THE DEVELOPMENT OF BIBLICAL HEBREW PREPOSITIONS

H. H. Hardy II

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In loving memory of
Kathryn Marie Hardy
24 June 1982–16 February 2017

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

PREFACE

The present volume comprises more than a decade of research on grammaticalization and the development of Biblical Hebrew prepositions. Various components of this study were presented at three annual meetings of the Society for Biblical Literature in 2011, 2014, and 2017. These presentations and the subsequent feedback from a number of scholars aided considerably in my thinking and the development of the project.

I am profoundly indebted to Dennis G. Pardee, Rebecca Hasselbach, and Salikoko Mufwene for their guidance. Many thanks to the magnanimous contributions over the years from Pete Bekins, Drayton Benner, Samuel Boyd, Aaron Butts, Andrew Dix, Brian Gault, Young Bok Kim, Matthew McAffee, Jody Otte, Benjamin Thomas, Jacqueline Vayntrub, and many others. Thank you, James Spinti, for your princely encouragement. Particular acknowledgement is due Daniel Rodriguez who interacted substantively with this investigation in personal communication and his own thesis (Rodriguez 2016).

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Finally, this volume is dedicated to my late wife, Katy. Her steadfast support—even in the most difficult days—is the reason the original study was completed. It is with great sadness that she was not able to see this finished product. May her memory be a blessing for she is not forgotten.

ABBREVIATIONS

The Leipzig glossing rules and conventions developed in consultation with the Max Planck Institute (http://www.eva.mpg.de/lingua/resources/glossing-rules.php), as much as possible, are used for the interlinear morpheme-by-morpheme linguistic abbreviations.

1	first person
2	second person
3	third person
ABS	absolute state
ACCRD	accordantive
ADJ	adjective
ADJP	adjective phrase
ADV	adverb(ial)
ADVZ	adverbializer
AUX	auxiliary
BH	Biblical Hebrew
BEN	benefactive
BTWN	between function
C	common gender
CTA	Herdner, Andrée, ed. *Corpus des tablettes en cunéiformes alphabétiques découvertes à Ras Shamra-Ugarit de 1929 à 1939.* Paris:Geuthner, 1963
CAUS	causative
CJ	conjunction
CJ ADV	conjunctive adverb
COM	comitative
COMP	complementizer
CSTR	construct state
DEM	demonstrative
DIR	directional
DOM	direct object marker

EA	El-Amarna tablets. According to the edition of Jörgen A. Knudtzon. *Die el-Amarna-Tafeln*. Leipzig: Hinrichs, 1908–1915. Repr., Aalen: Zeller, 1964. Continued in Anson F. Rainey, *El-Amarna Tablets*, 359–79. 2nd rev. ed. Kevelaer: Butzon & Bercker, 1978.
EVAL	evaluative
EXIST	existence marker
F	feminine gender
FUT	future
GEN	genitive
GN	geographical name
IMP	imperative
INF	infinitive
INSTR	instrumental
KAI	Donner, Herbert, and Wolfgang Röllig. *Kanaanäische und aramäische Inschriften.* 2nd ed. Wiesbaden: Harrassowitz, 1966–1969.
KTU	Dietrich, Manfried, Oswald Loretz, and Joaquín Sanmartín, eds. *Die keilalphabetischen Texte aus Ugarit.* Münster: Ugarit-Verlag, 2013. 3rd enl. ed. of *KTU: The Cuneiform Alphabetic Texts from Ugarit, Ras Ibn Hani, and Other Places*. Edited by Manfried Dietrich, Oswald Loretz, and Joaquín Sanmartín. Münster: Ugarit-Verlag, 1995.
LM	landmark
LOC	locative
LOG REL	logical relation
M	masculine gender
N	noun
NEG	negation, negative
NP	noun phrase
PART	partitive
PC	prefix conjugation
PL	plural
PN	proper noun
POSTP	postposition
PP	preposition phrase
PREP	preposition
PRS	present
PRO	pronoun
PTCP	participle
PTCL	particle
PURP	purpose
Q	question particle/marker
RCPR	reciprocative
REL	relative

S	sentence
SC	suffix conjugation
SG	singular
SPRT	separative
TEMP	temporal
TR	trajector
VB	verb
VP	verb phrase
WCPC	*waw*-consecutive prefix conjugation
WCSC	*waw*-consecutive suffix conjugation

TRANSLITERATION

The Biblical Hebrew consonant system is represented in Latin transliteration following the paradigm:

א	*ʔ*	ח		*ḥ*	פ	ף	*p*
בּ	*b*	ט		*ṭ*	פ	ף	*p̄*
ב	*b̲*	י		*y*	צ	ץ	*ṣ*
גּ	*g*	כּ	ךּ	*k*	ק		*q*
ג	*ḡ*	כ	ך	*k̲*	ר		*r*
דּ	*d*	ל		*l*	שׁ		*š*
ד	*d̲*	מ	ם	*m*	שׂ		*ś*
ה	*h*	נ	ן	*n*	תּ		*t*
ו	*w*	ס		*s*	ת		*t̲*
ז	*z*	ע		*ʕ*			

For a more phonemically-oriented description of Tiberian Hebrew, this representation may be compared with that of Khan (2020, 240–42).

The Tiberian seven vowel system for Biblical Hebrew is transliterated as *a*, *ɔ*, *ɛ*, *e*, *i*, *o*, and *u*. For a discussion of the allophonic realizations of *pataḥ* as the open front [a] and the open back [ɑ] qualities, see Khan (2020, 248–51). The zero-vowel (∅) realization of *schwa* is not transliterated. Even though vocalic schwa ([a]) and the ḥaṭef vowels ([a], [ɔ], [ɛ]) were likely read as full vowels (Khan 2020, 305–20), the graphic distinction is maintained with vocal schwa signified as *ə* and the compound-schwa vowels supra-linearly as ^{a}, ^{ɔ}, and ^{ɛ}. The presence of *matres lectionis* is not represented in transliteration system. Vocalic length is not represented.

The individual Semitic languages are transliterated according to their standard phonetic systems. The Central Semitic languages are represented consistent with Fox (2003, xvii–xix); Akkadian follows Huehnergard and Woods (2004); Geʕez corresponds to Leslau (1987); and Old South Arabian conforms to Beeston (1984) and Stein (2003).

INTRODUCTION

At every linguistic level—phonological and morphological, syntactic and pragmatic—speakers interact and adapt to one another's speech in discrete, recurrent steps to create meaning. These collaborative steps produce ongoing language variation and the perception of change. Structural innovation and procedural spread are offset with contraction and abandonment. On one level, concrete utterances generate variation in new contexts. But also, discourse occasions incipient structures, or procedures, that construct emergent grammar. Like partners dancing, verbal interaction couples memetic speech with expanding eclecticisms. This improvised negotiation results in the emergence of shared grammar as epiphenomenal. Noteably, such a conception contrasts with the common notion of grammar as "an abstract mentally represented rule system … [of] already available abstract structures and schemata" (Hopper 1987).

Two linguistic approaches are often employed to describe the choreography of language. A mostly synchronic assessment explains the relationship between the convergences and divergences of grammar from the standpoint of an individual and/or circumscribed community, whereas a diachronic examination explores the origin, development, and spread of adaptations unbounded by the temporal constraint of a speaker. While not ignoring the synchronic realities of language, the present work adopts a diachronic framework to investigate the development and emergence of Biblical Hebrew prepositions. It should be noted that determining actual historical change is not the end goal of the present study but rather potential (or shall we say cogent) semantic development. The resulting grammatical exploration accounts for language variation and change within a robust linguistic framework and an inductive, data-driven investigation in the textual corpus of the Hebrew Bible. Findings from cognitive linguistics and diachronic typology help to shed light on the evolution of prepositions. Moreover, it is showed that a "grammaticalization theory" can provide not just a descriptive rubric for individual changes but can help to account for the system-wide development of innovative grammatical functions.

In view of the extensive research conducted on Biblical Hebrew prepositions, one may query what, if anything, another study can offer. Previous work, while valuable, has largely been conducted using traditional philological approaches

often without substantial integration of current linguistic frameworks. Where up-to-date methods have been employed, the scope of study—rarely more than a lone preposition—affords only limited evaluation. This study presents a more comprehensive appraisal. It integrates an utterance-based or discourse-oriented approach with a clause-by-clause analysis of the Biblical Hebrew preposition usage. Forty-one source constructions (types) are examined comprising a total of nearly seven thousand tokens. Several novel semantic functions are plausibly identified. A semantic development pathway is proposed for each preposition from its source to all evidenced outcomes. In sum, the study yields a novel accounting of prepositions not merely as polysemous semantic glosses but through developmentally related functional use.

Chapter 1 presents an introduction to the theoretical framework of grammaticalization. A review of common approaches and a working definition is provided. Chapter 2 describes the grammatical characteristics of Biblical Hebrew prepositions including the morphological categories of simple and multi-word prepositions. Chapter 3 provides an examination of a subset of the simple prepositions. The source constructions, the functional usages, and the potential development(s) are assessed. Chapter 4 includes a similar accounting of the changes attested with Biblical Hebrew multi-word prepositions. Finally, Chapter 5 aggregates and compares the data on a corpus-wide scale.

One overarching goal of the study is to provide an interchange of ideas, or maybe even a prototype for constructive discourse, between research in linguistics and traditional grammatical approaches. The volume includes both a linguistic discussion—for those interested in the theoretical background—and a philological discussion—for those interested in the more data-driven approach. The intended audience includes grammatically minded readers in biblical studies who are interested in understanding and implementing current linguistic models for language variation and diachronic development. The result is a type of diachronic lexicon of preposition meaning that is useful not merely for linguistic investigation but Hebrew exegetes. That said, an effort to provide broader accessibility for the historical linguist and diachronic typologist is attempted with the hope that the wealth of Semitic data available may be more widely integrated into cross-linguistic investigations. This endeavor is largely accomplished through following common linguistic glossing practices and adhering to established functional terminology.

1.
GRAMMATICALIZATION FRAMEWORK

The following pages present a theoretical framework for the investigation of the particular changes that yield a function word. First, grammaticalization is defined in view of the history of research (§1.1) along with English examples of the phenomenon (§1.2). Then, the various approaches to grammaticalization theory are appraised with the purpose of constructing a systematic framework for the current investigation (§1.3). Finally, an overview of previous studies of grammaticalization in Semitic (§1.6) and the general methodology (§1.7) are outlined.

1.1. Towards a Definition

Fundamentally, grammaticalization denotes the making of something to be grammatical. The definition of the term grammaticalization[1] has varied greatly in the century since its coining. An exhaustive survey of the assorted definitions is beyond the scope of this volume, but those most widely referenced will be reviewed chronologically.[2] The purpose of this section is to provide the groundwork for adapting a working definition of the term.

Even though the phenomenon consisting of the emergence of grammatical elements from lexical items was identified in antiquity, Antoine Meillet receives credit for devising the name in his 1912 work, *L'évolution des formes grammaticales*.[3] He

1 The alternative terms—grammaticization (Hopper 1991), grammatization (Matisoff 1991), the nonce "grammat(ic[al])ization" (Matisoff 1991, 383), and the German participle *grammatisiert* (Werner 1979)—are found in the literature with essentially no variation in meaning (Lehmann 1995, 9–11); in this study, excepting direct quotations, the more common form grammaticalization (the English equivalent of Meillet's [1912/1948] French neologism grammaticalisation) will be used.

2 A nearly exhaustive examination of the definitions of grammaticalization may be consulted in Campbell and Janda (2001).

3 Several overviews of the origins and development of the study of grammaticalization are available, although each of the standard references for the history of the discipline is updated only to the end of the twentieth century (Heine, Claudi, and Hünnemeyer 1991, 5–23; Lehmann 1995, 1–8; Hopper and Traugott 2003, 19–38).

depicted grammaticalization as a process that "consiste dans le passage d'un mot autonome au rôle d'élément grammatical," further clarifying:

> The 'grammaticalization' of certain words creates new forms, introduces categories that did not [previously] have linguistic expression, [and] transforms the entire system.[4] (Meillet 1912/1948, 131, 133)

Meillet's general usage as the process of change of an independent word into a grammatical element remained essentially uncontested for more than half a century.[5] For instance, Hoenigswald (1966, 44) reiterates: "Grammaticalization [is] the emptying of lexically meaningful morphs (compound members, etc.) and their transformation into 'function' elements."

The study of grammaticalization was restricted almost exclusively to Indo-European philological-comparative studies, until the late 1960s. That is until Jerzy Kuryłowicz published a paper elucidating "the evolution of grammatical categories" by setting forth a paradigm of change to and from "grammatical status" that helped to expand the concept into the general vocabulary of linguistics. His commonly quoted definition from that paper states:

> Grammaticalization consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status, e.g. from a derivative formant to an inflectional one. (Kuryłowicz 1965, 69)

In contrast to Meillet's understanding as the creation of new forms and innovative linguistic expressions, Kuryłowicz defines grammaticalization as the quantitative growth in the grammaticality of either a lexical or another grammatical item.[6]

Talmy Givón's "An Archaeologist's Field Trip" moved grammaticalization studies into the realm of language universals and typology. His article ended with the now famous aphorism, "Today's morphology is yesterday's syntax," having demonstrated through the comparison of Amharic, Bantu, and several Romance languages that "bound morphemes, derivational as well as inflectional, arise historically from erstwhile free 'lexical' morphemes" (1971, 409).

In his highly influential 1982 essay *Thoughts on Grammaticalization*—not widely available in published form until more than a decade later—Christian

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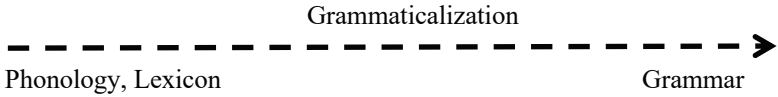
4 "La 'grammaticalisation' de certains mots crée des formes neuves, introduit des catégories qui n'avaient pas d'expression linguistique, transforme l'ensemble du système."

5 See Joseph (2015) for a more thorough review of Meillet's understanding of grammaticalization and a comparison with that of Saussure.

6 Several others, including Bernd Heine, Ulrike Claudi, and Friederike Hünnemeyer (1991, 24), adopt the definition of Kuryłowicz without modification.

Lehmann (1995, viii) returned to Meillet's characterization of grammaticalization as "a process leading from lexemes to grammatical formatives." Further, he developed a terminology and parametric schema providing a preliminary framework for what he dubbed "grammaticalization theory."[7] His parameters will be discussed more fully in a later section (§1.4), but Lehmann clarified his definition with two important remarks. First, the derivation of the term "grammaticalization" suggested that "something becomes or is made grammatical" where "grammatical" is understood as that which belongs to, or is a part of, grammar—as opposed to the lexicon, phonetics, et cetera—and does not mean "what is grammatically correct" as used in some linguistic parlance for well-formedness of an expression. Second, following Kuryłowicz, grammaticalization referred to "a process in which something becomes or is made more grammatical," which is designated by the term "grammaticality," that is, the scalar degree to which an element belongs to grammar (Lehmann 1995, 9).

Grammaticalization may be represented as the bridge between the lexical realm of language to the grammatical realm. This increase of grammaticality may be represented as movement from the less grammatical end of a continuum, containing the phonological and lexical elements of language, to the more grammatical end:



However, the lack of clear analytical methods of evaluating the increase of grammaticality among different grammatical morphemes suggests an imprecise network of assumptions built into this formulation (Frajzyngier 2008).

More recently, Paul Hopper and Elizabeth Traugott define grammaticalization in the first edition of their textbook of the same name as:

7 This theoretical reality is much debated and has reached an impasse. Some, like Bernd Heine (2004, 575), claim: "Grammaticalization theory is neither a theory of language nor of language change." Others, such as Hopper and Traugott (2003, 1), differentiate between two distinct linguistic concepts: the phenomenon of language change and the systematic examination of that phenomenon. The latter, as such, purports to produce a paradigmatic set of claims about the emergence of grammatical categories and the systemization thereof (Campbell and Janda 2001). In order to provide a more precise use of terminology, the term *grammaticalization* is used in the present study almost exclusively for the former, that is, the phenomenon. The latter is referred to as *grammaticalization theory* following the standard usage found in the literature.

> The process whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions, and, once grammaticalized, continue to develop new grammatical functions. (Hopper and Traugott 1993, xv)

This definition offered several improvements to previous characterizations. Hopper and Traugott (1993) specify the types of originating linguistic elements, namely lexical items, constructions, and other grammatical functions. They designate the context of language performance as instrumental. And they adopt Kuryłowicz's notion that a secondary function may develop from another grammatical function. Traugott (2002, 26–27) later provided the convenient terminological designation of the two basic types of reorganizations as "primary" grammaticalization (lexical item → grammatical function) and "secondary" grammaticalization (grammatical function → another grammatical function).

Subsequent studies, however, queried the depiction of grammaticalization as a process, that is, an organized sequence of particular mechanisms (Newmeyer 1998, 232–34, 2001). This designation was common throughout the literature, beginning with Meillet (1912/1948, 130–31):

> The processes by which grammatical forms are formed are twofold: the first of these processes is analogy … [and] the other process (grammaticalization) consists in the change from an autonomous word to the role of a grammatical element (author's translation).[8]

Chief among the concerns about the classification as a process is that grammaticalization could be conceived by some to be a "force with an impetus of its own independent of language learners and language users," so a revised definition wherein the word "change" replaced "process" was proffered in Hopper and Traugott's (Hopper and Traugott 2003, xv) second edition of their textbook:

> [Grammaticalization is] the *change* whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions and, once grammaticalized, continue to develop new grammatical functions (emphasis added).

