, and is usually not representative of how native speakers actually speak. This means that when analyzing written language with no native informants, as in this case, we must be careful not to make strong assumptions about the spoken language. This is very different from modern linguistics studies of living languages. Because of the different goals and situations involved, the methodology I am using is not drawn directly from modern linguistics work, but is informed by it.

The Corpus

Corpus linguistics is involved with the statistical analysis of a corpus, that is, a collection of linguistic data that is sampled to be representative of the language.⁴⁵ This definition of a corpus does not align precisely with the materials that I have at hand. The complete “corpus” of all biblical and extra-biblical material can hardly be considered to be representative of any spoken language, to a much higher degree than any corpus of a living language, for reasons relating to

⁴⁵Koplenig, “Analyzing Lexical Change in Diachronic Corpora”.

authorship, genre, and attestation.⁴⁶ There simply is not enough material and not enough variety in genre, content, and source, for it to be considered representative. Furthermore, I am not examining the entire corpus of Biblical Hebrew, but only a select few texts, further limiting the factors of genre, content, and source. This is not to say that we cannot learn at all from such a limited corpus, but that what we can learn is similarly limited. We cannot make grand claims about the way that native speakers used language or the particular ways that the spoken language evolved over time. Rather, we are limited to observations of the written language and of the specific texts.

Still, even with a corpus which is less than representative, much can be learned. The goal of study of a diachronic corpus should not be to investigate the language as a whole, but to identify key changes or results which can be replicated in other corpora.⁴⁷ If the results can be replicated, then the observation may be generalizable, perhaps even to the language as a whole. As such, the goal of this study is not to make claims about the development of kinship terminology in Biblical Hebrew, but much more specifically to identify evidence of diachronic change in kinship terminology in a sub-corpus of Samuel-Kings and Chronicles. If evidence of diachronic change can be identified here, then this study can be repeated in other corpora and with other lexical categories in order to make general statements about diachronic change in Biblical Hebrew.

⁴⁶There are approximately 8,674 unique lexemes in the Hebrew Bible, according to Strong's Concordance. See also, Miriam Azar, Aliza Pahmer, and Joshua Waxman, "A Thesaurus for Biblical Hebrew", in *Proceedings of 1st Workshop on Language Technologies for Historical and Ancient Languages* (European Language Resources Association (ELRA), 2020), 68–73.

⁴⁷Koplenig, "Analyzing Lexical Change in Diachronic Corpora".

Linguistics Methodology in Biblical Studies

As stated above, I am far from the first to attempt to connect biblical studies and linguistics. One of the foremost scholars in biblical studies using linguistics-informed methodology is Avi Hurvitz, who uses a rigorous set of standards to linguistically date language features and biblical books. His methodology is based on four criteria: linguistic distribution, linguistic opposition, extra-biblical attestation, and accumulation.⁴⁸ The first three of these criteria are used to determine if a particular linguistic feature is late; the fourth criterion is used to determine if a particular text is late. Essentially, these criteria state that to determine that a feature is from LBH, it must occur exclusively or predominantly in compositions assigned by consensus to the late biblical period, it must have contrastive classical equivalents that it replaces, and it must be active and widespread in extra-biblical sources reflecting the Second Temple period. Furthermore, a text is late only if it contains a heavy accumulation of neologisms (i.e. linguistic innovations; features of LBH as determined by the first three criteria). In order for Hurvitz to accept a feature or a text as late, it must meet all of his criteria.

Although this is excellent methodology for linguistic dating, it is not entirely useful for semantic comparisons, with the exception of the second criterion, linguistic opposition. The motivation of linguistic opposition is that when comparing early texts to late texts, there may be a term that comes to replace another term, such that they are in complementary distribution, with one occurring in only the early texts and the other occurring in only the late texts, in the same context and with the same meaning. This may happen through a process of semantic broadening, narrowing, or other kinds of semantic drift, such as if the referent of a word were

⁴⁸Avi Hurvitz, "The Recent Debate on Late Biblical Hebrew: Solid Data, Experts' Opinions, and Inconclusive Arguments", *Hebrew Studies* 47.1 (2006): 191–210; Rezetko, "The Spelling of 'Damascus'".

lost or fell out of use. Linguistic opposition may be identified through analysis of frequency and a correlated rise and fall in the frequency of two terms.

One criticism of Hurvitz's work is an argument by Robert Rezetko, that much of Hurvitz's evidence of linguistic change is lexicographical, i.e. spelling and word choice, and that the study of biblical language "*should concentrate on grammar (morphology and syntax) rather than lexicography*, and this focus is methodologically proper for investigating diachronic developments in BH in general."⁴⁹ While I do not disagree with Rezetko's assessment that the study of grammar has been neglected in biblical studies, or that morphological and syntactic changes make for strong evidence of diachronic development, I reject the notion that lexicographic evidence should be dismissed entirely simply because it is more variable than morphological and syntactic changes. Instead, the flexibility of the lexicon and the relative ease with which lexical items and meanings change should be seen as another way to track language change, especially on a more short-term scale than morphological and syntactic change. This is especially relevant when considering the short period of time of the Babylonian exile and the dearth of morphosyntactic evidence of change. While lexicographic evidence may not be enough to linguistically date any biblical works to any specific period, I believe that it is strong enough to date these books relative to each other and show diachronic language development.

Rezetko himself has published some extremely influential work, alongside Ian Young, Martin Ehrensverd and other colleagues. Their work both utilizes and questions the validity of historical linguistics methodology in biblical studies. Their work pushes back on the assumption that it is possible to date biblical books and texts based on linguistic features. Instead, they

⁴⁹Rezetko, "Dating Biblical Hebrew", 245.

propose that some of the linguistic variation of the Bible can be attributed to synchronic factors, such as variant scribal schools or regional dialects.⁵⁰ Rezetko, Young, and Ehrensverd's work has been met with much skepticism and argument, especially regarding the unstated implication that Hebrew did not undergo significant development, but they maintain that their point is simply that there is not enough data available to distinguish between stylistic and typological differences.

The work of Jacobus Naudé is also exceptionally important to this topic, as he has for many years reminded biblical scholars of the work of historical linguistics and modern understandings of language change and linguistic diffusion.⁵¹ One particularly important contribution is his development of a model of language change along four dimensions: “the individual dimension (the creation of new idiolects), the sociological dimension (the diffusion of idiolectal change through the broader society), and time dimension (the diffusion of change over time), and the written dimension (the use of specialised forms of language in writing).”⁵² This model emphasizes the complexity of language change and the multiple levels it occurs on, as well as the inherent differences between spoken and written language. Written language tends to be more stable, especially when it has been standardized and is limited to trained scribes. Furthermore, it tends to be more formal and literary than spoken language. This means that written language, such as in the Bible, is much slower to show evidence of linguistic diffusion and language change than spoken language. However, an implication of this is that if something

⁵⁰Robert Rezetko and Ian Young, *Historical Linguistics and Biblical Hebrew: Steps Toward an Integrated Approach* (SBL Press, 2014); Ian Young, Robert Rezetko, and Martin Ehrensverd, *Linguistic Dating of Biblical Texts* (Equinox Pub., 2008).