Further, Newmeyer (2001) problematizes the distinctive nature of grammaticalization. The broader phenomena of phonological reduction and metaphorical change, for instance, are neither unique to grammaticalization nor required components in the process. Its status as process is best abandoned (see further §1.3). Following the revision of Hopper and Traugott (2003), the present conception of grammaticalization as a discrete "diachronic change" does not necessitate the

8 "Les procédés par lesquels se constituent les formes grammaticales sont au nombre de deux.… L'un de ces procédés est l'analogie.… L'autre procédé [grammaticalisation] consiste dans le passage d'un mot autonome au rôle d'élément grammatical."

theoretical baggage of "a well-defined system of interconnected falsifiable hypotheses" (Haspelmath 2004, 23–26).

Finally, while attempting to understand grammaticalization as an extension of metaphor operating at the interface of semantics, syntax, and pragmatics, several linguists have attempted to move the understanding of grammaticalization away from being considered primarily a negative change, that is, one defined by the loss or impoverishment of meaning, and toward an assessment of the change as essentially the acquisition of grammatical meaning (Sweetser 1988, Traugott and König 1991, Eckardt 2006, 2012). Meaning loss subsequent to grammaticalization, then, constitutes an independent deprivation, not unlike loss in other linguistic environments (e.g., specialization).

Taking into consideration this last criticism that the change is, at bottom, a growth of grammatical function and not a deficiency, grammaticalization is defined in the present study as: *the change whereby a lexical item or a construction comes in certain linguistic contexts to acquire a grammatical function, or an item or a construction expands its grammatical function(s)*. This definition encompasses two distinct changes—the outcome of each is a grammatical function. Primary grammaticalization is the development of grammatical functions from lexical items. Secondary grammaticalization, then, comprises the extension to innovative grammatical functions.

1.2. Grammaticalization of Future Markers in English

The present-day English FUTURE provides a well-chronicled example of language change involving grammaticalization. The diachronic origin of tense-marking began, at least, in Old English (the Anglo-Saxon language before 1100 CE), if not Proto-Germanic.

It is widely held that no specialized form of the simple future existed in Old English, only past and present were marked—future action was generally inferred from context with a present tense verb. In example (1), the present *gā* 'go' indicates future action.

(1) On morgenne, **gā** ic tō þǣm dūnum.
in morning, **go-PRS** I to the hills
In [the] morning, I **will go** to the hills. (Smith 2009, 83)

By the time of late Old English, *willan* and *sculan*, the modal verbs of volition and obligation respectively, were grammaticalized in serial verb constructions as

verbal auxiliaries. In examples (2) and (3), *will* and *shall* function to mark future time in constructions with bare infinitives (Wischer 2006, 173–77).[9]

(2) I **will go** to town.
(3) I **shall go** to town.

The original modal usages, however, are not lost in present-day English, but in certain contexts the auxiliaries *should* and *must* acquire these functions.

In contrast to the two previous examples which follow the pattern AUX + VERB, another option, consisting of the form BE + *going to*/*gonna* + VERB in example (4), evolved into a future marker in the grammar of present-day English.[10]

(4) a. I **am going to go** to town.
b. I**'m gonna go** to town.

Subsequent to the development of *will* and *shall*, this third marker—*going to* in example (4a), frequently found in speech as the phonologically reduced form *gonna* with a cliticized auxiliary and the bare infinitive *go*, as in example (4b)—underwent the change to a future marker: GO$_{PTCP}$ + *to* INF > [*going* to]$_{FUT}$ + VERB.[11] *Going to* is found marking the future first in Middle English (ca. 1100–1500 CE) and Early Modern English (ca. 1500–1650 CE) alongside its original andative meaning (i.e., movement away from the speaker: *I am going to town*). Beginning in Middle English, as seen in example (5) and continuing into Early

9 Even though some English speakers may differentiate between the first two uses, *I will go to town* as obligatory and *I shall go to town* as future—and the converse with the second person, *You will go to town* as future and *You shall go to town* as obligatory— both the forms and the meanings are interchangeable, having been flattened by analogy in Present Day English. That is to say, all four examples may connote future action or obligation depending on the situation of the speech act.

10 It should be noted that the AUX + *going to*/*gonna* + VERB usage may be differentiated from *will* + VERB and *shall* + VERB synchronically in that it maintains some of its original imperfective sense as in (α) and (β):

(α) If she **is going** *to* come here, we'll have to leave earlier.
(β) **If she **will** come here, we'll have to leave earlier.

Hopper and Traugott (2003, 3) suggest this distinction reflects a "future of intention, plan, or schedule" deriving from the preservation of the polysemous progressive *be going*. In present-day English even this differentiation is in the process of being lost. However, certain aspects of the progressive are still preserved in present-day English, such as the past progressive in *he was going to do it*.

11 For alternative developments in nonstandard varieties of English, such as African American Vernacular English and English Creoles, see Poplack and Tagliamonte (2000).

Modern English with example (6), the progressive formation BE + GO$_{PTCP}$ is observed sporadically as connoting futurity, but by the time of Modern English *going to* is fully formed as a future marker as exemplified by example (7).

(5) Thys onhappy sowle … **was goyng** *to* be broughte into helle for the synne and onleful lustys of her body. (*The Revelation to the Monk of Evesham*, 1482; quoted in Traugott 2002, 36–37)
(6) So, for want of a Cord, hee tooke his owne garters off; and as he **was going to** make a nooze, I watch'd my time and ranne away. (Tourneur, *The Atheist's Tragedie*, 1611; quoted in Traugott 2002, 36–37)
(7) He was full of promise, but of no performance. He **was** always, in a manner, **going to** go, and never going. (Charles Dickens, *The Life and Times of Martin Chuzzlewit*, 1844; quoted in Perez 1990)

In sum, several strategies denoting the English FUTURE were developed from the extension of already existing and functioning constructions. The originating units do not require meaning deprivation but become polysemous with each added environment and function. The resulting variation and polysemy help point to the evolutionary acquisition of grammatical meaning. What's more, the expanding contexts of use point to language-internal motivations at each step along the pathways of change. Finally, cross-linguistic evidence can provide supportive external data for analogous changes, similar cognitive relationships, and directionality. In this case, verbs of motion (e.g., COME, GO, etc.) are commonly grammaticalized to markers of the future in the world's languages (Heine and Kuteva 2004).[12] Altogether this grammatical change is mapped through historical evidence, language internal reconstruction, and known typological pathways of change.

1.3. Issues in Grammaticalization Theory

The concept of grammaticalization inundated nearly every aspect of the field of linguistics by the end of the twentieth century. This expansion led to studies detailing with serial verb constructions (Li and Thompson 1976), copula constructions (Li and Thompson 1977), the development of demonstratives into articles and noun class markers (Greenberg 1978), an extensive grammatical comparison of African languages (Heine and Reh 1984), and the intersection of language typology and diachronic linguistics (Givón 1979; Bybee, Perkins, and Pagliuca 1994). Several book length treatments devoted exclusively to the topic

12 From the vantage point of language change, meaning gain can appear to move along a pathway from lexical to functional. On directionality of change, see §1.5.2 below.

were published in the last decade of the twentieth century (Heine, Claudi, and Hünnemeyer 1991; Hopper and Traugott 1993; Lehmann 1995). If the 1990s experienced a surge of studies in grammaticalization (Traugott and Heine 1991; Sankoff 1990; Pagliuca 1994; Giacalone Ramat and Hopper 1998), the decade following saw an explosion of articles (Geurts 2000; Heine and Kuteva 2003; Lightfoot 2005; Willis 2007; Fischer 2008), collections of articles (Fischer, Rosenbach, and Stein 2000; Wischer and Diewald 2002; Bisang, Himmelmann, and Wiemer 2004; Fischer, Norde, and Perridon 2004; Verhoeven 2008; Lopez-Couso and Seoane 2008), and monographs (van Gelderen 2004; Fischer 2007; Heine and Kuteva 2007; Norde 2009). Entire journal issues (Campbell and Janda 2001) were dedicated to various aspects of grammaticalization theory and its interplay with other linguistic subjects (Baker and Syea 1996; Roberts and Roussou 2003; Rossari, Ricci, and Spiridon 2009).

In this section, some of the main issues within grammaticalization theory are outlined. The focus is on the proposed contexts, factors, and results of the linguistic change as presented in two landmark research projects: Heine's fourfold division (§1.3.1) and Lehmann's six parameters (§1.4). This discussion is followed by a constructive framework for the investigation of grammaticalization in the present work (§1.5).

1.3.1. Evolutional Continuum and Interrelated Mechanisms

Heine and Reh (1984, 15–45) conceive of a grammaticalization continuum along which three interrelated developments—phonetic, morphosyntactic, and functional processes—are evident but not clearly distinguishable. In their study of African languages, several subcategories of these developments are outlined and illustrated. The phonetic processes include *adaptation* ("the phonological adjustment of a morpheme to its environment" [17]), syllable *erosion*, boundary *fusion*, and *loss* of phonological units. The morphosyntactic processes are *permutation* (the ordering of similar linguistic units in similar positions), *compounding* multiple units into a single word, *cliticization* of one gram to an independent word, *affixation* in which a function word changes into a bound morpheme, and *fossilization* in which productive morphemes become unproductive. Finally, the functional processes are outlined as *desemanticization* ("a lexical item receives a second, non-lexical function, which may ultimately become its only function" as defined [36]), *expansion* of a unit to other linguistic contexts, *simplification* or the optimizing of existing rules, and *merger* which is analogical to compounding where two or more linguistic units combine into one function. Several other sundry processes such as *reduplication*, *metathesis*, and *innovation* as well as the complex processes of verbal *attraction*, *infixation*, and *functional shift* are further delineated (46–62).

More recently, Heine (2004, 579) has reduced these assorted processes to four interrelated mechanisms: *desemanticization* (or semantic bleaching), *extension* (generalization), *decategorialization* (morphosyntactic property loss), and *erosion* (phonetic reduction). Each of these mechanisms pertains to different facets of language use: semantics, pragmatics, morphosyntax, and phonetics.

No absolute relations between the previously outlined processes are posited, since such an attempt, by the authors' own admission, would have been "premature" (Heine and Reh 1984, 62). Thus, the following comments will interact mainly with the more recent formulation of Heine (2004) with reference as needed to the former study (Heine and Reh 1984) for language specific illustrations or correlations of the properties.

1.3.2. Desemanticization

Heine (2004, 579) describes desemanticization the "loss in meaning content" as a mechanism associated with grammaticalization. Elsewhere this characteristic is called *semantic bleaching*.[13]

Two important observations should be mentioned about the coupling of the loss of semantic meaning and grammaticalization. First, semantic bleaching is not unique to grammaticalization as it may take place as a result of other types of language change. Semantic loss is well-known with compounds like *cobweb* (< Middle English *cob* 'spider' + *web*) or *astronaut* (< Greek *astron* 'star' + *nautēs* 'seaman') in which two or more lexemes are combined to form a single lexical unit. The aggregate may preserve certain constituent parts (i.e., bound morphemes) which as independent semantic units are desemanticized. This is true of *cob* 'spider' and *naut* 'seaman', both of which experienced semantic loss in present-day English.

Second, grammaticalization is found in situations where no semantic loss is observable. Such an illustration may be seen in example (8). After the grammaticalization of English *going to* into a marker of the future, either polysemous option is feasible. That is to say, the phrase, *I am going to deliver them*, may refer to a progression of motion with the intent of delivery or the future action of delivery. The observed ambiguity is a result of the fact that the source notion of motion is not lost once grammaticalization occurs, but the construction had gained additional meanings in certain shared environments.

13 The definition of desemanticization as "enriching an existing linguistic unit with an additional function" (Heine and Reh 1984, 39) seems to be abandoned in Heine's (2004) later work. Rubin (2005, 2) echoes this idea as "one important addition" to Hopper and Traugott's revised definition, stating that "lexical items and constructions come in certain linguistic contexts to *lose their lexical meaning* and serve grammatical functions."

(8) Please it your grace, there is a messenger
That stays to bear my letters to my friends,
And I **am going to** deliver them.
(William Shakespeare, *Two Gentlemen of Verona*, 1590, iii 1; Perez 1990)

In addition to the problems associated with defining grammaticalization as primarily the loss of meaning (§1.1), it should be evident that although grammaticalization and semantic bleaching may occur in tandem, the *post hoc* change should not be confused with the *propter hoc* implicature. That is to say, all changes to the resulting function need not be directly caused by the innovative of a grammatical function. Rather the subsequent changes happen as the result of multiple converging factors and influences.

1.3.3. Functional Extension

Heine (2004, 600 n. 8) refers to functional *extension* as a mechanism with pragmatic manifestation which results necessarily in the quantitative increase of "a linguistic expression by adding one (or more) contexts in which that expression can be used." This appears to be identical to the process designated as "expansion" in Heine and Reh (1984, 39–41), as a required form of secondary grammaticalization. As such, an item or a construction once grammaticalized needs to expand its function(s) into new grammatical contexts. In a number of Chadic languages this type of functional extension is exemplified by the locative adposition which develops into the dative/benefactive adposition and further into a marker of the direct object (Heine and Reh 1984, 40).[14] This mechanism, however, should not be confused with contextual extension—or spread to new contexts—but results in functional multiplicity of a linguistic item.

While a secondary grammaticalization may, and frequently does, occur with previously grammaticalized lexical items, it is not the case that it operates either necessarily or exclusively therewith. The future evolution of a linguistic unit could lead as much to its loss as to the development of a new function. For example, the English FUTURE *will* expands further to the marker of epistemic modality (9) as does *going to/gonna* (10), but the auxiliary *shall* (11) does not.

(9) That **will** be Susie. (on hearing the doorbell)[15]
(10) That**'s going to** be Susie.
(11) **That **shall** be Susie.

14 An analogous process has been proposed as occurring in several dialects of Aramaic (Rubin 2005, 94–110).

15 This and other cross-linguistic examples of the change FUTURE > EPISTEMIC MODALITY may be found in Heine and Kuteva (2004, 142–43).

Not only is secondary grammaticalization not obligatory, it also functions in situations without previous grammaticalization. For instance, the French grammatical phrase *à propos*, English *apropos (of)* was borrowed as a preposition, as found in example (12). This term later grammaticalized as a discourse marker evident with example (13) and in the fossilized phrase *apropos of nothing* as a pragmatic indicator of a shift in topic (Peters 2004, 44–45). The originating construction, however, did not begin with primary grammaticalization but grammatical borrowing as a contact-induced change.[16]

(12) Steyne … appeared among the ladies and the children who were assembled over the tea and toast, and a battle royal ensued **apropos of** Rebecca. (William Makepeace Thackeray, *Vanity Fair: A Novel without a Hero*, 1883)
(13) **Apropos of** beggars, Miss Grammont from the depths of her chair threw out the statement that Italy was frightfully overpopulated. "In some parts of Italy it is like mites on a cheese. Nobody seems to be living. (Everyone is too busy keeping alive." H.G. Wells, *The Secret Places of the Heart*, 1921)

In sum, Heine's categories of functional extension and desemanticization cannot be seen as mechanisms unique to or requisite of grammaticalization and therefore may not be considered primary criteria.

1.3.4. Decategorization

Decategorization is defined as morphosyntactic property loss. Heine and Reh give several subclasses designated as permutation, cliticization, affixation, and fossilization. As with the previously proposed mechanisms, decategorization is not required in or unique to grammaticalization. Hence, it is difficult to construe a change like cliticization as a necessary property of grammaticalization.

It is notable that there is a marked tendency in most instances of grammaticalization for certain morphosyntactic changes to occur with the target function, namely, the decrease in variability and the increase or spread in acceptable syntagmatic situations. Changes in variability may be the result of other conditions that are not unique to grammaticalization. Decreased variability may result from the fact that grammaticalization occurs on the semantic-syntactic interface in particular environments and not in situation-neutral constructions. The resulting function is treated as a grammatically static unit—neither subdividable nor variable. For instance, the change to the English FUTURE *going to* arose from the use of GO$_{PTCP}$ with *to* + INF and not other similar semantic and construction types,

16 For an example of contact-induced change in Biblical Hebrew, see Boyd and Hardy (2015).

such as RUN$_{PTCP}$ and *toward*. Each of the four permutations of example (14a) is acceptable, but the forms with GO$_{PTCP}$ *toward* + INF in example (14b) and RUN$_{PTCP}$ *to* + INF in example (14c) did not result in an expression of the future. And the grammaticalization of the expression *going to* is invariable.

(14) a. I am **going/running to/toward** the forest.
b. I am **going to/**toward** go.
c. I am **going/**running** to go

Subsequent to the grammaticalization, the form could be used in new environments (e.g., *I'm going to run*) where the semantically-similar constructions would not have been well-formed (e.g., ***I'm running to run*). Thus, the original morphosyntactic properties of the source are no longer independent and, in a sense, are frozen or considered a chunk. As a result of the expanded function, these grammaticalized forms are expanded to contexts where otherwise it would have not previously functioned, as seen in (14c) *I am going to go*.