⁵¹Naudé, “Linguistic Dating of Biblical Hebrew Texts”; Naudé, “The Complexity of Language Change”.

⁵²Naudé, “The Complexity of Language Change”, 408.

happened to the scribal schools such that the transmission of standards was disrupted and the standards were changed, written language may “jump” ahead and reflect a version of the language more similar to the contemporary spoken variant.

These scholars and many others are already doing the work of integrating modern linguistics understanding and approaches into the field of biblical studies. There are many sub-disciplines of linguistics, however, and there is still much more that it can offer to biblical studies, including new understandings of corpus analysis and historical linguistics.

Methodology of the Present Study

In order to examine kinship terminology in Samuel-Kings and Chronicles, I first created a list of kinship terminology in BH, then built a corpus containing all instances of these terms within Samuel, Kings, and Chronicles. I coded each instance according to its usage, form, and additional contextual information so that the corpus could be filtered and searched. From this, I was able to perform statistical analyses to learn about frequency. I examined the overall frequency of each term as well as the frequency of various usages of the terms with the highest frequency (terms with very low frequency are not suitable for the kind of statistical analysis being performed).

The various usages of words was determined after a thorough reading of the text and noting the various usages available. Coding of these usages (i.e. determining what usage was employed in a particular instance) was done by myself, using multiple translations and commentaries to assist my understanding of the text. In an ideal scenario, this would have instead been done by using many people’s judgments to determine the usage, and this would

have been assisted by semantic vector tests which can clarify the semantic range available for a given word. However, due to the narrow scope of this project and the limited data, these kinds of tests are not especially helpful; they require a larger amount of data for reliable results.

The material I will be using to engage with my methodology is presented below. There are two categories of kinship terms: terms describing kinship relations, and terms describing kinship structures. The lists below contain all the kinship terms represented in Biblical Hebrew. Note that some terms which should logically be present, such as “mother’s sister” are not present in the list. This does not mean they did not exist in the spoken language, but that they are not attested in the biblical corpus. Terms that appear with an asterisk are not attested in Samuel-Kings and Chronicles but are found elsewhere in the biblical corpus. Many of these terms, including *ḥātān*, *kallā*, and *dôd*, among others, are found only a few times in Samuel-Kings and Chronicles, and were not analyzed beyond noting their infrequent use (see Appendix 1 for frequency information for all terms).

List 1: Kinship Relations

1. *ʔāb*, father
2. *ʔēm*, mother
3. *ben*, son
4. *bəkôr*, first-born son
5. *bat*, daughter
6. *ḥātān*, son-in-law
7. *kallā*, daughter-in-law

8. ʔiš, man, husband
9. ba ʕal lord, husband
10. ʔišša, woman, wife
11. šārā, rival-wife
12. ʔalmānā, widow
13. pīlegeš, concubine
14. ʔāḥ, brother
15. ʔāḥôt, sister
16. ḥām, father-in-law
17. *ḥāmôt, mother-in-law
18. dōd, uncle (father's brother)
19. *dodā, aunt (father's sister)
20. *ʔāḥ ʔēm, uncle (mother's brother)
21. ben ʔāḥ, nephew (brother's son)
22. *bat ʔāḥ, niece (brother's daughter)
23. *ben ʔāḥôt, nephew (sister's son)

List 2: Kinship structures

1. mišpāḥā, clan/family
2. bet ʔāb, household (lit. father's house) item *bet ʔēm, mother's house
3. šēbet, tribe
4. maṭṭe, tribe

5. ʔ*elef*, tribe (lit. thousand)

6. ʕ*am*, people (also, troops)

7. *ʔ*ûmā*, people

CHAPTER 2: DATA ANALYSIS

In the following section, I will analyze the data collected from the corpus of Samuel, Kings, and Chronicles. This analysis is intended to identify statistically significant differences in the language of Samuel-Kings and Chronicles. In order to do this, I use several statistical tests which are described below.

Pearson's χ^2 test determines if there is a statistically significant difference between the expected frequency and observed frequency of data; in this case, the expected and observed frequency of kinship terms. This test is used to determine the probability that the distribution of data is random. Based on the expected values of a χ^2 distribution, it is possible to estimate how likely a value is to occur randomly by obtaining a p-value. In linguistics, it is conventional to use a p-value of $p \leq .05$ as a threshold for significance, meaning that if the p-value obtained from the χ^2 test is low ($p \leq .05$), it is evidence in support of the alternative hypothesis that the distribution is not random—that is, that there is a statistically significant relationship between the word and the book affecting how frequently it appears. In this study, however, because the size of the data is so small, the threshold for significance is set at $p \leq .01$. In the context of this study, a low p-value is interpreted as evidence that the distribution of a word between Samuel, Kings, and Chronicles is not random and that there is a relationship between the word and book such that it appears more or less frequently in each book than would be expected if the distribution was random. The value of χ^2 is obtained using the following formula:

$$\chi^2 = \sum \frac{(O - E)^2}{E} \quad (2.1)$$

where O is the observed frequency and E is the expected frequency of kinship terms. After determining that there is a statistically significant association between the word and the book, the size of this effect can be measured using Cramér's V , which is obtained using the following formula:

$$V = \sqrt{\frac{\chi^2/n}{\min(k-1, r-1)}} \quad (2.2)$$

where n is the number of samples, k is the number of columns, r is the number of rows, and $(\min(k-1, r-1))$ is the degrees of freedom). Cramér's V obtains a value between 0 and 1, where 0 indicates no association between the two variables, and 1 indicates a strong association. In this study, a higher value indicates a stronger association between a given word and book. That is, a high V value indicates a word word which is highly associated with a particular book, meaning that it appears with a high frequency in that book and with a low frequency in the other books. The size of the effect is determined not only by the V value but also by the degrees of freedom (df), or the number of independent values the variables being tested can have. More degrees of freedom means that a smaller V is more significant. For example, if there is 1 degree of freedom, $V = .5$ represents a large effect, and if there are 2 degrees of freedom, $V = .35$ represents a large effect.¹ Cramér's V is presented as $V(df)$. A small effect is interpreted as a low association between a word and a book, while a large effect is interpreted as a high association between a word and a book. Due to the fact that Chronicles is to some degree based on and reworking material sourced from Samuel and Kings, even a small effect is meaningful for this study.

¹Jacob Cohen, *Statistical Power Analysis for the Behavioral Sciences* (Routledge, 2013), 222.

A limitation of the size of the corpus and the amount of data available is that the χ^2 test does not produce reliable results for data with very few samples. More precisely, this test does not produce reliable results for contingency tables in which more than 20% of cells contain a value of ≤ 5 . There are several such tables in this study (e.g. Table 2.4), and for these tables, the probability of such a distribution was measured using Fisher's exact test to obtain a p-value. For a 2x2 contingency table, Fisher's exact test uses the following formula:

$$p = \frac{(a+b)!(c+d)!(a+c)!(b+d)!}{n!a!b!c!d!} \quad (2.3)$$

For contingency tables larger than 2x2, the calculation cannot be done by hand. As with the χ^2 test, this test obtains a p-value; a low p-value ($p \leq .01$) supports the alternate hypothesis that the distribution is not random and there is a statistically significant relationship between the word and the book. The low expected frequency does not affect the calculation of effect size, however, so Cramér's V was calculated the same way for all tables. All tests were calculated using R Statistical Software.² Cramér's V data was obtained using the rcompanion package.³

²R Core Team, *R: A Language and Environment for Statistical Computing* (Vienna, Austria: R Foundation for Statistical Computing, 2024), <https://www.R-project.org/>.

³Salvatore S. Mangiafico, *rcompanion: Functions to Support Extension Education Program Evaluation*, version 2.4.36 (New Brunswick, New Jersey: Rutgers Cooperative Extension, 2024), <https://CRAN.R-project.org/package=rcompanion/>.

FREQUENCY

One way to identify lexical and semantic change in a diachronic corpus is through changes in frequency, or simply the number of times a word is used.⁴ If a word changes frequency, it may indicate that the word is changing meaning or falling out of use in the language. In some cases, a positive change in frequency correlated with a negative change in frequency may demonstrate a lexical item being replaced with another. However, in order to be sure that the change in frequency is not simply due to differences in genre or content, it is necessary to consider and compare meta-textual features as well. This is why Samuel-Kings and Chronicles are especially useful for this study; their similar narrative styles and overlapping content mean that frequency of words can be compared relatively fairly. That said, 1 Chronicles 1–9 have a notably different style than the rest of Chronicles, and display some linguistic quirks; scholars consider these chapters, also known as the Chronicler’s genealogies, to come from a separate source than the rest of Chronicles, or more likely, to be a compilation of many short sources.⁵ Due to the nature of the genealogies, which contain genealogical lists of fathers and sons, 1 Chronicles 1–9 contain kinship terms at a much higher rate of frequency than the rest of Chronicles. Table 2.1 breaks down the instances of three terms within Chronicles between 1 Chronicles 1–9 and 1 Chronicles 10–2 Chronicles to demonstrate the disproportionate use of these words in the genealogies. Most significant is the use of *ben* “son” in 1 Chronicles 1–9, which accounts for approximately 46% of this term’s appearances in Chronicles.

⁴Koplenig, “Analyzing Lexical Change in Diachronic Corpora”.

⁵Levin, “From Lists to History”.

Term	Total	Location	Frequency
אָב	229	1 Chronicles 1-9	61
		1 Chr 10–2 Chr	168
בן	939	1 Chronicles 1-9	434
		1 Chr 10–2 Chr	505
אָה	125	1 Chronicles 1-9	28
		1 Chr 10–2 Chr	97

Table 2.1: Frequency of select kinship terms in 1 Chronicles 1–9 and 1 Chronicles 10–2 Chronicles

It is clear that the distribution of terms regarding kinship relationships is skewed such that there is a much higher frequency rate in 1 Chronicles 1–9 than in the rest of Chronicles. Considering this, and that in order to make the best comparison between Samuel-Kings and Chronicles, it is best to use the parts of the text that are most similar (i.e. the narrative, 1 Chronicles 10–2 Chronicles), the data that will be presented regarding this category of kinship term (List 1) will exclude the genealogies in 1 Chronicles 1–9. However, there is not the same concern regarding terms which describe kinship structures (List 1), as these have have a lower overall frequency and are not disproportionately represented in the genealogies. Therefore, the analysis of terms describing kinship structures will include the genealogies and will compare all of Chronicles with Samuel and Kings.

Term	Book	Frequency
אָב	Samuel	82
	Kings	165
	1 Chr 10–2Chr	168
אָם	Samuel	7
	Kings	38
	1 Chr 10–2Chr	12
בן	Samuel	345
	Kings	411
	1 Chr 10–2Chr	505

<i>bat</i>	Samuel	36
	Kings	28
	1 Chr 10–2Chr	32
ʾāḥ	Samuel	46
	Kings	16
	1 Chr 10–2Chr	97

Table 2.2: Frequency of kinship terms in Samuel, Kings, and 1 Chronicles 10–2Chronicles

Table 2.2 examines the frequency of the five most frequent List 1 kinship terms between Samuel, Kings, and 1 Chronicles 10–2 Chronicles. The probability that this data distribution is random is very low ($\chi^2 = 90.936, p < .001$). This effect is small, meaning there is a weak association between books and words ($V(2) = .1511$). In particular, there is an above-expected frequency of ʾāḥ in Kings and a corresponding below-expected frequency in Samuel, and there is an above-expected frequency of ʾāḥ in Chronicles and corresponding below-expected frequency in Kings.

Term	Book	Frequency
<i>mišpāḥā</i>	Samuel	5
	Kings	0
	Chronicles	14
<i>bēt ʾāḥ</i>	Samuel	17
	Kings	2
	Chronicles	59
<i>šēbet</i>	Samuel	18
	Kings	13
	Chronicles	16
ʿam	Samuel	213
	Kings	136
	Chronicles	159
<i>matte</i>	Samuel	2
	Kings	2
	Chronicles	24

Table 2.3: Frequency of kinship structure terms in Samuel, Kings, and Chronicles

Table 2.3 looks at the frequency of the five most frequent terms describing kinship or social structures in Samuel, Kings, and Chronicles. The probability that this data distribution is random is very low ($\chi^2 = 95.794, p < .001$). This effect is moderate, meaning there is a medium association between books and words ($V(2) = .2654$). There is an above-expected frequency of *mišpāḥā* in Chronicles and a corresponding below-expected frequency in Kings. There is an above-expected frequency of *bêṭ ʾāḇ* in Chronicles and a corresponding below-expected frequency in Kings. There is an above-expected frequency of *ʿam* in Samuel and Kings, and a corresponding below-expected frequency in Chronicles. Finally, there is an above-expected frequency of *maṭṭe* in Chronicles and a corresponding below-expected frequency in Samuel and Kings.

Some of these changes are small and they are not all equally significant. Some of these changes in frequency are likely due to genre and content, particularly *ʿam*, which is often used as “troops” in martial contexts. As such, frequency alone is not enough to provide evidence of change or even significant differences in language. Another way to look at diachronic change is to look at the use of words and see if the way the word is used changes, and if it changes in a way that corresponds to patterns of semantic development.

USAGE

Frequency is not the only way to track language change; the way a word is used may change over time. Often, multiple usages co-exist in the same stage of the language (colexification).⁶

⁶Thanasis Georgakopoulos and Stéphane Polis, “Lexical Diachronic Semantic Maps: Mapping the Evolution of Time-Related Lexemes”, *Journal of Historical Linguistics* 11.3 (2021): 367–420.