1.3.5. Erosion

Three of Heine's mechanisms presume the diminishing of linguistic properties: desemanticization marks the decrease in meaning, decategorialization is morphosyntactic loss, and erosion consists of phonological reduction. The only property increase is that of functional extension (Heine 2004, 579).

Often in grammaticalization studies, the concept of erosion is addressed in the context of boundness, that is, the phonological dependence of a morpheme allegedly increases as it moves along a universal cline. The result is a decrease of its free morpheme status. The term *cline*, first used by Julian Huxley (1938) as "a gradation in measurable characters," is meant to be a synonym of gradient with special application to incremental changes in a property through time.[17] Adapted from evolutionary biology into linguistics, Halliday (1961, 249) rightly designates this taxonomic term as a "relation along a single dimension." However, as with many co-opted terms, the meaning is re-appropriated so that Hopper and Traugott (2003, 6–7) speak of a cline of grammaticality as containing not a single scalar dimension but a continuum with different endpoints—one lexical and the other grammatical—ostensibly as deriving from varying degrees of boundness from "loose" structures (periphrasis) to "tight" structures (morphology). They dub the cline of boundness as a "cline of grammaticality" (7) and delineated it as:

17 A restriction of Huxley's definition to "continuous smooth clines" is suggested by Langlet (1971, 278).

Content Item → Grammatical Word → Clitic → Inflectional Affix

Setting aside for the sake of argument the problems with defining a cline as a gradient relationship with a multiplicity of different dimensions, let us consider the proposal that greater boundness (i.e., phonological dependence, §1.4.4) is equivalent to greater grammaticality and lesser boundness corresponds to lexical meaning. Several conspicuous difficulties are readily apparent within this formulation. First, a grammatical word is not necessarily more bounded than a content item. Compare the morphemes in the English noun compound *sidewalk*, the NP *the whole truth*, ADV *together*, and the PP *on top*. Several of the free morphemes (*side-*, *to-*) are more bounded than the grammatical ones (*the*, *on*). Yet articles and prepositions should be more bounded according to the grammaticality cline. Second, linguistic units may change in boundness without functional transformation, that is to say, there may be rightward movement from, for instance, a grammatical word to a clitic without a change in grammatical function (e.g., *not* > *-n't*). Third, the grammaticality of a derivational vis-à-vis an inflectional affix is not readily apparent in the current schema.

These problems may be further illustrated by the diachronic changes in the English verb *will*. First, Wischer (2006, 173–4) notes that the morphosyntactic features of the lexical verb *willan* and future auxiliary are nearly identical, that is, one cannot distinguish the source usage from the grammaticalized morpheme based on boundness alone. One must employ semantic distinctions in each environment to distinguish the usages. This means that the grammaticalization, VOLITION > FUTURE, occurred without an increase in the boundness of the grammatical word. Second, as speakers gradually began to separate the future tense markers *will* and *shall* from the autonomous lexical verbs *willan* and *sculan*, which Hopper (1991) labels "divergence" or Heine's decategorization (§1.3.4), these grammatical words lose their primary stress resulting in the cliticized form *we'll*, possibly on analogy to *we'd* (< *we would*/*should*).[18] This cliticization, nonetheless, was distinct from and subsequent to the grammatical change being a result of phonotactic developments of English auxiliaries and not directly of grammaticalization. In this situation, boundness increases, whereas grammatical function remains constant, which does not generate a meaningful gradient, mathematical or linguistic.

Because boundness may or may not vary in instances of grammatical change, the characteristics of erosion and boundness should be decoupled from a formal definition of grammaticalization. That is to say, grammaticalization does not necessitate boundness—defined as the decreased independence of a grammatical

18 The analogy would be *we would* : *we'd* :: *we will* : X = *we'll*.

word resulting in phonological erosion—and boundness may increase separately from grammaticalization.

1.3.6. The Overlap Model

Before moving on from Heine (2004), his "Overlap Model" should be described as a helpful heuristic device that provides a means to portray the fundamental increase of meaning with grammaticalization (579). It schematizes the progression by which a linguistic expression develops into grammatical functions. Grammaticalization is expressed in a basic three-stage model of transformation.

1. There is a linguistic expression A that is recruited for grammaticalization.
2. This expression acquires a secondary use pattern B with the effect that there is ambiguity between A and B.
3. Finally, A may be lost, that is, B alone remains a part of the linguistic system.

This idea is further organized in figure 1.1. Usage A is found in a context where grammatical function B may be inferred, leading to ambiguity between the forms (stage II). Subsequently, the original expression A may be lost so that function B remains the only productive one (stage III). Heine notes rightly that not every instance of grammaticalization continues through to the final phase. So, in many instances the development ends with stage II.

Figure 1.1. Overlap Model

Stage	I	II	III
Uses:	A	A	
		B	B

This model is not too unlike the concept of *layering* advanced by Hopper (1991), Bybee, Perkins, and Pagliuca (1994), and others. This change of A to B requires an intermediating step where there exists "more than one gram as the exponent of a gram-type" (Bybee, Perkins, and Pagliuca 1994, 21). Implicit within this idea is that the full replacement of one grammatical function with another (A > B) is incremental, not a one-time comprehensive replacement of Grammar A with Grammar B. Thus, layering is the property of language in which both grammatical forms are possible, that is, the middle stage of the model (A > [A, B] > B). From a synchronic point-of-view this step in which two homophonous forms coexist, [A, B], is considered a type of *polysemy*.

1.4. Lehmann's Six Parameters

Creating a grid of parameters for grammaticalization, Lehmann lays out the properties in three rows consisting of weight, cohesion, and variability with two columns of paradigmatic and syntagmatic characteristics. Weight is the property which distinguishes one member of the class from another. The quality of cohesion is the degree to which a sign is related to another. And variability describes mobility with respect to other signs. Grammaticalization is understood as the increase in cohesion and the decrease of weight and variability. The paradigmatic and syntagmatic aspects are related respectively to "the selection and combination of linguistic signs," yielding six parameters—integrity, structural scope, paradigmaticity, boundness, paradigmatic variability, and syntagmatic variability—as found in figure 1.2 (Lehmann 1995, 123).

Figure 1.2. Parameters of Grammaticalization

	Paradigmatic	Syntagmatic
Weight	Integrity	Structural Scope
Cohesion	Paradigmaticity	Boundness
Variability	Paradigmatic Variability	Syntagmatic Variability

The following sections will discuss these six parameters and evaluate the correlation between them as criteria for distinguishing grammaticalization.

1.4.1. Integrity

The semantic and phonological weight of a sign—the loss of which would be described as desemanticization (§1.3.2) and erosion (§1.3.5), respectively—is characterized as integrity. Lehmann presents the reduction of Latin *ille* to French *le* (frequently reduced further in speech to /l-/) as an example of the loss of integrity, but this latter reduction does not correspond to functional extension, only subsequent phonological incorporation. Contradicting the uniqueness of his own criterion, he also admits that similar changes as Latin *aqua* "water" to French *eau* occur outside of grammaticalization indicating that "it would be wrong to infer from phonological attrition to grammaticalization" (126–27).

1.4.2. Structural Scope

The structural scope is the size, structurally speaking, of the construction of which it is a part. Condensation is the decrease in structural scope leading to loss in independence. The reduced forms of the English auxiliaries—*he is* to *he's*, *he will*

to *he'll*, et cetera—provide examples of this loss in structural scope which results in cliticization. As has been demonstrated above (§1.3.5), however, condensation resulting in boundness is not unique to or required in grammaticalization, and it may occur in situations separate from functional change.

1.4.3. Paradigmaticity

The paradigmaticity of a sign consists in its cohesion with other signs in a paradigm, where the decrease of this parameter results in the leveling of the differences. One may compare German *wegen* with *während*. The former is more paradigmaticized as it is adopted into the paradigm of the primary prepositions taking the dative case increasingly in speech and certain dialects, whereas *während* governs the genitive case analogous to the secondary prepositions (Di Meola 2004). Similarly, according to Lehmann, the grammaticalized forms have a tendency to be adopted and assimilated into preexistent paradigms.

There exist several problems with paradigmaticity as a grammaticalization condition. First, grammaticalization at times yields an innovative form which cannot be relegated to an existing paradigm, for example, the innovation of direct object markers in several Semitic languages (Hardy 2016; Cohen 2018), or a complete reduction of a paradigm leading to fossilization, as with the vestige case vowels in Biblical Hebrew. Second, adoption into an existing paradigm is not always immediate or evident, as in the example of *während*. Third, formation of suppletive paradigms occurs in non-grammaticalized situations (e.g., English *good*, *better*, *best*). As such, paradigmaticity fails both as a universal and a unique criterion for grammaticalization.

1.4.4. Cohesion

The phonological connectiveness of a sign in a syntagm is labeled syntagmatic cohesion. Cohesion may include cliticization, univerbation, fusion, boundness, and adaptation. These are discussed in a previous section (§1.3) and are identified as properties of broader semantic change (Eckardt 2006). The loss of free grammatical status may occur for a range of reasons, accompanying other changes besides grammaticalization. For example, univerbation often is followed by multiple phonological processes in idiomization, as in the colloquial English greeting *sup?* (/wɔt iz ʌp/ > /wɔz ʌp/ > /wəzʌp/ > /sʌp/). As a result, cohesion cannot be considered a determining factor in characterizing or distinguishing grammaticalization.

1.4.5. Paradigmatic Variability

Paradigmatic variability is the degree to which another sign may be chosen by a speaker. Said another way, it is the *obligatoriness* with which a sign is used, or

another may be substituted therewith. This quality leads putatively to an increase in the frequency of the feature. The variability change which accompanies the grammaticalization of the Latin demonstratives *ille* and *illa* into the French definite article *le* is illustrative (Bauer 2007; Polyakov and Makarov 2015). The demonstratives in Latin are non-obligatory, while the French article is ubiquitous being required with definite nouns. Lehmann (1995, 142), however, points out a poignant consideration about obligatoriness which should "keep us from overemphasizing its importance." The omnipresence of a grammatical element may lead to its meaninglessness. This routinely happens at the end of the "grammaticalization cycle," such as with the adoption of the definite article morpheme into the general nominal paradigm in several late Aramaic dialects (Lipiński 1997, 275). Cautioning against too close of a coordination between these two distinct phenomena, Lindquist and Mair (2004, xiii) note: "Frequency emerges as an interesting corollary of grammaticalization rather than as a primary cause, and some processes of grammaticalization do not seem to involve an increase in discourse frequency at all."

1.4.6. Syntagmatic Variability

Syntagmatic variability, in contrast with paradigmatic variability, describes the degree to which the position of a sign is codified or mutable within a syntagm. The reason for the rigidity of the syntagm is understood to be derived from the originating context in which the change took place; however, flexibility at the beginning stages may continue for some time before the syntagm becomes immutable. Also, the typological arrangement may well require the formation of a stable syntagm separate from grammaticalization.

1.4.7. Parametric Correlation

Lehmann (1995, 126–27) admits concerning these parameters that "none of them is by itself sufficient to define grammaticalization; it is only by the interplay of all of them that grammaticalization comes about." On the other hand, however, he claims: "There are … no theoretical grounds on which to expect a 100% correlation between them" (124), and elsewhere "we can see that in some cases the parameters do not correlate" (169). One is left to question, then, how these parameters can help designate such a change if they do not correlate, do not always occur together, and may be explained by other linguistic factors.

1.5. Theoretical Framework for the Present Study

Having considered two important theories detailing the properties and mechanisms of grammaticalization in the previous sections, where does this leave the study of the phenomenon? The conclusion is that these theories too often fall short of identifying the basic properties and mechanisms of grammaticalization.[19] An updated scheme is critical for a more robust and precise understanding of grammaticalization with less room for debate about the extent to which one can apply the concept and what linguistic adaptations are secondary versus primary. A revised framework should incorporate the criticism of the past theories and explain the uniqueness of this type of language change.

In light of this, it is proposed that grammaticalization be delimited by a single unique criterion, namely, the acquisition of a grammatical function either by a lexical item or another function word. This formation follows that of Mufwene (1996, 6), as well as others (notably Frajzyngier 2008), who states: "Grammaticalization is assumed … to apply to specific kinds of restructuring which produce grammatical morphemes out of lexical ones or assign new grammatical functions to some grammatical morphemes." The fundamental diagnostic tool therefore requires the examination of semantic and functional shifts in specific constructions and environments to detect the acquisition of new grammatical meanings. Such changes occur in contexts where multiple interpretations of a single construction lead to the layering of polysemous linguistic material (i.e., ambiguity) and the extension of the innovative function to new contexts (i.e., generalization). All other mechanisms or parameters suggested above are not unique to grammaticalization and are not essential—thus the *outcome* of a grammatical function alone is what is particular to the change.

Since other features, like the increase of boundness, cliticization, et cetera, may not be attributed to all cases and can be demonstrated to occur because of other linguistic factors apart from grammaticalization, they will not be invoked as primary criteria for the exposition of grammaticalization but, at most, obtain secondary status and are separated from the acquisition of innovative functions. Secondary outcomes may be a consequence of analogy or contextual extension (i.e., specialization) as the new grammatical function is adopted into the grammatical system. While these secondary changes—particularly in the variability of the source formation—do regularly occur, they are not exclusive to grammaticalization or part of some multistage grammaticalization "process" (see §1.1).

These characteristics identified above may be observed in the example of English *going to*. In constructions with *to* + INF, the English GO_{PTCP} acquires the

19 Others have recognized these limitations and proposed various ways forward without completely rejecting the insights provided in the study of grammaticalization (Joseph 2004; Fischer 2008).

grammatical function of marking the future (§1.2).[20] This expansion, or layering, yields two polysemous constructions which may only be distinguished by contextual semantics and pragmatic factors. The evidence for the functional change, then, is the extension of the grammaticalized construction into contexts where the previous usage is not well-formed on a semantic level, such as *I'm going to go*/*run* (§1.2). Subsequent to this grammaticalization, the progressive and the future diverge leading to secondary phonological and morphosyntactic changes in the innovative construction. These changes cannot be attributed primarily to grammaticalization but are the result of other mechanisms, such as isomorphism. The phonological reduction of the catenative form (*going to* > *gonna*) may be explained as related to that of other emerging modal auxiliaries (e.g., *want to* > *wanna*, *got to* > *gotta*, etc.) (Krug 2000). It may be argued that such a reduction would not have occurred had it not been for the functional shift. This is evident in that the progressive does not undergo the reduction, ***I'm gonna the forest*. But this example betrays the previous criticism. Grammaticalization provides an innovation which is the growth in usage and function of the linguistic unit. Any subsequent change or variation to the originating expression or the grammaticalized one cannot be understood as necessary to the change, only subsequent to it—whether caused or incidental.

1.5.1. Syntactic Reanalysis and Grammaticalization

Two further issues which regularly are queried in the discussion of grammaticalization involve the relationship between grammaticalization and syntactic reanalysis, and whether grammaticalization is unidirectional. This section and the following one (§1.5.2) will attempt a concise treatment of these topics as they relate to the present study.

Langacker is credited with coining the term *syntactic reanalysis*.[21] He defined it as the "change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation" (Langacker 1977, 58). This allows for a reorganization of the parsing of a syntagm with regard to morphosyntax without rearranging the linear expression of that syntagm. For example, *glass* may be the subject of the clause followed by the

20 Further, a secondary development may be assessed where the future is expanded to contexts marking epistemic modality.

21 The idea of syntactic reanalysis, however, predates Langacker, having been discussed in detail as *Verschiebung der syntaktischen Gliederung* ("shift of syntactic structure") by Hermann Paul (1920, 282–303).

modifying ADJP *full of wine* (15a) or a part of the NP *a glassful* (< **glass full*) *of wine* (15b).[22]

(15) a. [A glass]$_{NP}$ [full of wine]$_{ADJP}$ is on the floor.
b. [A glassful]$_{NP}$ [of wine]$_{PP}$ is on the floor.

Campbell expands this understanding and claims that the underlying structure should include grammatical categories and relations. The result is that change to grammatical relations, or grammaticalization, is incorporated as a subclass of reanalysis. His definition states:

> Reanalysis changes the underlying structure of a grammatical construction, but does not modify surface manifestation. The *underlying structure* includes (1) constituency, (2) hierarchical structure, (3) grammatical categories, (4) grammatical relations, and (5) cohesion. (Campbell 2001, 141)[23]

One must query whether Campbell's addition of grammatical categories to Langacker's definition is indeed warranted or merely an unneeded expansion that has led to much disagreement as to the interaction and dependency of these phenomena.

Rejecting Campbell's inclusion of grammaticalization as merely a component of syntactic reanalysis, the relationship between reanalysis and grammaticalization needs to be further examined. Heine (2004, 592) attempts to do this by interfacing four general positions.

1. Grammaticalization and reanalysis are independent, but coextensive properties—all instances of one are also instances of the other, and vice versa.
2. Reanalysis is inclusive of grammaticalization, but grammaticalization is not inclusive of reanalysis—all instances of grammaticalization are instances of reanalysis, but not all instances of reanalysis are instances of grammaticalization.
3. Grammaticalization and reanalysis are distinct phenomena, but some instances will overlap with the other.
4. Grammaticalization and reanalysis are mutually exclusive phenomena.

Only the middle two, however, appear to have been positively espoused by researchers. Representative of the second view is Campbell's (2001, 116)

22 Eckardt (2012) discusses a similar example under the rubric of "semantic reanalysis," contrasting the German phrases *Ein Glas voll Weines stand auf dem Tisch* and *Ein Glas voll Wein muss in die Soße*.