Alternatively, one usage may become more common and another correspondingly less so. Note that I will not discuss the usages of *mišpāhā* here, but rather in Section 3, because the usages are very difficult to quantify and the frequency of this term is low, so statistical analysis does not provide useful information.

ʔāb			
Book	Total Freq.	Usage	Frequency
Samuel	82	literal	62
		extended	19
		fictive	1
		metaphorical	0
Kings	165	literal	81
		extended	77
		fictive	6
		metaphorical	1
1 Chr 10–2 Chr	168	literal	66
		extended	65
		fictive	3
		metaphorical	34

Table 2.4: Frequency of usages of ʔāb in Samuel, Kings, and 1 Chronicles 10–2 Chronicles

Fisher’s exact test indicates a non-random distribution of data ($p > .001$). There is a medium-large association between book and usage ($V(2) = .292$). There are several usages of ʔāb available in BH: literal, extended, fictive, and metaphorical. The metaphorical use is synecdoche or part-to-whole, where ʔāb “father, patriarch” is representative of the whole clan. This use is found only in Chronicles, and is discussed further in Section 3. Additionally, there is a below-expected frequency for the literal use in Chronicles, and an above-expected frequency for the literal use in Samuel. There is a below-expected frequency for the extended use in Samuel and an above-expected frequency in Kings.

<i>ben</i>			
Book	Total Freq.	Usage	Frequency
Samuel	349	literal	265
		extended	43
		age	7
		fictive	11
		adjectival	19
Kings	410	literal	323
		extended	50
		age	18
		fictive	11
		adjectival	8
1 Chr 10–2 Chr	503	literal	350
		extended	109
		age	28
		fictive	1
		adjectival	15

Table 2.5: Frequency of usages of *ben* in Samuel, Kings, and 1 Chronicles 10–2 Chronicles

The probability that this data distribution is random is very low ($\chi^2 = 49.866, p < .001$).

This data shows a small association between books and usage of *ben* ($V(2) = .1342$). The

primary meanings available to *ben* are literal, meaning “son” and extended, meaning

“descendant.” The frequency of the literal usage is fairly consistent between Samuel, Kings, and

Chronicles. There is an above-expected frequency of the extended usage as well as the age usage

in Chronicles, and an below-expected frequency of the fictive usage.

<i>bat</i>			
Book	Total Freq.	Usage	Frequency
Samuel	36	literal	34
		extended	1
		metaphorical	0
		adjectival	1
Kings	28	literal	26
		extended	0
		metaphorical	2
		adjectival	0

1 Chr 10–2 Chr	32	literal	24
		extended	1
		metaphorical	7
		adjectival	0

Table 2.6: Frequency of usages of *bat* in Samuel, Kings, and 1 Chronicles 10–2 Chronicles

Fisher’s exact test indicates a low probability that this data distribution is random ($p = .009$). The size of this effect is moderate, indicating a medium association between book and usage ($V(2) = .2523$). However, the increased use of the metaphorical usage in particular is significant. In Chronicles the term *bat* is used metaphorically, with a meaning which never occurs in Samuel or Kings. There are two instances of a metaphorical use in Kings, but it is a different type of metaphor, personification, whereas the use in Chronicles is a metaphorical expression that uses kinship as a template for non-kinship relationships. I will discuss this metaphorical usage in depth in section 3.

ׁāḥ			
Book	Total Freq.	Usage	Frequency
Samuel	46	literal	37
		extended	7
		fictive	2
		idiomatic	0
Kings	16	literal	6
		extended	5
		fictive	4
		idiomatic	1
1 Chr 10–2 Chr	97	literal	57
		extended	39
		fictive	1
		idiomatic	0

Table 2.7: Frequency of usages of ׁāḥ in Samuel, Kings, and 1 Chronicles 10–2 Chronicles

Fisher’s exact test indicates that the probability of this distribution being random is extremely low ($p < .001$). The size of this effect is large ($V(2) = .3415$), meaning that there is a strong association between books and usage of $\text{b}^{\text{ê}}\text{t} \text{ } \text{ā}^{\text{b}}\text{h}$. The primary meanings available for the term $\text{b}^{\text{ê}}\text{t} \text{ } \text{ā}^{\text{b}}\text{h}$ are literal, meaning “brother,” and extended, meaning “kinsman.” There is an above-expected frequency of the literal meaning in Samuel and a corresponding below-expected frequency in Kings. There is a slightly above-expected frequency of the extended meaning in Chronicles and a corresponding below-expected frequency in Samuel. It is notable that Chronicles has over twice as many instances of this term as Samuel and nearly twice as many as Samuel and Kings combined.

<i>bêṭ āḥ</i>			
Book	Total Freq.	Usage	Frequency
Samuel	17	literal	10
		extended	7
		metaphorical	0
Kings	2	literal	2
		extended	0
		metaphorical	0
Chronicles	59	literal	5
		extended	2
		metaphorical	26

Table 2.8: Frequency of usages of *bêṭ āḥ* in Samuel, Kings, and Chronicles

Fisher’s exact test indicates that the probability of this distribution being random is extremely low ($p > .001$). The size of this effect is large ($V(2) = .5612$), indicating a very strong association between book and usage. This is due to the fact that there are significantly more total uses of *bêṭ āḥ* in Chronicles, and especially because all of the uses of this term to mean “clan” are in Chronicles, with no instances of this use in Samuel or Kings.

<i>‘am</i>			
Book	Total Freq.	Usage	Frequency
Samuel	213	literal	100
		non-literal	113
Kings	136	literal	127
		non-literal	9
Chronicles	157	literal	143
		non-literal	14

Table 2.9: Frequency of usages of *‘am* in Samuel, Kings, and Chronicles

The probability that this data distribution is random is very low ($\chi^2 = 125.38, p < .001$). The size of this effect was very large ($V(1) = .5038$), indicating a very strong association between books and usages. There are two primary meanings of *‘am*: people and troops. The large size of this effect is due to the fact that the majority of the uses of *‘am* as “troops” occurs in Samuel.

SUMMARY

It is clear from the above tests that there are a number of differences in frequency and usage in kinship terminology in the language of Samuel-Kings and Chronicles. The changes in overall frequency of List 1 terms are minor and have small effect sizes. The changes in frequency of List 1 terms are somewhat larger and have medium effect sizes. This is in part due to lower overall frequency of List 1 terms. Changes in usage, however, are much more interesting.

The terms *āb*, *bat*, and *āḥ* from List 1 all have significant changes in usage and medium-to-large associations between book and usage. All of these terms have a significant increase in one usage associated with Chronicles. It is notable that the usage which increases in

Chronicles is the metaphorical usage of both *āb* and *bat*, and the extended usage of *āḥ*. The actual metaphor being used is not the same, but the relevant point is that all of these usages are secondary and derived from the primary, literal meaning of the respective term.