23 Notice the later variation: "Reanalysis changes the underlying structure of *syntactic* construction" (emphasis added) (Campbell 2004).

depiction that "grammaticalization does not have any independent status of its own, but rather it is derivative of other kinds of language change." The third option, of course, contains a wide range of positions with regard to the degree to which these phenomena are overlapping. Heine, Claudi, and Hünnemeyer (1991, 219) represent one end of this continuum, claiming "both grammaticalization and reanalysis appear to be inseparable twins," while Haspelmath holds to the opposite extreme wherein the phenomenological union is negligible but not nonexistent. He claims:

> The large majority of syntactic changes are instances of "pure" grammaticalization and should be explained within the framework of a theory of grammaticalization, without reference to reanalysis. A minority of syntactic changes are due to reanalysis, and they must be explained in different terms. Grammaticalization and reanalysis are disjoint classes of phenomena. (Haspelmath 1998, 315)

For the present study, three potential situations are distinguished: (1) reanalysis may occur without grammaticalization; (2) grammaticalization may happen without reanalysis; and (3) both may occur ostensibly as simultaneous changes or better as inseparable, concomitant phenomena. Each of these situations is appraised and exemplified in the following discussion.

First, reanalysis without grammaticalization may be observed in the change in the constituency of the syntagm *for me* in example (16), given by Harris and Campbell (1995, 62) as an example of "constituency and hierarchical structure" change:

(16) I wol conclude that it is bet **for me**
To sleen myself than ben defouled thus.
I will conclude that it is better for me to slay myself than to be violated thus.
(Chaucer, *Canterbury Tales*, ca. 1400)

At the initial stage with example (17a), the preposition phrase *for me* modified the main clause; however, the pronoun was later reanalyzed as the logical subject of the infinitive as with example (17b).

(17) a. [It would be better **for me**] [to slay myself than to be violated thus.]
b. [It would be better] [**for me** to slay myself than to be violated thus.]
(Adapted from Haspelmath 1998, 324–35)

This latter stage is exemplified in the ability of the entire phrase, "for me to slay myself," to be prepositioned as the subject as found in example (18).

(18) [**For me** to slay myself] [would be better than to be violated thus.]

Notice that no individual unit or construction is grammaticalized, only syntactically reassigned.

Second, grammaticalization is independent of syntactic reanalysis in the case of the English demonstrative changing to the definite article (e.g., *this man* > *the man*) and the numeral acquiring the function of an indefinite article (e.g., *one man* > *a man*) (Heine, Claudi, and Hünnemeyer 1991, 219). Syntactic rebracketing is not necessitated in such situations, only a change in the semantic and grammatical category.

Third, some changes appear to undergo concurrently both reanalysis and grammaticalization. In previous sections, the periphrastic English FUTURE VP was delineated as BE + [*going* to]$_{FUT}$ + VERB which arose from the reanalysis and grammaticalization of BE + GO$_{PTCP}$ + *to* + INF. The categorical shift and rebracketing of the transitive preposition *to* from being the head of the infinitival phrase in example (19a) to a part of the future tense marker *going to* in example (19b) motivates the change from the progressive to the future syntagm.

(19) a. [I am **going**] [**to** go to town.]
b. [I am **going to**] [go to town.]
c. [I am **gonna**] [go to town.]

As a consequence of these changes, the new tense marker *going to* is reinterpreted as a complex auxiliary *be going to*, diverges from the homophonic GO$_{PTCP}$, and undergoes reduction to *gonna* (19c). These changes of categorical shift, rebracketing, and grammaticalization occurred together. However, to equate the changes would be problematic in instances, as demonstrated above, where one or another change takes place unaccompanied by the other.

1.5.2. Unidirectionality, Degrammaticalization, and Lexicalization

Some will recognize that the present understanding of grammaticalization is construed as a unidirectional transformation, *viz*. the change *in one direction* from a lexical item to a grammatical function (lexical item > grammatical function). Unlike other discussions, however, this unidirectionality claim does not oblige the nonexistence of the converse (grammatical function > lexical item). Examples of the latter change, while much less common, are well documented in the literature, generally regarded as degrammaticalization (Norde 2009).

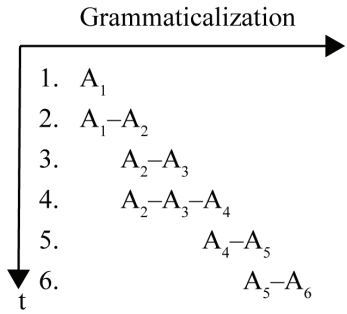
Lexicalization would designate the change resulting in a lexical item. Indeed, Kuryłowicz (1965, 69) in conjunction with defining grammaticalization characterized *lexicalization* as the "reverse" change: grammatical function to lexical item. Analogous to grammaticalization, lexicalization is defined by the outcome of the change and not characterized as necessarily the opposite of grammaticalization as though lexicality and grammaticality are situated on the two extremes of

a single continuum (Lightfoot 2005). This designation may prove to be too broad, covering changes from non-grammatical functions to new lexical meanings ([X, Y, Z] > lexical item), but further delimitation of the concept does not eliminate the need for precise and accurate terminology for this type of change (Brinton and Traugott 2005).

The alternate term *degrammaticalization*, though firmly grounded in the literature (Norde 2009, 112–14), is regrettable in that any attempt to define a word with a privative prefix entails certain reference to the non-prefixed term. As to what degree these two linguistic phenomena are, or are not, related should not be influenced by terminology but established separately. That is to say, merely having equivalent endpoints in the reverse order does not require the change necessarily to be related. The examples of degrammaticalization presented by Norde (2009) and others (Newmeyer 1998, 2001, Fischer 2000) do not represent the reversal of the pathway of grammaticalization, that is, no example of a grammaticalized element which retraces its steps is known (i.e., the change, A > [A, B] > B, followed by the converse, B > [A, B] > A), but only the resulting outcomes of lexical items which putatively developed from grammatical origins. What's more, no examples of degrammaticalization have been suggested in Biblical Hebrew.

Another type of change that is, at times, mislabeled by the term degrammaticalization is *retraction*. Grammaticalization yields new grammatical functions as A_1 expands its function to the new context A_2, and A_2 may subsequently expand to A_3, and so forth (fig. 1.3).

Figure 1.3. Expansion

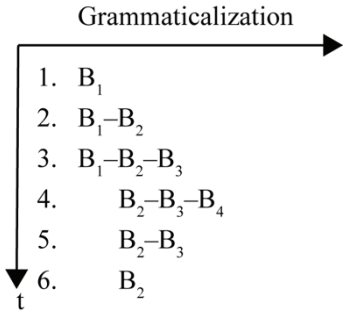


(Adapted from fig. 2 in Haspelmath 2004, 33)

However, this expansion does not, of necessity, eliminate previous linguistic layers. This is represented in figure 1.4., where B_2 is preserved as a polysemous

function even when the form is expanded to other contexts, B_3 and B_4, which are eventually lost.[24]

Figure 1.4. Retraction



(Adapted from fig. 3 in Haspelmath 2004, 33)

Haspelmath (2004) has keenly noted that retraction may occur when an older linguistic layer is preserved as (rightward) expansion continues. If certain succeeding layers are later lost leaving the earlier preserved usage, then degrammaticalization may appear to have occurred, although it may only be the conservation of an earlier function.

1.6. Studies of Grammaticalization in Semitic

Even though Lehmann (1995, 6) states that Carl Meinhof (1936) applied grammaticalization to the Semitic languages in his work on flexional morphology, *Die Entstehung flektierender Sprachen*, exploration in Semitic grammaticalization was almost nonexistent until about the last two decades of the twentieth century.[25] This section provides a brief, diachronic review of the study of grammaticalization in Semitic languages, while a complete examination and evaluation of the studies relevant to particular prepositions is handled in the corresponding sections. A more synchronic overview of the current state of work on Semitic grammaticalization is surveyed in Esseesy (2018).

One of the earliest case studies in Semitic grammaticalization is Givón's essay "The Evolution of Dependent Clause Morpho-syntax in Biblical Hebrew"

24 See the above discussion (§1.3.2) on desemanticization concerning the elimination of semantic meaning.

25 Only a single Semitic example from Ethiopian Semitic is included as part of the "preliminary" treatment of African Languages (Heine and Reh 1984, 238).

found in the widely cited two-volume collection of studies, *Approaches to Grammaticalization*, edited by Traugott and Heine (1991). Givón examines subordinators in Biblical Hebrew encompassing primarily the evolution of the REL *ʔᵃšer* with brief mention of complementizers and quotatives. From these data, Givón extracts several implications for the dialectal and diachronic nature of Biblical Hebrew with regard to the changes observed. Focusing on semantic change, Rubba (1994) develops several claims using insights from Cognitive Linguistics (Langacker 1987) in the Neo-Aramaic dialect of Telesqof, Iraq and concerning the transition from body parts to prepositions. Baalbaki (1995) appraises a multiplicity of grammatical changes in Arabic, which he designates within the broad category of *reclassification*, much of which would be considered grammaticalization.

The latter half of the 1990s yielded a marked increase in the number of grammaticalization studies and the expansion of the theory into the Semitic verbal systems. Concentrating on Maltese and six Arabic varieties spoken in Yemen and Oman, Simeone-Senelle and Vanhove (1997) detail the emergence of verbal auxiliaries, following Cohen's (1984) earlier work on the evolution of the Semitic verbal system. Kouwenberg (1997, 2010) presents a theory of the origin of the Akkadian D-stem appealing to the process of iconicity and subsequent grammaticalization, which he again invokes nearly a decade later when studying the Gt stem (2005) and the Semitic background of the Akkadian verbal system (2010). Also, Contini (1997) examines grammaticalization changes witnessed in the modern Neo-Aramaic language of Ṭuroyo from southeastern Turkey. The next year, Testen (1998) in a revision of his 1995 dissertation references the historical process in an attempt to differentiate the origins of the Central Semitic definite article. In the same year, Voigt (1998) presents evidence that the article evolved from an original demonstrative via grammaticalization. An important article on the grammaticalization of Arabic prepositions was also published by Voigt (1999) in the last year of the decade.

The pace of publishing on topics related to Semitic grammaticalization increased dramatically at the beginning of the twenty-first century including the first full-length monograph devoted to the subject (Rubin 2005). In his article on derivational morphology, "Why Semitic adverbializers (Akkadian *-iš*, Syriac *-āʔīṯ*) should not be derived from existential **ʔīṯ*," Gensler (2000) uses positive typological evidence of the grammaticalization development of adverbs, MOTION > MANNER (*pace* Mayer 1995), to support the derivation of the Syriac morpheme from the feminine singular *nisba* ending. In her work on reported speech in Hebrew, Miller (2003, 200–212) discusses the quotative, which is also studied by Cohen (2002, 805) in Akkadian, by Pat-El (2009b) in Official Aramaic, and by Shemesh (2006) in Mishnaic Hebrew. Various studies on the Hebrew verbal system with reference to grammaticalization are offered by Dobbs-Allsopp (2000),

Cook (2002, 2004, 2006, 2008b, 2012a, 2012b, 2014a, 2014b, 2015), Eskhult (2008), Anstey (2009), Andrason (2010b, 2011, 2015), Andrason and van der Merwe (2015), Andrason, Hornea, and Joubert (2019), and Robar (2015), whereas studies on other Semitic verbs, including the development of the Semitic stative (Zaborski 2005), Proto-Semitic *yaqattVl-* (Garr 2005), Barth's law applied to the Proto-Semitic imperative (Bar-Asher 2008), the verbal system of biblical Aramaic (Li 2009), the origin and development of the Akkadian verbal system (Kouwenberg 2010), the Neo-Aramaic future auxiliary (Coghill 2010), the Akkadian verbal form *iprus* (Andrason 2010a), the inflected forms of Arabic *kāna* 'to be' (Jastrow 2013), and tense marking in Ethiosemitic (Meyer 2016), invoke grammaticalization albeit, at times, only nominally. A number of studies on individual Semitic free and bound morphemes were published in the last fifteen years including articles (Rubin 2005, 65–90, Pat-El 2009a; Huehnergard and Pat-El 2012; Doron and Khan 2016), bipartite reciprocal markers (Halevy 2011; Staps 2020), case relators (Lehmann 2011), copula (Katz 1998; Khan 2012), energic suffix (Owens 2013), existentials (Wilmsen 2017), negation (Sjörs 2018), object markers (Rubin 2005, 91–128; Wilmsen 2013a, 2013b; Hardy 2016; Wilson-Wright 2016; Cohen 2018), particles (Anstey 2006; Gebreyes 2014; Andrason and Lyle 2015), prepositions (Esseesy 2010; Pat-El 2013; Huehnergard and Wilson-Wright 2014; Pat-El 2020), pronouns (Moshavi 2018), relatives (Givón 1991; Huehnergard 2006; Holmstedt 2006; Huehnergard and Pat-El 2018), subordinators (Pat-El 2008), and tense markers (Rubin 2005, 129–52).

1.7. Methodology

In order to evaluate the grammaticalization of Biblical Hebrew prepositions systematically, the following methodology is adhered to. First, the prepositions are grouped according to morphological form and placed in the conventional categories of simple and multi-word prepositions (chapter 2). Second, the various functions of each lexeme are analyzed and outlined based on usage (chapters 3 and 4). This includes examining instances that may fall into more than one category and considering possible environments of change. Third, the grammaticalization pathways linking the original lexical meaning to various functions are compared (chapter 5).

In light of the previous description and preliminary evaluation of grammaticalization theory, a fourfold approach is employed in the analysis of functional trajectories using the comparative method, diachronic typology, the layering principle, and linguistic strata. The two former techniques are language external; the latter two are language internal.

First, the framework of the comparative method allows for a diachronic examination of the philological data from various Semitic languages. Reconstructions of the Hebrew and Semitic protolanguages illuminate potential inter-

linguistic influences and inner-linguistic developments in the dialects of Hebrew. Second, diachronic typology provides a form of uniformitarian control through cross-linguistic comparison primarily to help determine directionality of change. Comparison is useful both positively to assist in identifying prospective changes and negatively to provide caution in evaluating speculative developments. Typology affords insight into cross-linguistic propensities, but it does not alone determine any specific developmental pathway.

Third, the investigation of overlapping meanings, discussed previously as the Overlap Model (§1.3.6), is one of the principle language-internal means of determining the environments of innovative grammatical functions. Grammaticalization occurs in contexts which may be interpreted in more than one way as situations with ambiguous meanings allow for speakers to reinterpret one construction as another (Traugott and Trousdale 2010). Like the comparative method, however, this approach is restricted to providing only positive evidence for grammatical change. That is to say, the lack of attested contexts of functional extension does not proscribe the existence of such environments from some inaccessible point in the evolution of the language.

Fourth, different linguistic strata—diachronic, dialectal, genre, register, et cetera—provide pattern variation which can be used to detect potential changes and restructuring evident within the time period of the biblical texts themselves. This aspect will be explored in relation to the different individual examples and usages in traditionally defined layers to evaluate the source of the variations.

2.
BIBLICAL HEBREW PREPOSITIONS

Prepositions provide arguably some of the most straightforward examples of grammaticalization. The reasons are multifaceted but primarily stem from widespread use and functional relatedness. Following the approach of Tyler and Evans (2003), this study assumes that the network of distinct meanings of grammatical morphemes are related and stored together in the mental lexicon. The various meanings or functions for each preposition may further be accounted for not just as synchronically related complexes (polysemy) but detectable historical products (development). Even though speakers do not retain an overt memory of language evolution, polysemy oftentimes betrays the pathways of change through the environment of use and the relatedness of the functions. Thorough investigation of synchronic polysemy, language-internal evidence, and cross-linguistic comparison can yield a credible accounting of diachronic change.

With such an end in view, this chapter provides the groundwork for the study of Biblical Hebrew prepositions. The morphology of prepositions in Semitic is overviewed (§2.1) and a classification framework for Biblical Hebrew prepositions is presented (§2.2).

2.1. Overview of Semitic Prepositions

Biblical Hebrew morphology, as with that of Semitic languages in general, principally consists of a triconsonantal root, a base (i.e., the combination of vocalic and consonantal lengthening patterns), and affixes. For the Biblical Hebrew word, כָּתַבְתִּי *kɔ̱taḇti* 'I wrote', the root is *KTB*, the base is **qatal* (using the generic root *QTL* per Biblical Hebrew conventions), and the final syllable *-ti* is a suffix. The earliest Semitic-speaking grammarians outlined three word-classes. These groups include verbs, substantives (i.e., nouns, pronouns, and adjectives), and everything else, the so-called particles. Following this scheme, modern Semitic grammars commonly categorize prepositions along with (some) adverbs, conjunctions, and other sundry words in this third grouping as an amalgamation of independent morphemes that did not fit the verb and substantive categories.