The terms *bêt* *āb* and *am* from List 1 have significant changes in usage and very large associations between books and usage. *Bêt* *āb* has a significant increase in one usage associated with Chronicles, while *am* has a significant increase in usage associated with Samuel. This usage of *am* as “troops” is a non-kinship use, and so is not entirely relevant to the present discussion.

In sum, there are a number of differences in usage that can be identified in the language of Samuel-Kings and Chronicles. Chronicles shows a tendency to have a higher frequency of secondary meanings, derived from the primary usage of these kinship terms.

CHAPTER 3: EVIDENCE OF DIACHRONIC DEVELOPMENT

DIACHRONIC CHANGE/LINGUISTIC CYCLES

Language change is cyclical and systematic.¹ This means that there are predictable patterns that languages tend to follow as they evolve over time. This is true of all aspects of language, including phonology, morphology/syntax, and semantics. One of the most prominent processes of change is grammaticalization and reanalysis, wherein semantic features become grammatical features, and new semantic features emerge to fill the gap. Grammaticalization is defined as “a process whereby lexical items lose phonological weight and semantic specificity and gain grammatical functions,”² and reanalysis is the process which results in “a grammar different from that of an earlier generation.”³ This process can affect any category of lexical item, including verbs, nouns, prepositions, etc. These lexical categories are often ambiguous and perpetually in flux, with linguistic expressions often exist in multiple categories and with multiple functions at the same time.⁴ An example of grammaticalization/reanalysis is the verb “have,” which originally was a lexical item with a meaning of possession as in 1a, and has been grammaticalized as an auxiliary verb with a perfect meaning as in 1b. Similarly, the verb “go”

¹Elly Van Gelderen, *The Linguistic Cycle: Language Change and the Language Faculty* (Oxford University Press, 2011).

²Van Gelderen, *The Linguistic Cycle*, 5.

³Van Gelderen, *The Linguistic Cycle*, 6.

⁴Martin Haspelmath, “Why is grammaticalization irreversible?”, *Linguistics* 37.6 (1999): 1043–68.

originally was a lexical item with a meaning of directional motion as in 2a, and has been grammaticalized as an auxiliary verb with a future meaning as in 2b. In both examples, both meanings exist in the present stage of the language, but the lexical category is the earlier one.

(1) a. I have a garden.

b. I have seen the garden.⁵

(2) a. I am going to marry Bill (i.e. I am traveling to marry Bill).

b. I am going to like Bill.⁶

Other well attested cycles include subject agreement and object agreement. These cycles follow a very similar structure, shown in Table 3.1. In these agreement cycles, demonstratives or other nominals are reinterpreted (grammaticalized/reanalyzed) as pronouns, then as agreement markers, which eventually become null/zero. The cycle then repeats, with a new demonstrative or other nominal marker of the subject arising to fill the gap left by the null agreement marker. Critically, this pattern is attested in many languages and exemplifies a general tendency of languages to develop in predictable ways.

Subject Agreement

demonstrative/emphatic/noun > pronoun > agreement > zero

Object Agreement

demonstrative/pronoun > agreement > zero

Source: Elly Van Gelderen, *The Linguistic Cycle: Language Change and the Language Faculty* (Oxford University Press, 2011)

Table 3.1: Agreement cycle

⁵Van Gelderen, *The Linguistic Cycle*, 7.

⁶Elly Van Gelderen, *The Linguistic Cycle: Economy and Renewal in Historical Linguistics* (Routledge, 2024), 7.

While these example cycles involve both semantics and syntax, there are also a variety of identifiable trends that are more strictly semantic, including metaphor, semantic drift, and broadening and narrowing. These will be discussed further in the following sections. Additionally, linguistic cycles such as these examples generally occur over a much longer period of time than the short span of the Babylonian exile and its aftermath. This means that there is little chance of finding evidence of linguistic cycles at this scale. Therefore, the changes that this study is looking for are much smaller. This discussion of cycles serves as an example of the kinds of linguistic changes that are identifiable in corpus analysis on a larger scale, and evidence of directionality in linguistic change. Instead of identifying a cycle or series of grammaticalizations, the present study is looking for evidence of change in a diachronic direction, using known cross-linguistic patterns of change and development to guide the search. The rest of this section will discuss various kinds of change, the general tendencies of that change, and the evidence for it from the data.

Semantic Change

Semantics is the study of word values and how they logically build up to create meaning. The semantic value or meaning of a particular word is notoriously flexible and tends to change relatively quickly. There are many vectors of semantic change, including social and linguistic.⁷ Social vectors include language contact, language isolation, and technological advancements. Linguistic vectors include grammaticalization, metaphor, broadening, narrowing, and other types of semantic drift.

⁷Hamilton, Leskovec, and Jurafsky, "Cultural Shift or Linguistic Drift?"

Metaphorical Expressions

One vector or path of semantic change is metaphor. Metaphoric language expresses underlying conceptual relationships between superficially unrelated domains. These conceptual relationships then influence the use and meaning of the concepts involved in the metaphor.⁸ For example, there are many idioms in English that connect the human body to superficially unrelated concepts, such as “to *shoulder* a responsibility,” “the *head* of a department,” and “a *healthy* society.” These metaphorical expressions become conventional usages of the word, taking on new meanings distinct from their original usages. Interestingly, many of the common domains for conceptual metaphors to be drawn from (including human body, animals, machines and tools, emotion, morality, and politics, among many others)⁹ are shared cross-linguistically, resulting in similar metaphors for the same ideas even in unrelated languages. For example, consider the use of *rōṣṣ* “head” in BH in the phrases *rōṣṣê hāmmattôt* “heads of the tribes” and *rōṣṣê hāṣṣbôt* “heads of the clans.” This use mirrors the use of “head of the department” in English.

Family also provides a fruitful domain for metaphorical expression. For example, the terms “daughter cell” and “sister cell” from the field of biology refer to the cells that result from cell division. Here, the relationship between the cells is being explicated by using the kin term that represents that relationship. Kinship provides a template of relationships that map onto many concepts (e.g. daughter languages, daughter nodes, sister cities, twin flames, etc.), which can easily be expressed using kinship terminology. It is important to recognize that in order for

⁸Maja Fabijanac, “Conceptual Metaphor as a Basis of Language Change – a Case of Nouns Pertaining to Family Relationships” (master’s thesis, Josip Juraj Strossmayer University of Osijek, 2013).

⁹Fabijanac, “Conceptual Metaphor as a Basis of Language Change”, 7–10.

metaphorical expressions to effectively convey meaning, the source domain must be common and easily understood. This is why kinship—as well as the other common source domains listed above—is so productive; kinship is something that all societies have in common, and even though their conceptions of kinship may vary somewhat, there are basic relationships (parent-child, parent-parent, etc.) that are part of every kinship system and map easily onto other concepts.

This type of metaphorical use is present in the book of Chronicles, in the use of the term *bat* “daughter” to mean “dependencies, daughter-towns, satellite towns, or suburbs” as in a small town in the outskirts of a larger town or city which relies on the larger town for commerce. The term is used in this way 11 times in 1 Chronicles and 6 times in 2 Chronicles (1 Chronicles 2:23, 5:16, 7:28, 7:29, 8:12, 18:1; 2 Chronicles 13:19, 28:18). This usage is clearly secondary, derived from the primary kinship meaning through metaphor as described above. There are also other cases of kinship terminology being used for towns and cities; a similar metaphorical use occurs in 2 Samuel 20:19 where the city *ʾābēl* Abel is referred to as *ʿîr wəʿēm* “a city and a mother.” Also in Chronicles, there are a number of instances of town names being included in genealogy lists as sons (e.g. 1 Chr 2:24, 2:42, 2:43, etc.), and men being referred to as the father of a town (e.g. 1 Chr 2:51), though it is unclear if these are toponyms referring to the geographic territory or eponyms naming people whom the towns are named for.¹⁰ Regardless, this metaphorical use of kinship terminology for towns appears in several forms and throughout the Bible. In the present study, this use appears only in Chronicles and never in Samuel-Kings. While the metaphor of familial relationships for towns was established and evident in earlier

¹⁰Levin, “From Lists to History”.

texts, it seems likely that this particular use of *bat* wasn't available in the language of Samuel-Kings, but was in the language of Chronicles.

Another kind of metaphor is metonymy, a figure of speech where a word or phrase is substituted with another that is closely related in meaning or by association. A sub-type of metonymy is synecdoche, in which a part of a whole stands in for the whole, as in the examples in 3.

- (3) a. All hands on deck ("hands" stand in for sailors).
- b. The soldiers drew steel ("steel" stands in for swords).

This kind of metaphor is found several times in Chronicles with the word $\text{ָ}ab$ "father," where $\text{ָ}ab$ represents a whole family or clan (e.g. 1 Chronicles 15:12, 23:9, etc.). In this situation, the term $\text{ָ}ab$ not only means father, but the head of the house or the patriarch of the clan, and is standing in for the larger unit. In the form $b\hat{e}t \text{ָ}ab\hat{o}t$ "house of the fathers," "fathers" functions similarly, with the fathers or leaders standing in for the clan as a whole. Like the metaphorical expressions discussed above, the primary meaning must be fixed before these metaphors can be used productively. The fact that this metaphorical usage only appears in Chronicles may indicate that this use developed in later Hebrew, or emerged in the written language at a later time. These metaphorical usages are evidence of semantic change over time, or diachronic development, with Chronicles in the later stage of the language.

Semantic Drift

In the Bible, there are a number of terms that refer to social units, usually translated as "tribe" or "clan." It is commonly understood that these units have a hierarchical relationship such that the

tribe is the largest unit, then the clan, then the family, then the household, etc. However, some of these social unit terms are used in multiple contexts which make their relationship to one another opaque and their hierarchy unclear. This may be in part an effect of the scribes writing about past events, where the scribes are using or misusing archaic terminology, and in part due to the meanings of these words changing.

The two most frequently used words for “clan” in Samuel-Kings and Chronicles are *mišpāḥā* and *bêt ʾāb*. *Mišpāḥā* in Modern Hebrew has the meaning of “family,” usually with a sense of a nuclear family, but in Biblical Hebrew has a broader meaning of “clan.” Meyers translates *mišpāḥā* as “protective association of families,” in reference to the clusters of homes found in ancient Israelite villages and the cooperative and defensive nature of this layout.¹¹ Additionally, *mišpāḥā* refers to a geographically-bound region as well as the people who inhabited that region, typically passing region-specific agricultural knowledge from generation to generation.¹² This sense of a cluster of families or descendants of a common ancestor is retained in early or pre-exilic texts, including Samuel-Kings, but changes in later or post-exilic texts, such as Chronicles. The change of sense is not abrupt or incredibly significant, and may be overlooked due to its relatively small shift and the difficulty in identifying the connotations of the different senses.¹³ However, this change is more apparent when comparing specific verses which use this word in different ways, and when comparing verses which contrast *mišpāḥā* with other terms. For example, 1 Samuel 10:21 reads *vayyaqrēb ʾēt-šēbeṭ binyamin lemišpāḥôtāw*

¹¹Meyers, “The Family in Early Israel”, 37.

¹²Vanderhooft, “The Israelite Mishpaha”.

¹³It bears mentioning that this change is often reflected in English translations, where in Samuel and Kings the term *mišpāḥā* is translated as “clan,” but is translated as “family” in Chronicles, while *bêt ʾāb* is translated as “clan.” Translation is hardly evidence of change in meaning, but it does reflect that the translators are identifying a shift in sense or a conflict between these words with closely related meanings.

vatillākēd mišpaḥat hammaṭrî “Then Samuel brought forward the tribe of Benjamin by its clans, and the clan of the Matrites was indicated.” In this verse it is clear that the tribe of Benjamin was made up of several clans, including the Matrites. On the other hand, 1 Chronicles 2:53 reads *ûmišpəḥôt qiryat yəʿārîm hayyitrî wəhapûṭî wəhaššūmātî wəhammišrāʿî mēʿelle yāšʿû haššārʿātî wəhāʿeštāʿulî* “And the families of Kiriath-jearim: the Ithrites, the Puthites, the Shumathites, and the Mishraites; from these came the Zorathites and the Eshtaolites.” In this verse, it is a city, Kiriath-jearim, that is being divided into clans, not a tribe. Furthermore, 1 Chronicles 4:2 lists members of “the families of the Zorathites,” using the same term, *mišpəḥôt*, which raises the question of if the term is being used the same way in 2:53 and 4:2, where the Zorathites are both a *mišpāḥā* and made up of *mišpəḥôt*. One explanation for this contradiction is that these verses both come from Chronicles’ genealogies and it is very likely that they come from two different sources. Regardless, the inconsistencies still remain, and it remains unclear what this term actually means in these contexts.

Mišpāḥā is also contrasted with other terms for kinship structures. For example, 1 Chronicles 4:38 reads *ʿelle habāʿîm bəšēmôt nəšîʿîm bəmišpəḥôtām ûbêt ʿăbôtêhem pārsû lārôb* “These mentioned by name were chiefs in their families, and their clans increased greatly.” Here, the terms *mišpəḥôt* and *bêt ʿăbôt* are contrasted, showing that these terms were not synonymous, and suggesting a hierarchical relationship where a *mišpāḥā* is larger than a *bêt ʿăb* and made up of several *bəṭê ʿăb*. Another contrast is found in 1 Chronicles 6:4, which reads *wəʿelle mišpəḥôt hallēwî laʿăbôtêhem* “These were the families of the Levites according to their clans.” Here, the terms *mišpāḥā* and *ʿăbôt* are contrasted, showing again that the *mišpāḥā* is larger than the unit represented by *ʿăbôt*. Notice also that the term *ʿăbôt* is being used here metaphorically as a part of the whole. Many translations, such as the JPS 2023 version translate

this term as “clans,” but it is perhaps better understood as “ancestry,” or “lineage,” as in the NRSVUE translation, as in all those descended from one person, the *ʔāb*.