The current study classifies prepositions using the general semantic category of function words, that is, morphemes which express grammatical relations. Speakers use these words to encode what has been called grammatical knowledge, which creates the structural data of language. Included in this group are auxiliaries, conjunctions, determiners, expletives, interjections, prepositions, pronouns, quantifiers, and some adverbs. These grammatical words make up a small number of lexemes that are high frequency morphemes (i.e., few types but many tokens).[26] The limited number of types has led some to consider prepositions to be part of a closed word class that do not readily incorporate new members. Recent study, however, demonstrates that grammatical features are more dynamic than basic vocabulary (Greenhill et al 2017). In contrast, content words (e.g., nouns, verbs, etc.) are "a reflex of world knowledge" (Abrusán, Asher, and van de Cruys 2019). They are often described as having "lexical" meaning and typically are considered an open word class. While the boundary between open and closed word classes cannot be seen as imperious—as is demonstrated repeatedly in this study through the incorporation of content words into the grammatical system—certain features of these classes remain "highly stable over time" (Greenhill et al 2017).[27]

The category of prepositions may be further circumscribed by its syntactic and semantic properties (Waltke and O'Connor 1990, §11). Syntactically, *pre*-positions stand before certain constituent types. Semantically, prepositions encode relationships between a referent and the prepositional complement. In a cognitive linguistics framework, these correspond to a trajector [TR] and a landmark [LM]. Examples of the semantic relationships include, among others, notions of place, time, goal, and interest.

2.2. Classification of Hebrew Prepositions

Semitic prepositions are conventionally classified as either primary or secondary based on their morphology and etymology (Bauer and Leander 1922, 634–47, Brockelmann 1908, 494–99). Primary prepositions are, for the most part, mono- or bi-radical morphemes. These prepositions are traditionally designated as "inseparable" or "separable" based on orthography. Inseparable prepositions (e.g., Ethiopic *ʔem-* 'from', Aramaic *l-* 'toward', Arabic *bi-* 'in') are prefixed to nominal landmarks, and separable prepositions are independent morphemes (e.g., Akkadian *ana* 'to', Old South Arabian *bn* 'from', Phoenician *ʕd* 'until').

26 The type-token distinction is understood as the difference between a concept and an entity. A type is a class of objects, and a token is an occurrence of that object. So, for example, in producing a statistical model, a linguistic type could be the construction *bəʕet*, and the tokens would be the instances of this construction in a text.

27 For a more detailed data-driven analysis of temporal stability and rates of change, see Wichmann and Holman (2009).

Secondary prepositions, on the other hand, are triconsonantal and derivative. They almost always are independent morphemes in the Semitic languages (e.g., Ugaritic *åḫr* 'after'; Syriac *tḥɛt* 'under'; Mehri *fənōhən* 'before') and are related etymologically to nouns. The nineteenth-century derivational understanding that "All words that appear in language use as prepositions are originally nouns"[28] (Gesenius and Kautzsch 1896, §101) is an oft-repeated refrain even in more recent grammars of Biblical Hebrew (Bauer and Leander 1922, §81, Joüon 1923, §103, Waltke and O'Connor 1990, §11.1.1, Blau 2010, §5.1). Furthermore, Brockelmann (1908, 494) suggests an even broader understanding that "nouns freeze into prepositions" and originate from "Nouns [functioning] as accusative adverbs."[29]

To this notion that prepositions come from original accusative-case substantives functioning as adverbs, it should be added that they develop from morphologically construct state, or bound, forms governing the genitive case.[30] This supposition is substantiated in several Semitic languages, most notably Arabic where, for example, the preposition *baʕda* 'after' is distinguishable from the independent adverb *baʕdan* 'afterwards'.[31] Both words derive from a *qatl*-type noun with the accusative suffix *-a*(*n*). The adverb is the absolute form, whereas the preposition is the construct form (Voigt 1999, 22).

Two additional groups of Semitic prepositions, however, do not fit within this schema of primary and secondary prepositions. One group includes morphemes made up of tri-consonantal structures with unknown or uncertain roots (e.g., Arabic *ladun* 'at').[32] The other group consists of multi-word prepositions (e.g., Ugaritic *btk* 'in the midst of', *lpn* 'in front of'; Aramaic *btr* 'after' [< *b-* 'in' + *ʔtr* 'place']).

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28 "Sämtliche Wörter, welche im Sprachgebrauche als Präpositionen erscheinen, sind urspr. Substantiva."

29 "Die semit. Präpositionen sind urapr. Subst. im Akk[usativ] adv. Wie im Laufe der Sprachgeschichte immer wieder Subst. zu Präpositionen erstarren."

30 In Arabic grammar, these function words are referred to as *ḥurūfu l-jarri*, that is, "particles which govern the genitive case" (Wright 1896, §355).

31 See, also, Arabic *maʕa* 'with' as a preposition compared with the adverb *maʕan* 'together'.

32 Several grammars assert that some bi-consonantal prepositions derive from underlying tri-radical, third-weak roots (Gesenius, Kautzsch, and Cowley 1910, §103n, Driver 1937, Blau 2010, §5.1.4). For example, Hebrew עַל *ʕal* 'upon', עַד *ʕaḏ* 'until', and אֶל *ʔɛl* 'toward' are explained as originating from tri-radical roots as evidenced with the so-called long forms, עָלַי *ʕᵃle*, עָדַי *ʕᵃḏe*, and אֵלַי *ʔᵉle*. The first two are likely connected to עלה 'go up' and עדה 'advance', but the origin of the last preposition is obscure. As the long forms are restricted primarily to vestigial independent forms in Hebrew poetic texts and with pronominal suffixes, the present study categorizes these prepositions along with other lexemes with obscured roots.

Reassessing the traditional categories, Voigt (1999) develops a four-part classification schema of Arabic prepositions which is adopted in the present volume as a threefold structure for Hebrew prepositions.[33] In the first grouping, prepositions without an unmistakable root are categorized. This group (I) contains all mono- and biconsonantal examples. The second category (II), which corresponds to Voigt's third grouping, is comprised of those prepositions with an analyzable triconsonantal root. Lastly, the polymorphic prepositions of various types are grouped in category III.

Each of these groups is exemplified in table 2.1. For the first two groupings, a comprehensive listing is provided. The examples are given with a gloss, historical form, base, and (where applicable) root. The third group catalogs the six basic types of multiword prepositions by their composite parts. A discussion of the multiword prepositions examined in this study is provided below (§4).

Table 2.1. Classification of Hebrew Prepositions

Category		Form	Base	Root
I:				
1.	-בְּ *b-* 'in, on'	**bV-*	**qV*	–
2.	-כְּ *k-* 'as, like'	**kV-*	**qV*	–
3	-לְ *l-* 'at, to, for'	**lV-*	**qV*	–
4.	אֶל *ʔɛl* 'toward'	**ʔil(ay)*[34]	**qil(ay)*	–
5.	אֵת *ʔeṯ* 'with'	**ʔitt*	**qill*	–
6.	בְּלִי *bəli* 'without'	**bVliyy*	**qVliyy*	
7.	מוּל *mul* 'before'	**mūl*	**qūl*	–[35]
8.	מִן *min* 'from'	**min(n)*	**qil(l)*	–
9.	עַד *ʕaḏ* 'until'	**ʕad(ay)*	**qal(ay)*	–
10.	עַל *ʕal* 'upon'	**ʕal(ay)*	**qal(ay)*	–
11.	עִם *ʕim* 'with'	**ʕimm*	**qill*	–
12.	בִּלְתִּי *bilti* 'except'	**biltiyy*	**qiltiyy*	–
13.	זוּלָתִי *zulɔṯi* 'except'	**zūlatiyy*	**qūlatiyy*	–
14.	טֶרֶם *ṭɛrɛm* 'before'[36]	**ṭi/arm*	**qi/atl*	–

33 Voigt's (1999, 28) category II is not applicable in Hebrew as there appear to be no Biblical Hebrew examples of "teilweiser Monemisierbarkeit."

34 See above (n. 5) for a brief discussion of the problems inherent in analyzing the long forms of *ʕᵘle*, *ʕᵘḏe*, and *ʔᵉle*.

35 Any evidential connection to the Hebrew root *MWL* relating to 'circumcision' is remote. A derivation from *ʔWL* 'strong; front' is also difficult to substantiate (Olshausen 1861, §223c).

36 Note also the biform טְרוֹם *ṭərom* 'before'.

Table 2.1: Classification of Hebrew Prepositions (cont.)

Category		Form	Base	Root
II:				
1.	אַחַר *ʔaḥar* ‘before’	**ʔaḥḥar*	**qattal*	√*ʔḤR*
2.	אַחֲרֵי *ʔaḥᵃre* ‘before’	**ʔaḥḥaray*	**qattalay*	√*ʔḤR*
3.	אֵצֶל *ʔeṣɛl* ‘beside’	**ʔiṣl*	**qitl*	√*ʔṢL*
4.	בֵּין *ben* ‘between’	*bayn	*qatl	√BYN
5.	בַּעַד *baʕaḏ* ‘behind’	*baʕd	*qatl	√BʕD[37]
6.	חֵלֶף *ḥelɛp̄* ‘exchange for’	*ḫilp	*qitl	√ḪLP
7.	יַעַן *yaʕan* ‘because of’	*yaʕn[iy]	*yaqtil	√ʕNY
8.	נֶגֶד *nɛḡɛḏ* ‘before’	*nigd	*qitl	√NGD
9.	נֹכַח no*ḵaḥ* ‘opposite to’[38]	*nukḥ	*qutl	√NKḤ
10.	סְבִיב *səḇiḇ* ‘around’	**sabīb*	**qalīl*	√*SBB*
11.	עֻקֶב *ʕeqɛḇ* ‘for’	**ʕiqb*	**qitl*	√*ʕQB*
12.	תַּחַת *taḥaṯ* ‘under’	**taḥt(ay)*	**qatl(ay)*	√*TḤT*
III:				
1.	מֵאֵת *meʔeṯ* ‘out of, from’	**min+ʔit(t)*	PREP+PREP	
2.	מֵעַל ל- *meʕal l-* ‘above’	**min+ʕal+lV-*	PREP+PREP+PREP	
3.	בִּגְלַל *biḡəlal* ‘because of’	**bV+galal-*	PREP+NP	
4.	מִבֵּית ל- *mibbeṯ l-* ‘within’	**min+bayt+lV-*	PREP+NP+PREP	
5.	מִלְּמַטָּה *milləmaṭṭɔ* ‘from below’	**min+lV+ maṭṭat*	PREP+PREP+ NP	
6.	אֶל מִחוּץ ל- *ʔɛl miḥuṣ l-* ‘to the outside of’	**ʔil+min+ḥūṣ+ lV-*	PREP+PREP+NP+ PREP	

37 The corresponding verb, however unwitnessed in Biblical Hebrew, is well-known in Semitic (see §3.5.1).

38 The biform -נִכְח *niḵḥ-* is included herewith.

3.
THE DEVELOPMENT OF SIMPLE PREPOSITIONS

This chapter outlines the evidence for the development of the simple prepositions from their lexical source to various functional uses. A full discussion is included for the following category II prepositions (table 2.1): אַחַר *ʔaḥar* 'before', אַחֲרֵי *ʔaḥ^{a}re* 'before', אֵצֶל *ʔeṣɛl* 'beside', בֵּין *ben* 'between', בַּעַד *baʕaḏ* 'behind', חֵלֶף *ḥelɛp̄* 'exchange for', יַעַן *yaʕan* 'because of', נֶגֶד *nɛḡɛḏ* 'before', נֹכַח *noḵaḥ* 'opposite to', סְבִיב *səḇiḇ* 'around', עֶקֶב *ʕeqɛḇ* 'for', and תַּחַת *taḥaṯ* 'under'. Category I prepositions, although more frequent, are excluded from this study. Because they do not provide language-internal evidence of their source, a complete pathway of change cannot be definitively reckoned.

In each section, the morphology, synchronic usage patterns, and grammaticalization pathway(s) are examined. The morphology of the source lexeme is reviewed first, followed by contexts of its prototypical grammatical functions. The changes are outlined with particular attention to the ambiguous environments wherein the grammatical functions may be acquired and extended. Last, a mapping of the proposed grammaticalization changes is provided.

3.1. אַחַר *ʔaḥar*

As with a number of the category I prepositions and the category II preposition תַּחַת *taḥaṯ* 'under', *ʔaḥar* and *ʔaḥ^{a}re* derive from original short and long biforms, **ʔaḫḫar* and **ʔaḫḫaray* (see also the discussion in §3.2.1 below). In Biblical Hebrew, however, these two forms have divergent morphology and semantics. A joint analysis would privilege the diachronic relationship over clear synchronic, including functional, differences. Thus, this section discusses *ʔaḥar*. The analysis of *ʔaḥ^{a}re* is undertaken in the following section. The relationship between these prepositions is examined afterwards (§3.2.6).

3.1.1. Morphosyntax of ʔaḥar

A frozen construct form of the Proto-Semitic base **qattal* (Biblical Hebrew *qattɔl*) from the root *ʔḪR* accounts for the vocalic pattern and invariability of the

morpheme (Fox 2003, 253–61, Bauer and Leander 1922, 479). Other invariable, construct-state forms are detectable among the Biblical Hebrew prepositions, including בְּדֵי *bəḏe* 'as much as', בִּגְלַל *bigəlal* 'because of' (§4.4), and מִפְּנֵי *mippəne* 'because of' (§4.18). Driver (1937, 346) assigns this form along with תַּחַת *taḥaṯ* 'below' (§3.12) to the **qatl* noun category with, for example, פַּעַם *paʕam* 'step'. This pattern, however, fails to explain the accentual difference between these forms—*ʔaḥár* has word-final accent, and *táḥaṯ/páʕam* is word-initial.

The expected, but unattested, absolute state of **ʔaḫḫar* would have been realized as *אֶחָר *ʔɛḥɔr* on the pattern of other similar forms, most notably אֶחָד *ʔɛḥɔḏ* 'one' (< **ʔaḥḥad*) and אֶחָיו *ʔɛḥɔw* 'his brothers' (< **ʔaḫḫayhŭ*).[39] A distinctive suffixed form of *ʔaḥar* is not known. The two principal contexts in which such a morphological form would be expected to appear, the locative and temporal prepositions, overlap with the nearly identical function of *ʔaḥ^{a}re* which itself is used with suffixes.

3.1.2. Usage of ʔaḥar

Of the ninety-three examples of *ʔaḥar* in Biblical Hebrew, seven usage patterns—two lexical and five grammatical—are differentiated: Noun, Locative Adverb, LOCATIVE (BEHIND), TEMPORAL/ADVERBIALIZER (AFTER), ACCORDANTIVE (ACCORDING TO), and CONJUNCTIVE ADVERB (THEN).[40]

3.1.2.1. Noun ('back')

As with many prepositions (e.g., English *beside*, *behind*, *in front of*), *ʔaḥar* appears to have its origin in an anatomic noun. It originally designated the 'backside'. Etymological speculation about the specific referent of this erstwhile substantive extends from Joüon and Muraoka (1991, §103) 'the back' to G. R. Driver (1933, 378, 1937, 346) 'buttocks' and Gesenius (1910, §101) 'hinder part'. In Biblical Hebrew, only a single plausible usage of *ʔaḥar* as a noun meaning 'west' is attested (20). The cardinal direction, which is the locality at one's back when facing east, allows for the positive identification of the concrete meaning

39 This sound change (**a* > *ɛ* / __CC*ɔ*) occurs where C is an originally doubled voiceless fricative of the *h/ḥ/ḫ* series (IPA [h], [ħ], [x]): בֶּהָלָה *bɛhɔlɔ* 'horror' (< **bahhalat*), אֶחָת *ʔɛḥɔṯ* 'one (F.)' (< **ʔaḥḥadt*), and פֶּחָה *pɛḥɔ* 'governor' (< **paḫḫat*). Elsewhere, it is productive with derivable morphological forms—such as the definite article, הֶחָרָבָה *hɛḥɔrɔ̄bɔ* 'the dry ground' (< **haḫḫarrabat*), and certain verbal forms, יִתְנֶחָם *yiṯnɛḥɔm* 'he is grieved' (< **yitnaḥḥam*).

40 Three additional examples are found as part of the compound preposition מֵאַחַר *meʔaḥar* 'from after' (SOURCE + LOC).

'back' for the original lexeme. The derivation of the cardinal direction from the preposition seems farfetched without connection to the anatomic reference (Childs 1974, 49). A metaphorical understanding as 'back, behind, rear part' is alternatively potential (Propp 1998, 197–98; Hamilton 2011, 43).[41]

(20) וַיִּנְהַג אֶת־הַצֹּאן אַחַר הַמִּדְבָּר

wayyinhaḡ	*ʔeṯ-haṣṣon*	***ʔaḥar***	*hammiḏbor*
lead-WCPC.3M.SG.	DOM+the.flock	**west.of**	the.wilderness

[Moses] led the flock to the west of the wilderness.[42] (Exod 3:1)

3.1.2.2. Locative Adverb ('behind')

Two instances of the lexeme may be taken to function as a locative adverb in Biblical Hebrew. These examples, however, are dubious from a text-critical perspective.

In the first case (21), the phrase אַיִל אַחַר *ʔayil ʔaḥar* 'a ram behind' may be understood as the subject of the following finite verb. However, the final consonant was read as the typographically similar letter *dalet* in nearly every early version. As such, *ʔaḥar* was understood as the number adjective אֶחָד *ʔeḥoḏ* 'one' hence 'a ram was caught by its horns' as found in the Septuagint, Targums (Neofiti, Pseudo-Jonathan, and some manuscripts of Onqelos), Samaritan Pentateuch, and Peshitta (Sarna 1989, 153).