While *mišpāḥā* has a strong sense of kinship and relatedness in Samuel-Kings, there are several instances in Chronicles where this sense is not as clear. In particular, 1 Chronicles 2:55, which refers to *mišpəḥôt sōprîm* “families of the scribes,” and 4:21, which refers to *mišpəḥôt bêt-ʿābōdat habuṣ* “families of the linen factory.” In each of these verses, the use of *mišpāḥā* referring to occupations or places of occupation is suggestive of a meaning more like “guild” than “family.”¹⁴

Similarly, *bêt ʔāb* is used in multiple ways and seems to have a slightly different meaning in Samuel-Kings and Chronicles. It is used in Samuel first with a meaning of a person’s ancestors or ancestral house, as in 1 Samuel 2:27, *ḥāniglō niglêtî ʔel-bêt ʔābikā bihyôtām bəmiṣrayîm ləbêt parʿō* “Lo, I revealed Myself to your father’s house in Egypt when they were subject to the House of Pharaoh,” where *bêt ʔāb* clearly refers to Samuel’s ancestors. When referring to historical times like this, this sense of “ancestors” is clear. This is strong evidence for this phrase being used as description of a kinship unit and not as a geographically-bound term like *mišpāḥā*, since it makes reference to this term in Egypt, where people would not have lived in “protective associations of families” or had the same connection to the land. Instead, this term refers strictly to the people in the father’s house, presumably related by blood, marriage, or other social bonds like adoption or slavery, but not to the land or geographic boundaries. *Bêt ʔāb* is commonly used in this way in earlier texts, with a sense of a person’s

¹⁴This is not entirely surprising, as occupations were often inherited and so guilds may have consisted at least in part of related families. Additionally, in some occupations it was not uncommon for children to be adopted in, and for kinship terminology to be used fictively to describe the relationship between master and apprentice or teacher and disciple. For a discussion of this practice within the scribal system, see Schniedewind, *The Finger of the Scribe*.

household or immediate family. For example, 1 Samuel 22:1 reads *vayyēlek dāwid miššām wayyimmālēt ʾel-məʿarat ʿāḏullām wayyišməʿû ʾeḥāyw wəkol-bêt ʾābîw wayyērəḏû ʾēlāyw šāmmā* “David departed from there and escaped to the cave of Adullam; and when his brothers and all his father’s house heard, they joined him down there.” Here, *bêt ʾāb* is used to refer to the people of David’s family’s household, including his brothers, parents, and other family. In Chronicles, the sense of *bêt ʾāb* broadens to a larger kinship unit. For example, 1 Chronicles 12:29 reads *wəṣādôq naʿar gībôr ḥayil ûbêt-ʾābîw sārîm ʿeśrîm ûšnāyim* “Zadok, a valiant young warrior, with his clan—22 officers.” Zadok is a priest who is the father of several other priests and eventually the head of a distinguished lineage (see, e.g., Ezek. 40:46, 43:19, 44:15, and 48:11), listed here directly after the Aaronites. From the small number listed alongside Zadok, it at first seems as though *bêt ʾāb* here could still mean household; however, 22 is the number of officers, not the total number of people in the *bêt ʾāb*. Additionally, this verse comes in the middle of a list of large clan groups: the Judahites, Simeonites, Aaronites, Zadok, Benjaminites, Ephraimites, etc., all of which other than Zadok and his clan are numbered at 3,000 or more. As such, it is clear that Zadok and his clan are being granted the same status as the other clans, and that *bêt ʾāb* here is referring to a much larger group than just a household. Another example of this larger group size comes from 2 Chronicles 17:14, which reads *wəʿelle pəqūdātām ləbêt ʾābôtêhem lîhûdā sārê ʾālāpîm ʿadnā haśśār wəʿîmmô gībôrê ḥayil šəlōš mēʾôt ʾālep* “They were enrolled according to their clans. Judah: chiefs of thousands, Adnah the chief, who had 300,000 valiant warriors.” The next verse continues listing the chiefs of the clans of Judah and their warriors, with numbers of 200,000 and 180,000. Although it is unlikely that these numbers are exactly accurate, they demonstrate that the size of the *bêt ʾāb* in this context was much larger than a household or even cluster of households.

Another subtle shift in use and semantic drift can be found in the term *ben*. While *ben* literally means “son,” it is also frequently used to mean “descendant.” The use of *ben* as “descendant” includes a number of instances (in Chronicles) with the form *bənê* [*clan name*], for example, *bənê mərārî* (2 Chr 34:12), where Merari is one of the sons of Levi and the eponymous head of the clan. This usage, where *ben* refers to the descendants of a person, whom the family is then named after, is found frequently in Chronicles, and much less frequently in Samuel-Kings. There is, however, a similar use of *ben* found in Samuel-Kings as well as Chronicles, where *ben* is used to describe ethnicity, as in *bənê yiśrāʾēl* “Israelites” or *bənê ʿammôn* “Ammonite.” This is essentially the same meaning, “descendants of...”, but the crucial difference is that in Chronicles, this construction is frequently used to refer to clans/families or the members of a clan/family, whereas in Samuel-Kings it is used almost exclusively for literal children (the sons of x) or ethnicity (e.g. Israelites). One exception is 2 Samuel 2:25, where the term *bənê-binyāmin* “Benjaminites (or descendants of Benjamin)” is used. There are a few additional instances in Samuel-Kings where this construction is used with tribes or clans (2 Samuel 1:18, 1 Kings 5:10, 1 Kings 12:31), but it is atypical, and this construction is usually reserved for marking ethnicity or peoplehood. This more frequent use in Chronicles could indicate a breakdown in tribal/clan structure, or simply a broadening of meaning and more extensive application of this construction. In either case, the difference in use points to development of the language.

Lexicographical Change

Although the focus of this study is primarily on semantic change, I would be remiss if I did not discuss some significant lexicographical changes which point to diachronic change. As mentioned briefly above, many scholars value morphological and syntactic data over lexicographical or semantic data for linguistic dating of biblical books. Because morphological and syntactic changes take longer to diffuse within a language than lexical and semantic changes, changes in morphology and syntax are argued to represent a longer period of time and are therefore considered stronger evidence of different stages of a language. Whether this argument can be supported or not ultimately falls outside the scope of the present study. Regardless, the point of interest is that lexical and semantic changes may be able to reflect a shorter period of time and help distinguish between two relatively similar stages of a language.