(21) וְהִנֵּה־אַיִל אַחַר נֶאֱחַז בַּסְּבַךְ בְּקַרְנָיו

wəhinne-ʔayil	***ʔaḥar***	*neʔᵉḥaz*
CJ+PTCL+ram	**behind**	be.caught-SC.3M.SG.
bassəḇaḵ	*bəqarnɔw*	
IN+the.thicket	BY+horns+his	

A ram behind [him] was caught by its horns in the thicket. (Gen 22:13)

Proverbs provides the second instance of a possible adverbial reading of *ʔaḥar* as in example (22). The versions, though, opt for various nonadverbial renderings of this usage. For instance, the Septuagint translates πορεύου κατόπισθέν μου, apparently reading, לְךָ אַחֲרַי *leḵ ʔaḥᵃray* 'follow after me', interpreting the preceding word as a verb and adding a suffix to *ʔaḥar* (Fox 2009, 1041). The Targum, on the other hand, translates ובתר כן בני ביתך, understanding *ʔaḥar* as a clause-coordinator akin to אַחַר *ʔaḥar* 'afterwards' (see further §3.1.2.6).

41 A number of conjectural emendations have been proposed to resolve this "unparalleled" phrase (Propp 1998, 183).

42 Translations of all ancient and biblical texts are the author's, unless otherwise specified.

(22) הָכֵן בַּחוּץ מְלַאכְתֶּךָ וְעַתְּדָהּ בַּשָּׂדֶה לָךְ אַחַר וּבָנִיתָ בֵיתֶךָ

hɔ̱ken	*baḥuṣ*	*məlaḵtɛ̱ḵɔ*
prepare-IMV.M.SG.	outside	work-F.+your
wəʕattəḏɔh	*baśśɔḏɛ*	*lɔ̱ḵ*
CJ+prepare-IMP.M.SG.+her	IN+the.field	FOR+you
ʔaḥar	*uḇɔniṯɔ*	*ḇeṯɛ̱ḵɔ*
back/afterwards	build-WCSC.2M.SG.	house+your

Make ready your work outside and prepare it in the field afterwards, then you may build your house. (Prov 24:27)

The textual and semantic difficulties with these examples cast reasonable doubt upon the existence of an adverbial function of *ʔaḥar* in Biblical Hebrew. The prepositional usage, on the other hand, is well-attested and distinguished syntactically by a following object NP.

3.1.2.3. PREP (BEHIND)

Seventeen instances of the preposition *ʔaḥar* may be grouped together as marking the spatial relation behind a participant.[43] Svorou (1994, 144–7) categorizes this notion as BACK-REGION. Example (23) is illustrative of this function in Biblical Hebrew. Having been told that his brothers were going to Dothan, Joseph travelled to that location designated as אַחַר אֶחָיו *ʔaḥar ʔɛḥɔw* 'behind his brothers' to find them.

(23) וַיֵּלֶךְ יוֹסֵף אַחַר אֶחָיו וַיִּמְצָאֵם בְּדֹתָן

wayyelɛ̱ḵ	*yosēp̄*	***ʔaḥar***	*ʔɛḥɔw*
go-WCPC.3M.SG.	PN	**BEHIND**	brothers+his
wayyimṣɔʔem		*bəḏoṯɔn*	
find-WCPC.3M.SG.+them		AT+GN	

Joseph went behind his brothers and found them at Dothan. (Gen 37:17)

3.1.2.4. PREP/ADVZ (AFTER)

Thirty-two examples of the prepositional function of *ʔaḥar* are used to denote an event which took place prior to the perspective of the events of the main clause.[44]

43 Gen 37:17; Exod 11:5; Ruth 2:2; 1 Sam 11:7; 12:14; 2 Kgs 11:6; 13:2; 23:3; 25:5; Job 31:7; 39:8; Song 2:9; Qoh 12:2; Isa 57:8; 65:2; 66:17; Ezek 13:3.

44 Gen 9:28, 10:1, 10:32, 11:10, 15:1, 22:1, 39:7, 40:1; Exod 18:2; Lev 14:43; 25:15, 27:18; Num 6:19; 1 Kgs 13:33, 17:17, 19:11, 19:12 (2x), 21:1; 1 Chr 2:24; 2 Chr 32:9; Ezra 7:1; Neh 13:19; Esth 2:1, 3:1; Job 21:3, 42:7; Prov 20:25; Jer 40:1; 41:16; Ezek 40:1; Amos 7:1.

This temporal modifier may precede a NP (24), an infinitive (25), a demonstrative (26), or a relative (27).

(24) וַיִּוָּלְדוּ לָהֶם בָּנִים אַחַר הַמַּבּוּל

wayyiwwɔləḏu	*lɔhɛm*	*bɔnim*	***ʔaḥar***	*hammabbul*
be.born-WCPC-3M.PL.	TO+them	sons-M.	**AFTER**	the.flood

Sons were born to them after the flood. (Gen 10:1)

(25) וְנָתַן עַל־כַּפֵּי הַנָּזִיר אַחַר הִתְגַּלְּחוֹ אֶת־נִזְרוֹ

wənɔṯan	*ʕal-kappe*	*hannɔzir*
give-WCSC-3M.SG.	INTO+hands.of	the.Nazirite
ʔaḥar	*hiṯgalləḥo*	*ʔeṯ-nizro*
AFTER	shave-INF.CSTR+him	DOM+hair+his

He shall put [them] into the Nazirite's hands after shaving his head. (Num 6:19)

(26) אַחַר זֶה שָׁלַח סַנְחֵרִיב מֶלֶךְ־אַשּׁוּר עֲבָדָיו יְרוּשָׁלַ͏ִם

ʔaḥar	*zɛ*	*šɔlaḥ*	*sanḥeriḇ*	*mɛlɛḵ-ʔaššur*
AFTER	this	send-SC.3M.SG.	PN	king.of+PN
ʕᵃḇɔḏɔw		*yərušɔlaymɔ*		
servants+his		GN		

After this, Sennacherib king of Assyria sent his servants to Jerusalem. (2 Chr 32:9)

(27) אַחַר אֲשֶׁר הֻכְּתָה הָעִיר ... הָיְתָה עָלַי יַד־יְהוָה

ʔaḥar	*ʔᵃšɛr*	*hukkaṯɔ*	*hɔʕir ...*
AFTER	REL	be.struck-SC.3F.SG	the.city …
hɔyaṯɔ	*ʕɔlay*	*yaḏ-YWHW*	
be-SC.3F.SG.	UPON+me	hand.of-F.+PN	

[On the tenth day of the month, in the fourteenth year] after the city was razed, (…) the hand of Yahweh came upon me. (Ezek 40:1)

The previous example with the relative is similar to constructions linking two clauses without the relative. There are two cases of *ʔaḥar* functioning as an adverbializer—a subclass of subordinators, or subordinating conjunctions, which marks an intraclausal, adverbial relation. In both example (28) and example (29), the clause governed by the adverbializer follows the main clause it modifies. Each embedded clause is temporally prior to the mainline events akin semantically to the temporal function outlined above for the preposition phrases headed by *ʔaḥar*.

(28) וְאִם־יָשׁוּב הַנֶּגַע וּפָרַח בַּבַּיִת אַחַר חִלִּץ אֶת־הָאֲבָנִים וְאַחֲרֵי הִקְצוֹת אֶת־הַבַּיִת וְאַחֲרֵי הִטּוֹחַ

wəʔim-yošuḇ		*hannɛ̄gaʕ*	*upɔ̄raḥ*
CJ+IF+return-PC.3M.SG.		the.plague	infest-WCSC.3M.SG.
babbayiṯ	***ʔaḥar***	*ḥilleṣ*	*ʔɛṯ-hɔʔª ḇɔnim*
IN+the.house	**AFTER**	remove-SC.3M.SG.	DOM+the.stones
wəʔaḥª re		*hiqṣoṯ*	*ʔɛṯ-habbayiṯ*
CJ+**AFTER**		scraping-INF.	DOM+the.house
wəʔaḥª re		*hiṭṭoª ḥ*	
CJ+**AFTER**		plastering-INF	

If the infestation comes back and breaks out in the house even after he pulled out the stones, scraped, and plastered the house. (Lev 14:43)

(29) הֵשִׁיב מֵאֵת יִשְׁמָעֵאל בֶּן־נְתַנְיָה מִן־הַמִּצְפָּה אַחַר הַכֹּתוֹ אֶת־גְּדַלְיָה בֶּן־אֲחִיקָם

hešiḇ		*meʔeṯ*	*yišmɔʕel*	*bɛn-nəṯanyɔ*
bring.back-SC.3M.SG		FROM	PN	son.of+PN
min-hammiṣpɔ	***ʔaḥar***	*hikkɔ*	*ʔɛṯ-gəḏalyɔ*	*bɛn-ʔª ḥiqɔm*
from+Mizpah	**AFTER**	strike-SC.3M.SG.	DOM+PN	son.of+PN

He recovered [them] from Ishmael ben-Nethaniah from Mizpah after he had attacked Gedaliah ben-Ahikam. (Jer 41:16)

3.1.2.5. PREP (ACCORDANTIVE)

A third function of *ʔaḥar* may possibly be explanative of two instances conveying the relational idea of 'in accordance with' or 'according to'. This proposed function is labeled ACCORDANTIVE. In example (30), the preposition governs a NP denoting the accordant value of the acquired merchandise.[45] The parallel lines of example (31) in the seventy-third Psalm demonstrate the semantic parallelism between, on the one hand, the verbs, תַּנְחֵנִי *ṯanḥeni* 'you lead me' and תִּקָּחֵנִי *tiqqɔḥeni* 'you take me', and, on the other hand, the modifying phrases, בַּעֲצָתְךָ *baʕª ṣɔṯɔ̄ḵɔ* 'with your counsel' and אַחַר כָּבוֹד *ʔaḥar kɔḇoḏ* 'according to glory'.

(30) וַיִּקְחוּ מֵהֶם בְּלֶחֶם וְיַיִן אַחַר כֶּסֶף־שְׁקָלִים אַרְבָּעִים

wayyiqḥu	*meheṃ*	*bəleḥem*	*wɔyayin*
take-WCPC-3M.PL.	FROM+them	IN+bread	CJ+wine
ʔaḥar	*kɛsɛp̄-šəqɔlim*		*ʔarbɔʕim*
ACCRD	silver+shekels		forty

[The governors] took bread and wine from them in the amount of forty silver shekels. (Neh 5:15)

45 The Vulgate reading of *cotidie* 'daily' is not transparent from a text critical perspective.

(31) בַּעֲצָתְךָ תַּנְחֵנִי וְאַחַר כָּבוֹד תִּקָּחֵנִי

baʕᵃṣɔṯəḵɔ		*ṯanḥeni*	
IN+counsel+your		lead-PC.2M.SG+me	
wəʔaḥar	*kɔḇoḏ*	*tiqqɔḥeni*	
CJ+**ACCRD**	glory	take-PC.2M.SG.+me	

With your counsel you guide me,
and in accordance with [your] glory you lead me. (Ps 73:24)

Example (32) from Ben Sira suggests that this function may be continuous with later stages of Hebrew.

(32) ואחר צרכו ימשוך תורה

wʔḥr	*ṣrkw*	*ymšwk*	*twrh*
CJ+**ACCRD**	desire+his	pull.down-PC.3M.SG.	law

He shall bend the law according to his desire. (Sir 32:17, ms. B)

3.1.2.6. CONJUNCTIVE ADVERB (THEN)

The largest number of Biblical Hebrew usages of *ʔaḥar* functions temporally as a conjunctive adverb. Each of the thirty-seven instances heads a clause, and all but seven are preceded by prefixed *waw*-conjunction. Functionally, it provides a sequential link with the preceding events in temporal or logical succession, that is to say, subsequent to the previous mainline events and actions. This inter-clausal transition is most commonly used with a prefix conjugation verb marking an unrealized future outcome resulting from previous events.[46] This usage is found as a type of instructive speech act in narrative direct speech (33)[47] and casuistic law (34).[48] Slightly less frequent, the conjunctive adverb is also employed with suffix-conjugation clauses to mark the end of a narrative sequence (35).[49]

46 The lone attestation of *ʔḥr* in the corpus of inscriptional Hebrew in line 12 of the third letter of the Lachish correspondence functions similarly (Pardee et al. 1982, 81–89).
47 Gen 18:5; 24:55; Num 31:2; 32:22; Josh 2:16; Judg 7:11; 15:7; 19:5; 1 Sam 10:5; Job 18:2; Ps 68:26; Hos 3:5; Zech 2:12. A textual problem with Ezekiel 20:39 is obscuring the proper place of this example in this taxonomy.
48 Lev 14:8, 19, 36; 15:28; 22:7; Num 5:26; 6:20; 12:14; 19:7; 31:24; Deut 21:13. The example found in Proverbs 20:17, though not a casuistic law proper, fits best this category.
49 Gen 10:18; 30:21; 33:7; 38:30; Exod 5:1; Num 12:16; Josh 24:5; Judg 1:9; 1 Chr 2:21; 2 Chr 35:14; Job 19:26.

(33) וַיֹּאמֶר אָחִיהָ וְאִמָּהּ תֵּשֶׁב הַנַּעֲרָ אִתָּנוּ יָמִים אוֹ עָשׂוֹר אַחַר תֵּלֵךְ

wayyomɛr		*ʔɔḥihɔ*		*wəʔimmɔh*	
say-WCPC.3M.SG.		brother+her		CJ+mother+her	
tešeḇ	*hannaʕ^{a}rɔ*	*ʔittɔnu*	*yɔmim*	*ʔo*	*ʕɔśor*
remain-PC.3F.SG.	the.girl	WITH+us	days	OR	ten
ʔaḥar		*teleḵ*			
THEN		go-PC.2M.SG.			

Her brother and mother said: 'Let the girl stay with us for about ten days; afterwards you may leave. (Gen 24:55)

(34) וְאִם־טָהֳרָה מִזּוֹבָהּ וְסָפְרָה לָהּ שִׁבְעַת יָמִים וְאַחַר תִּטְהָר

wəʔim-ṭɔh^{a}rɔ		*mizzoḇɔh*	
CJ+IF+be.clean-SC.3F.SG.		FROM+discharge+her	
wəsɔp̄ərɔ	*lɔh*	*šiḇʕaṯ*	*yɔmim*
CJ+count-SC.3F.SG.	TO+her	seven	days
wəʔaḥar		*tiṭhɔr*	
CJ+**THEN**		be.clean-PC.3F.SG.	

Once she is clean from her hemorrhaging, then she must wait seven days; afterwards she will be clean. (Lev 15:28)

(35) וָאֶשְׁלַח אֶת־מֹשֶׁה וְאֶת־אַהֲרֹן וָאֶגֹּף אֶת־מִצְרַיִם ... וְאַחַר הוֹצֵאתִי אֶתְכֶם

wɔʔɛšlaḥ	*ʔɛṯ-mošɛ*		*wəʔɛṯ-ʔah^{a}ron*
send-WCPC.1C.SG.	DOM+PN		CJ+DOM+PN
wɔʔɛggop̄	*ʔɛṯ-miṣrayim*		…
strike-WCPC.1C.SG.	DOM+Egyptians		…
wəʔaḥar	*hoṣeṯi*	*ʔɛṯəḵɛm*	
CJ+**THEN**	bring.out-SC.1C.SG.	DOM+you-M.PL.	

I sent Moses and Aaron and struck the Egyptians … afterwards I brought you out. (Josh 24:5)

3.1.3. Grammaticalization of ʔaḥar

Having categorized the primary functions of *ʔaḥar* in Biblical Hebrew, this section will examine the pathways of change for these grammatical functions. In addition to external typological comparison, the principal language-internal diagnostic, as mentioned previously (§1.7), requires the examination of semantic and functional shifts. Such shifts occur where ambiguous constructions provide multiple interpretations of a single construction—leading to the layering of polysemous linguistic material and extending the function into new contexts (Hopper and Traugott 2003).

3.1.3.1. Noun ('back') > PREP (BEHIND)

The semantics of the original nominal *ʔaḥar* denote the rear of the body and by metaphorical extension the locality which is at one's back when facing the sunrise (§3.1.2.1). Anatomic nouns, used first with animate objects and then with inanimate objects, commonly acquire LOCATIVE functions. Heine and Kuteva designate this cross-linguistic change as "BACK (body part) > BEHIND" (2004, 47). Semitic examples of this semantic shift are known with Hebrew *ʔaḥ^{a}re* 'back; behind' (§3.2), Mishnaic Hebrew *ʔ^{a}ḥore* 'back; behind' (Segal 1927, 141), Punic *ṣd* 'back; behind', Aramaic (*lʔ*)*ḥwry* 'behind', Arabic *xalfa* 'back; behind' (Esseesy 2010, 153–62), Argobba *gunž* 'back; behind', Geʕez *kawalā* 'hind part; behind' (Leslau 1956, 242–43), and Akkadian *kutallu* 'back; behind'*, warkī* 'rear; behind' (Brockelmann 1913, 421–24).

The nominal use of *ʔaḥar* in the construct state likely provided the structural context for its grammaticalization. No case, however, is attested in Biblical Hebrew that could provide an explicit context of this change into the locative function.[50]

3.1.3.2. PREP (BEHIND) > PREP/ADVZ (AFTER)

Instances of the secondary grammaticalization of a locative preposition yielding a temporal function are well-known in the world's languages and Semitic.[51] Spatial notions commonly grammaticalize to time markers (Haspelmath 1997, 54–63) as a "part of a more extended chain BACK > BEHIND > AFTER" (Heine and Kuteva 2004, 52–53, Svorou 1994, 158–59). In addition to several of the LOCATIVE examples noted above which also serve as temporal markers (Hebrew *ʔaḥ^{a}re* 'behind, after', Aramaic *lḥwr* 'behind, after', Amharic *h^{w}ala* 'behind, after', Akkadian *kutallu* 'behind, after'*, warkī* 'behind, after'), one should note the functional shift from spatial BEHIND to temporal AFTER even where the original nominal is not detectable. Examples of this type are observable with Arabic *baʕda* 'after', Tigre *ḥaqo* 'afterwards, after', *gərra* 'behind, after', and Akkadian *dāt* 'behind, after, then'.

Two examples of contexts in the Biblical Hebrew corpus where this change plausibly could have occurred are evidenced. In both example (36) and example (37), the verb *BWʔ* 'enter' is modified by a preposition phrase headed by *ʔaḥar*. These modifiers could be construed as spatial designations or temporal settings for the verbal action which combines movement through space and time. Such

[50] An example of the parallel change with *ʔaḥ^{a}re* is outlined in section §3.2.

[51] Haspelmath (1997) provides a cross-linguistic description of the semantics of anterior space and previous time. See, also, the examples provided by Svorou (1994, 123–201).

ambiguities in the function allowing for multiple interpretations provide environments in which new grammatical functions may be acquired and extended.

(36) וַיִּקַּח רֹצַח בְּיָדוֹ וַיָּבֹא אַחַר אִישׁ־יִשְׂרָאֵל אֶל־הַקֻּבָּה וַיִּדְקֹר אֶת־שְׁנֵיהֶם

wayyiqaḥ	*romaḥ*	*bəyɔḏo*
take-WCPC.3M.SG.	spear	IN+hand+his
wayyɔḇoʔ	***ʔaḥar***	*ʔiš-yiśrɔʔel*
enter-WCPC.3M.SG.	**BEHIND/AFTER**	man.of+PN
ʔɛl-haqqubbɔ	*wayyiḏqor*	*ʔɛṯ-šnehɛm*
INTO+the.tent	pierce-WCPC.3M.SG.	DOM+two.of+them

[Phinehas] grabbed a spear, entered the tent behind/after the Israelite man, and pierced both of them. (Num 25:7–8)

(37) וַיִּתְקָעֵהָ בְּבִטְנוֹ וַיָּבֹא גַם־הַנֶּצַב אַחַר הַלַּהַב

wayyiṯqɔʕɛhɔ	*bəḇiṭno*
strike-WCPC.3M.SG.+her[sword-F.]	IN+stomach+his
wayyɔḇoʔ	*gam-hanniṣṣɔḇ*
enter-WCPC.3M.SG.	also+the.hilt
ʔaḥar	*hallahaḇ*
BEHIND/AFTER	the.blade

Ehud thrust the sword into his stomach so that even the hilt went in behind/after the blade. (Judg 3:21–22)

The adverbializer function of *ʔaḥar* appears to be emergent from the temporal preposition since the relational semantics are nearly identical. As such, the syntactic expansion from *ʔaḥar*PREP + NP to *ʔaḥar*ADVZ + S may be understood as purely one of construction and not semantic change. The context for this development is not entirely unambiguous. Three settings may be posited for the latent origin of the adverbializer. First, this innovation could have arisen from the prepositional usage where the complement was a clause. Examples of this construction are not found with *ʔaḥar*, but they are commonly attested with several other independent and compound Hebrew prepositions—אֶל *ʔɛl* 'toward' (e.g., 1 Chr 15:12), כְּמוֹ *kəmo* 'like, as' (e.g., Isa 26:18), מִן *min* 'from' (e.g., Deut 33:11), עַד *ʕaḏ* 'until' (e.g., Gen 38:11), עַל *ʕal* 'on account of' (e.g., Ezra 3:11), בַּעֲבוּר *baʕᵃḇur* 'because of' (e.g., Mic 2:10), כְּעַל *kəʕal* 'according to' (e.g., Isa 59:18), מִנֶּגֶד *minnɛ̄ɛḏ* 'before' (e.g., Deut 32:52), and מִתַּחַת *mittaḥaṯ* 'below' (e.g., Isa 14:9). This could have arisen on analogy to the well-known Semitic construction found in example (38) where a construct-state noun is joined with a verbal clause (see examples at Lev 14:46 and 1 Sam 25:15).

(38) תְּחִלַּת דִּבֶּר־יְהוָה בְּהוֹשֵׁעַ

təḥillaṯ	*dibbɛr-YHWH*	*bəhošeᵃʕ*
beginning.of	speak-SC.3M.SG.+PN	WITH+PN

The beginning of (when) Yahweh spoke with Hosea. (Hos 1:2)

Second, the intraclausal relation could have developed from the coordination of the preposition and the embedding particle, *ʔaḥar*PREP + *ʔᵃšɛr*REL + S, as in example (39). The adverbializer, then, would represent a shortening to the *ʔaḥar*ADVZ + S construction.

(39) בֶּעָשׂוֹר לַחֹדֶשׁ בְּאַרְבַּע עֶשְׂרֵה שָׁנָה אַחַר אֲשֶׁר הֻכְּתָה הָעִיר בְּעֶצֶם הַיּוֹם הַזֶּה הָיְתָה עָלַי יַד־יְהוָה

bɛʕɔśor	*laḥoḏɛš*	*bəʔarbaʕ ʕɛśre*	*šɔnɔ*
ON+tenth	OF+the.month	IN+fourteenth	year
ʔaḥar	*ʔᵃšɛr*	*hukkəṯɔ*	*hɔʕir*
AFTER	REL	be.struck-SC.3F.SG	the.city
bəʕɛṣɛm		*hayyom*	*hazzɛ*
ON+same		the.day	this
hɔyəṯɔ		*ʕɔlay*	*yaḏ-YHWH*
be-SC.3F.SG.		UPON+me	hand.of-F.+PN

On the tenth day of the month, in the fourteenth year after the city was razed, on that very day the hand of Yahweh came upon me. (Ezek 40:1)

Third, this syntactic environment may have obtained where the temporal preposition was joined with an infinitive. This construction is detailed below with example (63). As several infinitive forms are homophonous with finite verbs, such constituents could have been reinterpreted as an adverbializer plus verb.

In light of these potential situations of change, the most parsimonious explanation would seem to be the first. As only the complement type is different, the syntax is known with other prepositions and nouns, and the semantic status is equivalent between the temporal preposition and the adverbializer function, this extension would most directly account for this construction.

3.1.3.3. PREP (AFTER/BEHIND) > PREP (COMITATIVE)

Some commentators have further differentiated a comitative function for *ʔaḥar*, a development not unknown in typological studies (Svorou 1994, 156–7). Following the earlier assertion of Scott (1949), Dahood claims that "in a number of texts *ʔaḥar* denotes 'with' rather than 'after'" (1962, 363–64). The premier exemplar is example (40) in which the COMITATIVE is assumed because, as stated by

Seow, "the notion of a cloud coming after the rain does not make sense and is without parallel" (1997, 347, 353–54).

(40) וְשָׁבוּ הֶעָבִים אַחַר הַגָּשֶׁם

wəšɔ̱bu	*hɛʕɔ̱bim*	***ʔaḥar***	*haggɔšɛm*
CJ+return-SC.3C.PL.	the.clouds	**AFTER/COM**	the.rain

The clouds return with/after the rain. (Qoh 12:2)

Dahood (1962) further asserts that the use of the Ugaritic cognate *åḫr* 'after' in example (41) parallels the comitative function word *ʕm* 'with' and confirms this observation.

(41) ***ʕmn*** *nkl ḫtny* // ***åḫr*** *nkl yrḫ ytrḫ*

"**With** Nikkal is my marriage, **with** Nikkal will the Moon enter into wedlock." (*CTA* 24:32–33 [Dahood's translation])

Pardee (1976, 252) suggests rather that Ugaritic *åḫr* 'after; afterwards' may be read as a temporal adverb "to connote 'immediately after'." He translates the passage: "Avec Nikkalu sera mon mariage! Ci-après Yariḫu s'acquiert Nikkalu pour épouse" (Pardee 2010, 26). In light of this option, it may be concluded that Dahood's suggestion is not required by this example and does not provide sure evidence of a shared usage in Ugaritic and Hebrew.

For this Biblical Hebrew usage, then, another possibility should be considered. That is, it may signal the early stages of the shift to 'with' accompanied by verbs of motion. Verbs meaning 'follow' (literally, 'come behind/after') are known to be the source of the comitative function in the world's languages (Heine and Kuteva 2004, 139–40). It is not altogether impossible to see a similar change in Biblical Hebrew from contexts with verbal motion as in example (42). In such cases, the notion of close accompaniment may give rise to the comitative interpretation. As such, example (40) may likewise provide a context for this change.

(42) אֲשֶׁר אֵינֶנּוּ יֹצֵא אַחֲרֵי שָׁאוּל וְאַחַר שְׁמוּאֵל כֹּה יֵעָשֶׂה לְבְקָרוֹ

ʔᵃšɛr	*ʔenɛnnu*	*yoṣeʔ*	***ʔaḥᵃre***	*šɔʔul*
REL	NOT.EXIST+he	come.out	**BEHIND/COM**	PN
wəʔaḥar	*šəmuʔel*	*ko*	*yeʕɔśɛ*	*liḇəqɔro*
CJ+**BEHIND/COM**	PN	thus	be.done-PC.3M.S.	TO+ox+his

Whoever does not go out after/with Saul and Samuel, thus it will be done to his oxen. (1 Sam 11:7)

3.1.3.4. PREP (BEHIND) > PREP (ACCORDANTIVE)

The change from spatial relations to the accordantive function is not well defined in typological studies; though Svorou's (1994, 158) BENEFACTIVE notion may overlap herewith. More commonly, such a usage evolves from the comparative and equative functions. Two cross-linguistic examples, nevertheless, may be given in support of this development (LOCATIVE > ACCORDANTIVE): the Latin preposition *sĕcundum* 'behind, after' developing into 'according to' and the Akkadian noun *pittu* 'side, region' to (*ina*) *pitti* 'according to'. No context of change is elicited internally from the Biblical Hebrew evidence.

3.1.3.5. PREP (AFTER) > CONJ ADV (THEN)

Prepositions often grammaticalize into subordinators in the world's languages (Hopper and Traugott 2003, 184–90). These clause linkers may develop from a wide range of expressions relaying time, place, and manner to mark hypotactic relationships. Svorou (1994, 160) recognizes this development in three languages where "POSTERIOR uses also had an AFTER use … [which] requires that situations be conceptualized as objects." In addition to these, English *after* has a similar trajectory of change from a spatial-temporal preposition to the subordinating conjunction.

Conjunctive adverbs function to show the relationship between independent clauses (e.g., English *then*, *thereafter*, *consequently*). These function words may arise from erstwhile anatomic nouns with original meanings 'back' or 'rear'. Heine and Kuteva (2004, 49) claim that this type of grammaticalization is part of a widespread change "whereby certain body parts … are first used as structural templates to express deictic location and then develop further into temporal markers." A similar change may be posited in Semitic for Geʕez *kawalā* 'rear, hind' and Akkadian *warkatu* 'backside, rear' as well as in Middle Egyptian with the temporal subordinator *r-sꜣ* 'after' which may be derived from *r-sꜣ* 'in the back of' (Gardiner 1957, 134, Loprieno 1995, 100).

Proposing this change from the original body-part term is problematic, however, in that no unmistakable Biblical Hebrew context of change is accessible. The sequential nature of the function word distinguishes it semantically from the normal use of the temporal preposition. Thus, it is best understood as having arisen from the commonly attested, clause-initial preposition phrase, אַחַר הַדְּבָרִים הָאֵלֶּה *ʔaḥar haddəḇ̲ɔrim hɔʔellɛ* 'after these things'.[52] The function of the phrase

52 See Gen 15:1; 22:1; 39:7; 40:1; 1 Kgs 17:17; 21:1; Ezra 7:1; Esth 2:1; 3:1. Similarly, the usage at 1 Kgs 13:33 provides evidence of the singular formation, אַחַר הַדָּבָר הַזֶּה *ʔaḥar haddəḇ̲ɔr hazzɛ* 'after this thing'. The simplified phrase, אַחַר זֶה *ʔaḥar zɛ* 'after this', is found only once (2 Chr 32:9).

is equivalent to a conjunctive adverb. It marks a sequential link in the narrative between what precedes and the following perfective verb. This phrase may head the clause as in example (43). Elsewhere, it may be preceded by a narrative frame (44) or the clause linker *waw* (45).

(43) אַחַר הַדְּבָרִים הָאֵלֶּה הָיָה דְבַר־יְהוָה אֶל־אַבְרָם בַּמַּחֲזֶה

ʔaḥar	*haddəḇɔrim*		*hɔʔellɛ*
AFTER	the.things		these
hɔyɔ	*ḏəḇar-YHWH*	*ʔɛl-ʔaḇrɔm*	*bammaḥ^{a}zɛ*
be-SC.3M.SG.	word.of+PN	TO+PN	IN+the.vision

After these things, Yahweh spoke to Abram in a vision. (Gen 15:1)

(44) וַיְהִי אַחַר הַדְּבָרִים הָאֵלֶּה וְהָאֱלֹהִים נִסָּה אֶת־אַבְרָהָם

wayəhi	***ʔaḥar***	*haddəḇɔrim*	*hɔʔellɛ*
be-WCPC.3M.SG.	**AFTER**	the.things	these
wəhɔʔ^{ɛ}lohim	*nissɔ*		*ʔɛṯ-ʔaḇrɔhɔm*
CJ+the.god	test+SC.3M.SG.		DOM+PN

After these things, God tested Abraham. (Gen 22:1)

(45) וְאַחַר הַדְּבָרִים הָאֵלֶּה בְּמַלְכוּת אַרְתַּחְשַׁסְתְּא ... הוּא עֶזְרָא עָלָה מִבָּבֶל

*wə**ʔaḥar***	*haddəḇɔrim*	*hɔʔellɛ*		*bəmaləḵuṯ*
CJ+**AFTER**	the.things	these		IN+reign.of
ʔartaḥšastʔ ...	*huʔ*	*ʕɛzrɔʔ*	*ʕɔlɔ*	*mibbɔḇɛl*
PN …	that	PN	leave-SC.3M.SG.	FROM+GN

After these things, in the reign of Artaxerxes … that Ezra left Babylon. (Ezra 7:1)

3.1.4. Mapping the Grammaticalization Trajectories of ʔaḥar

In this section, the multifunctional usages of *ʔaḥar* are mapped sequentially according to relative time. Based on the comparative and semantic data, it is suggested that the noun first developed into the locative preposition (BEHIND) which further was used as the ACCORDANTIVE, COMITATIVE and TEMPORAL/ADVERBIALIZER (AFTER). The CONJUNCTIVE ADVERB (THEN) likely developed from the temporal function of the preposition phrase. These shifts are represented in figure 3.1 below.

Figure 3.1. Functional Developments of *ʔaḥar*

Noun ('back') > PREP (BEHIND) > PREP/ADVZ (AFTER)
> PREP (ACCRD)
> PREP (COM)
PP (AFTER + NP) > CONJUNCTIVE ADVERB (THEN)

Using the Overlap Model (§1.3.6), the semantic layers of *ʔaḥar* may be schematized as in figure 3.2. Each of the changes is presented in successive stages. Any semantic loss results in the removal of that meaning at the appropriate stage. The initial stage (I) includes the anatomic noun and its metaphorical extensions, such as the cardinal direction. The noun is extended to the locative function at stage II and further by stage III into accordantive, comitative, and temporal contexts. The relative ordering of these latter expansions is not clear from the current data, so both are represented together in stage III. The conjunctive adverb may have developed from the TEMPORAL (AFTER) at stage IV or arisen from the original Noun (‘back’) at stage II. The final stage (IV) represents the Biblical Hebrew situation where all four semantic relations and the originating noun are evidenced.

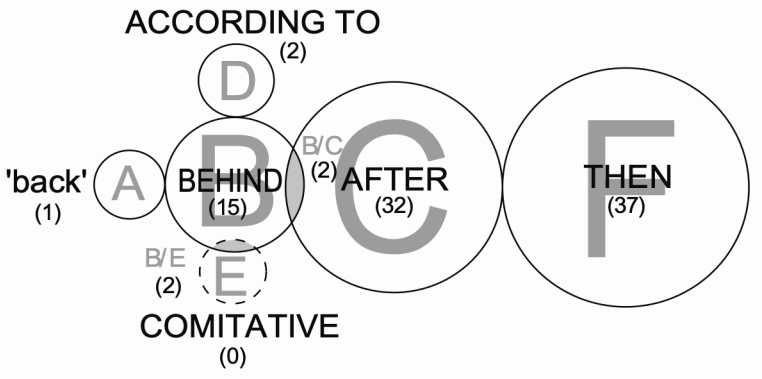
Figure 3.2. Overlap Model for *ʔaḥar*

Stage:	I	II	III	IV
Noun	‘back’	‘back’	‘back’	(‘back’)
PREP		BEHIND	BEHIND	BEHIND
PREP/ADVZ			AFTER	AFTER
PREP			ACCRD	ACCRD
PREP			(COM)	(COM)
CJ ADV		(THEN)	(THEN)	THEN

A third way to represent the evolution and synchrony of *ʔaḥar* is to graph the semantic functions on a single chart.