One kind of lexicographical change occurs when a term changes spelling or form but retains the same meaning and usage. One such example is the shift from *bêt ʾāb* to *bêt ʾābôt* which occurs in Chronicles. In Samuel-Kings, this term appears almost exclusively as *bêt ʾāb*, while in Chronicles it appears almost exclusively as *bêt ʾābôt*. The meaning and usage stay essentially the same, but the form changes. This phrase is a genitive construction, where the first word, the nomen regens, in this case *bêt*, is in the construct form, indicating possession of the second word, the nomen rectum, *ʾāb* or *ʾābôt*, which is in the absolute form. Normally, in order to make this construction plural, the nomen regens is pluralized and the nomen rectum is left in the singular. For example, the correct plural of *bêt ʾāb* is *bətê ʾāb*. It is considered incorrect to pluralize the nomen rectum in this genitive construction. In the case of *bêt ʾābôt*, the nomen regens is singular and the nomen rectum is plural.¹⁵ Curiously, the meaning of this term remains

¹⁵See Rezetko, “Dating Biblical Hebrew” for a brief discussion of this phenomenon in Chronicles. Note that

singular. Here, the word *ʾāb* “father, patriarch (i.e. clan leader)” is being used metaphorically as a stand-in for the clan as a whole; in the form *bêt ʾābôt*, *ʾābôt* “fathers” functions the same way, with the fathers or leaders standing in for the clan as a whole. It is impossible to tell if this change in form is representative of a change in society where there was a group of leaders in a clan, or if it is a purely linguistic change resulting from incorrect pluralization. Either possibility still points in a diachronic direction; either the society/social structures changed and the language followed, or the language evolved naturally due to analogy and poor understanding of the genitive construction.

Another intriguing change is the development of the third person masculine plural possessive suffix, reflected in the shift from *ʾăbôtām* to *ʾăbôtêhem* in Chronicles.¹⁶ Samuel and Kings regularly use the form *ʾăbôtām*, while the form *ʾăbôtêhem* occurs twenty-six times in Chronicles and only once in 1 Kings. Additionally, the expression *bêt ʾăbôtêhem* is limited to seven occurrences in the book of Chronicles.¹⁷ Hurvitz states that “it is widely recognized that morphologically, the extended form [-*ôtêhem*] is secondary”¹⁸ due to its form containing two plural morphemes. Again, because this form is secondary and found only in Chronicles, it is evidence of diachronic development, placing Chronicles in a later stage of the language than Samuel-Kings which do not use this later form.

In this section, I have examined some cross-linguistic patterns of language change, and

Rezetko explains this phenomenon as free variation and not as chronological development, but does not give a full explanation of why this is.

¹⁶Avi Hurvitz, “Terminological Modifications in Biblical Genealogical Records and Their Potential Chronological Implications”, in *Hebrew in the Second Temple Period*, ed. Steven Fassberg, Moshe Bar-Asher, and Ruth Clements (Brill, January 2013), 105–16.

¹⁷Hurvitz, “Terminological Modifications”.

¹⁸Hurvitz, “Terminological Modifications”, 113.

provided examples of semantic and lexicographical change in Samuel-Kings and Chronicles. In the last section, I will summarize my findings and discuss future directions of study.

CONCLUSION

It is clear that the language of Samuel-Kings and Chronicles differ in a variety of ways. The reason for these differences is contested, with many scholars arguing that the books were written at different times and reflect different stages of the language, and other scholars arguing that the books reflect different literary styles or dialects and were written contemporaneously. The semantic and lexicographic evidence shown here supports a theory of diachronic language development, where Samuel-Kings reflects an earlier stage of biblical Hebrew than Chronicles.

Often when biblical scholars discuss language change or linguistic change in the Hebrew Bible, they are concerned with lexicographical changes and syntactic or morphological changes. Occasionally, they discuss semantic change when the semantic change is overt and significant. Here I have found evidence of semantic change on a smaller scale and at a level that is easily overlooked. There are a number of clear differences in meaning and in usage in kinship terms in Samuel-Kings and Chronicles. The changes that I have identified can not be correlated with geographic or dialectal (e.g. Judean and Israeli dialects) differences, and instead support a theory of diachronic language change. That is, the language of kinship in Samuel-Kings and Chronicles is distinct not because of regional dialects or writing styles but because of language change over time, triggered especially by language contact with Aramaic and changes in social structures as a consequence of the Babylonian exile. In particular, I identified semantic changes such as the

broadening of *bêt ʾāb* and lexicographical changes such as the third person masculine plural possessive suffix *-ām/-êhem*. While some of the changes identified constitute weak evidence on their own, or have other possible synchronic explanations, when taken all together, this study points to a diachronic direction of change in the writing of Samuel-Kings and Chronicles.

Even if one were to disregard the argument of diachrony and dating, this study identified several data that set the language of Samuel-Kings and Chronicles apart. Regardless of the precise reasons why, which we can only speculate on, this study contributed semantic and lexicographical evidence to the discussion of the language of Chronicles.

I believe that this corpus-based methodology has a huge amount of potential for the field of biblical studies, especially considering the recent advancements that have been made in Natural Language Processing and empirical semantics. In future work, I believe that it is preferable to work with a much larger corpus of data for two primary reasons: first, because a larger corpus means more data, which allows for more precise methodology including semantic vector space analysis and modeling; and second, because a larger corpus will include a wider range of genre and content, constituting a more representative corpus and allowing for a more thorough analysis of the language. Extra-biblical sources may be able to fill in some of the gaps in the biblical data. Additionally, in the future I would like to see this kind of corpus analysis applied to other lexical categories than kinship. The narrowness of the present study was intended to demonstrate the methodology, and now this methodology should be repeated and improved upon. While the goal of this study was to find evidence of diachrony, corpus analysis should not be limited to this; instead, it should become a tool and method for biblical scholars concerned with comparing semantic and lexicographical data across texts.

Appendix 1: Frequency of Kinship Terminology

Term	Book	# of Occurrences
ʿāb	Samuel	82
	Kings	165
	Chronicles	229
ʿēm	Samuel	7
	Kings	38
	Chronicles	14
ben	Samuel	345
	Kings	411
	Chronicles	939
bəkôr	Samuel	3
	Kings	2
	Chronicles	26
bat	Samuel	36
	Kings	28
	Chronicles	56
ḥātān	Samuel	2
	Kings	1
	Chronicles	0
kallā	Samuel	1
	Kings	0
	Chronicles	1
ḥām	Samuel	2
	Kings	0
	Chronicles	0
ʿiš	Samuel	352
	Kings	212
	Chronicles	97

ʔišša	Samuel	103
	Kings	57
	Chronicles	39
ʔāḥ	Samuel	46
	Kings	16
	Chronicles	125
ʔāḥôt	Samuel	10
	Kings	4
	Chronicles	11
dôd	Samuel	4
	Kings	1
	Chronicles	1
ben-ʔāḥ	Samuel	0
	Kings	0
	Chronicles	1

Term	Book	# of Occurrences
mišpāḥā	Samuel	5
	Kings	0
	Chronicles	14
bêt ʔāb	Samuel	17
	Kings	2
	Chronicles	32
šēbet	Samuel	10
	Kings	13
	Chronicles	16
maṭṭe	Samuel	2
	Kings	2
	Chronicles	24
ʔelef	Samuel	45
	Kings	32
	Chronicles	143
ʿam	Samuel	213
	Kings	136
	Chronicles	157

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