Figure 3.3 represents each use of *ʔaḥar* by a circle with the number of Biblical Hebrew instances in parentheses.

Figure 3.3. Semantic Map of *ʔaḥar*



The diameter of each circle approximates the number of tokens: the larger the circle the greater the number of examples, and the smaller the circle the fewer the number of examples. Ambiguous contexts are included in the set intersection (e.g., the set A ∩ B is labeled "A/B"; B ∩ C is labeled "B/C"; etc.). Touching circles indicate no Biblical Hebrew ambiguity is identified, but comparative data are suggestive of a connection. If the circle is dashed, the usage is reconstructed and not attested in Biblical Hebrew. Nouns are signified by single quotation marks, and functions are indicated by words with all capitalized letters. Each usage is given a representative letter for reference: A ('back'), B (BEHIND), C (AFTER), et cetera. These do not necessarily represent ordered expansion. But diachronic developments are ordered from earlier to later in time with the progression from left to right.

3.2. אַחֲרֵי ʔaḥᵃre

3.2.1. Morphosyntax of ʔaḥᵃre

As noted above (§3.1.1), אַחֲרֵי *ʔaḥᵃre* is likely the long biform of an original **qattal* nominal pattern with the morpheme **-ay*. Alternatively, the morphological form could be accounted for as a **qatl* base. The original phonological environment of an unaccented, non-final syllable closing with a "guttural" consonant—*ʕ, *ʔ, *ḫ, or *h (sometimes *ḥ)—commonly changes to two open syllables by adding a secondary hurried, or ultrashort, vowel after the second consonant (ø > v̆₁ / v₁G__Cv), as in נַחֲלָה *naḥᵃlɔ* 'wadi' from **naḫl* with locative *he* (Bauer and Leander 1922, 210–11). Even though both reconstructed forms, **ʔaḫḫaray* and **ʔaḫray*, are equally possible morphologically, the former is preferred in the present study because of the existence of and substantial semantic overlap with the short biform *ʔaḥar* (< **ʔaḫḫar*).

The origin of the suffix, on the other hand, is both simpler and more problematic. The form is clearly **-ay*; however, there are at least three potential origins for such an affix. It could have arisen (1) from a Proto-Semitic adverbial suffix, (2) from the original dual/plural nominal suffix, or (3) on analogy to the biforms of the Group I bi-syllabic prepositions. Deriving these forms from a possible fourth **-ay* suffix—the archaic feminine ending (Tropper 2000, 282–4)—is speculative, at best, as only a handful of Biblical Hebrew attestations exist (Böttcher 1866, 415), and these are primarily extant in proper nouns (Layton 1990, 241–5).

Each possibility is reviewed below:

First, the Proto-Semitic **-ay* gentilic morpheme is evidenced with various functions in Biblical Hebrew (Kienast 2001). In addition to the independent prepositions—עָדֵי *ʕᵃde*, עָלֵי *ʕᵃle*, אֶלֵי *ʔᵉle*, and once קַדְמֵי *qadme* 'before' (Prov 8:23)—the affix is found with some suffixed prepositions, such as תַּחְתֵּיהֶם *taḥtehɛm* (< **taḥt* + *-ay* + *-humŭ*), adverbs, אָזַי *ʔᵃzay* (biform of אַז *ʔaz*) 'then', interrogative

adverbs, מָתַי *mɔṯay* ‘when?’ and אַי *ʔe* ‘where?’, and exclamations, אַחֲלַי *ʔaḥ^{a}lay* ‘would that!’, אַלְלַי *ʔallay* ‘woe!’, and אוּלַי *ʔulay* ‘may it be!’. Also, one finds evidence of similar expanding **-ay* suffixes with a wide range of prepositions in Semitic (Sabaic *ʕly* ‘on, upon’, Akkadian *adī* ‘until’, Arabic *ʔilā/ʔilay-* ‘to’, etc.) and other Northwest Semitic languages: Aramaic *ʔzy* (later *ʔdyn*) ‘then’, *ʔḥry* ‘after’, *nmy* ‘also’, *q(w)my* ‘before’; Syriac *kay* ‘indeed’, *blay* ‘not’; and Ugaritic *ỉky* (< **ʔaykaya*) ‘how’, *ly* (< **laya*) ‘to’. This morpheme seems to provide a single likely origin of not only the Hebrew suffix of *ʔaḥ^{a}re* but these other Semitic examples as well. The question remains, however, whether the suffix had a productive function in proto-Hebrew or was merely a vestige of a Proto-Semitic morpheme lexicalized with certain Biblical Hebrew forms.

Second, the original anatomic noun may well have been conceived of as a plurality or even a duality as found with several dual body parts (*viz.* עַיִן *ʕayin* ‘eye’ ~ עֵינַיִם *ʕenayim* ‘two eyes’; יָד *yɔd* ‘hand’ ~ יָדַיִם *yɔdayim* ‘two hands’; etc.). The frozen form would preserve the construct ending (*e* < **-ay*). Driver (1937, 346, 1933, 377–8) suggests that the original form is indeed dual, referring to “the two sides … of the buttocks.” Others claimed that it is a plural noun probably meaning *hintere Gegenden* (Gesenius and Kautzsch 1896, §103o). Although this appears to be a fitting solution, it is not without difficulty. Biblical Hebrew examples of such biforms are limited to anatomically dual body parts (i.e., ‘buttocks’, cf. שֹׁת, מִפְשָׂעָה, לְחִי, and maybe שׁוּל). While ‘back’ could be euphemistic for ‘rear; back-side’, the dual seems unwarranted etymologically for the more general body part. And if the primary originating semantics were ‘buttocks’, what would be the reason to have a singular and dual form? In addition to these semantic problems, the morpheme preservation would not account similarly for the Biblical Hebrew Group I long forms (עָדֵי *ʕ^{a}ḏe*, עֶלֵי *ʕ^{a}le*, and אֶלֵי *ʔ^{a}le*) or the presence of the */e/* linking vowel on the prepositions in Geʕez. These would have had to either develop independently or as an analogy to this form.

Third, following the suggestion of Barth (1888, 356), Bauer and Leander (1922, 645) propose that the suffix form אַחֲרֵי *ʔaḥ^{a}re* developed from the singular noun (**ʔaḥḥar*) on analogy to its antonym לִפְנֵי *lipnē* ‘before’. Thus, two antonymic pairs—עַל *ʕal* ‘above’ parallel with תַּחַת *taḥaṯ* ‘below’ and *lipnē* ‘before’ with *ʔaḥ^{a}re* ‘behind’—expanded the pronominal forms, עֲלֵיהֶם *ʕ^{a}lehɛm* and תַּחְתֵּיהֶם *taḥtehɛm* alongside לִפְנֵיהֶם *lipnehɛm* and אַחֲרֵיהֶם *ʔaḥ^{a}rehɛm*.[53] This

53 The short and long Hebrew forms would thus be understood as remnants of original Proto-Semitic biforms (e.g., **ʕal*/**ʕalay*, **ʕad*/**ʕaday*, **ʔil*/**ʔilay*). In most of the daughter languages, either the short (e.g., Aramaic *ʕd* ‘to, unto’) or long (e.g., Arabic *ʕalā* ‘upon’) forms would have been generalized as isomorphic, particularly for the grammaticalized prepositions. Some languages, exemplified by the Geʕez dyad *laʕla* and *laʕleka*, retained both Proto-Semitic biforms.

solution is quite elegant, not only accounting for the linking vowel *-e-* (< *-*ay*) on these forms but also providing an explanation for the absence of the suffix on *taḥaṯ* (*ʕᵃlehɛm* : *taḥtehɛm* :: *ʕal* : X = *taḥaṯ*) and its presence with *ʔaḥᵃre* (*lipnehɛm* : *ʔaḥᵃrehɛm* :: *lipne* : X = *ʔaḥᵃre*). All that being said, this hypothesis remains speculative, leaving unaccounted the independent long form *ʕᵃle* and the preservation or the shortening of *ʔaḥar*.

3.2.2. Usage of ʔaḥᵃre

The following subsections describe the usages of *ʔaḥᵃre* in Biblical Hebrew. In addition to the original nominal meaning 'back', four grammatical functions are differentiated—LOCATIVE (BEHIND), TEMPORAL/ADVERBIALIZER (AFTER), CAUSE (SINCE), and PARTICLE.

3.2.3. Noun ('back')

The Hebrew Bible evidences four usages of the noun *ʔaḥᵃre*.[54] The noun *ʔaḥᵃre* refers to the rear part of an inanimate object in example (46a), and a metonymic usage may be assessed for the body part in example (46b).

(46) a. וַיַּכֵּהוּ אַבְנֵר בְּאַחֲרֵי הַחֲנִית אֶל־הַחֹמֶשׁ

wayyakkehu		*ʔaḇner*
strike-WCPC.3M.SG.+him		PN
bəʔaḥᵃre	*haḥᵃniṯ*	*ʔɛl-haḥomɛš*
INSTR+**back.of**	the.spear-F.	TOWARD+the.stomach

b. וַתֵּצֵא הַחֲנִית מֵאַחֲרָיו

watteṣeʔ	*haḥᵃniṯ*	***meʔaḥᵃrɔw***
come.out-WCPC.3F.SG.	the.spear-F.	SOURCE+**back**+his

Abner struck him with the hilt of the spear in his stomach, and the spear came out of his back. (2 Sam 2:23)

In these instances, the author uses a wordplay, constructed on what was probably an archaic meaning of *ʔaḥᵃre* with the phrase בְּאַחֲרֵי הַחֲנִית *bəʔaḥᵃre haḥᵃniṯ* '[he struck him] with the *back* of the spear' placed in parallel with the paraprosdokian phrase הַחֲנִית מֵאַחֲרָיו *haḥᵃniṯ meʔaḥᵃrɔw* 'the spear [came out] from his *back*'. This meaning of the noun *ʔaḥᵃre* with the preposition *min-* is unique. Elsewhere, *meʔaḥᵃre* designates the compound relation SOURCE +

54 Deut 11:30; Judg 18:12; 2 Sam 2:23 (2x).

BEHIND.[55] However, this instance appears to express the specific anatomic location from which the spear emerged and not the more general spatial relation of the BACK-REGION.

Twice it is used in reference to the cardinal direction ‘west’, which is the locality at one’s back when facing east as evidenced in example (47) and example (48).

(47) הִנֵּה אַחֲרֵי קִרְיַת יְעָרִים

hinne	***ʔaḥᵃre***	*qiryaṯ yəʕɔrim*
EXIST	**west.of**	Kiriath-jearim

It was west of Kiriath-jearim. (Judg 18:12)

(48) הֲלֹא־הֵמָּה בְּעֵבֶר הַיַּרְדֵּן אַחֲרֵי דֶּרֶךְ מְבוֹא הַשָּׁמֶשׁ

hᵃloʔ-hemmɔ	*bəʕeḇer*		*hayyarden*
Q+NEG+they-M.	ON+opposite.side.of		the.Jordan
ʔaḥᵃre	*dɛrɛḵ*	*məḇoʔ*	*haššɛmɛš*
west.of	road	setting.of	the.sun

Are they not in the region beyond the Jordan River, west of the road, at the setting of the sun? (Deut 11:30)

Since the landmarks in these cases are objects without clear front-back orientation, the referent is the direction ‘west’ as a location and not a spatial metaphor. Excepting these contexts, the more than five hundred other instances of *ʔaḥᵃre* in Biblical Hebrew are function words.

3.2.3.1. PREP (BEHIND)

The locative function denoting BACK-REGION (BEHIND) is identified in 275 contexts.[56] This functional meaning is used as a verbal modifier in example (49)

55 Gen 19:26; Exod 14:19 (2x), 43; 32:15; Deut 7:4; 23:15; 29:21; Josh 8:2, 4, 14; 22:16, 18, 23, 29; Ruth 1:16; 1 Sam 6:7; 12:20; 14:46; 15:11; 24:2; 2 Sam 2:19, 21, 22, 23, 26, 27, 30; 3:28; 7:8; 11:15; 15:1; 20:2; 1 Kgs 9:6; 10:19; 19:21; 22:33; 2 Kgs 10:29; 17:21; 18:6; 1 Chr 17:7; 2 Chr 13:13 (2x); 18:32; 25:27; 32:23; 34:33; Neh 4:7; Job 34:27; Ps 78:71; Qoh 10:14; Isa 30:21; 59:13; Jer 3:19; 9:21; 32:40; Ezek 14:7, 11; Hos 1:2; Amos 7:15; Zeph 1:6.

56 Gen 18:10; 19:6, 17; 24:5, 8, 39, 61; 31:23, 36; 32:20, 21 (2x); 35:5; 44:4; Exod 14:4, 8, 9, 10, 17, 23, 28; 15:20; 23:2 (2x); Lev 26:33; Num 3:23; 15:39 (2x); 16:25; Deut 4:3; 6:14; 8:19; 11:4, 28; 12:30; 13:3, 5; 19:6; 25:18; 28:14; Josh 2:5, 7 (3x); 3:3; 6:8, 9, 13; 8:6, 16 (2x), 17 (2x), 20; 10:19; 20:5; 24:6; Judg 1:6; 2:12, 19; 3:28 (2x); 4:14, 16; 5:14; 6:34, 35; 7:23; 8:5, 12; 9:3, 4; 9:49; 13:11; 19:3; 20:40, 45; Ruth 1:15; 2:3, 7; 3:10; 1 Sam 6:12; 7:2; 8:3; 11:5, 7; 12:21; 13:4, 7; 14:12, 13 (2x), 22, 36, 37; 15:31; 17:13, 14, 35, 53; 20:37, 38; 21:10; 22:20; 23:25, 28; 24:9 (2x), 15 (4x); 25:13, 19; 25:42; 26:3, 18; 30:8, 21;

where the LM is another anatomic term and as the predicate of a verbless clause in example (50) with the directional adverb. In these instances, the use with the anatomic and direction terms preclude the nominal usage in favor of the functional relation.

(49) וַיַּשְׁלִכוּ אֶת־תּוֹרָתְךָ אַחֲרֵי גַּוָּם

wayyašliku	*ʔeṯ-torɔṯəḵɔ*	***ʔaḥ^{a}re***	*gawwɔm*
cast-WCPC.3M.PL.	DOM+law+your	**BEHIND**	back+their

They have cast your Torah behind their back.[57] (Neh 9:26)

(50) מִשְׁפְּחֹת הַגֵּרְשֻׁנִּי אַחֲרֵי הַמִּשְׁכָּן יַחֲנוּ יָמָּה

mišpəḥoṯ	*haggeršunni*	***ʔaḥ^{a}re***	*hammiškɔn*
clans.of	the.Gershonites	**BEHIND**	the.tabernacle
yaḥ^{a}nu		*yɔmmɔ*	
camp-PC.3M.PL.		westward	

The clans of the Gershonites were to camp behind the tabernacle on the west. (Num 3:23)

3.2.3.2. PREP/ADVZ (AFTER)

The second most frequent usage of *ʔaḥ^{a}re* (231 occurrences) is the temporal function AFTER.[58] In example (51), it is exemplified as a verbal modifier, designating the timeframe of Moab's rebellion.

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2 Sam 1:7; 2:10, 19, 20, 24, 25, 28; 3:16, 26, 31; 11:8; 13:17, 18, 34; 15:13; 17:1, 9; 18:16, 22; 20:2, 6, 7 (2x), 10, 11, 13 (2x), 14; 23:10; 1 Kgs 1:7, 14, 35, 40; 2:28 (2x); 11:2, 4, 5 (2x), 10; 12:20; 13:14; 14:8, 9, 10; 16:3 (2x), 21 (2x), 22 (2x); 18:18, 21 (2x); 19:20, 21; 20:19; 21:21, 26; 2 Kgs 2:24; 4:30; 5:20, 21 (2x); 6:19, 32; 7:14, 15; 9:25, 27; 11:15; 14:19; 17:15 (2x); 19:21; 1 Chr 10:2 (2x); 14:14; 17:7; 2 Chr 11:16; 13:19; 23:14; 25:27; 26:17; 34:31; Neh 4:10, 17; 9:26; 12:32, 38; Job 21:33; 39:10; 41:24; Pss 45:15; 49:14, 18; 50:17; 63:9; 94:15; Prov 7:22; 28:23; Qoh 2:12, 18; Song 1:4; Isa 37:22; 38:17; 43:10; 45:14; Jer 2:2, 5, 23, 25; 3:17; 7:6, 9; 8:2; 9:13 (2x), 15; 11:10; 12:6; 13:10; 16:11, 12; 17:16; 18:12; 25:6; 29:18; 35:15; 39:5; 42:16; 48:2; 49:37; 52:8; Ezek 3:12; 5:2, 12; 9:5; 10:11; 12:14; 20:16, 24; 23:35; 29:16; 33:31; 44:10; Hos 2:7, 15; 5:8, 11; 11:10; Joel 2:3 (2x); Amos 2:4; Zech 1:8; 7:14.

57 This idiom, "to cast something or someone behind one's back," refers to the refusal to take notice of that entity (1 Kgs 14:9; Isa 38:17; Ezek 23:35).

58 Gen 5:4, 7, 10, 13, 16, 19, 22, 26, 30; 6:4; 9:9; 11:11, 13, 15, 17, 19, 21, 23, 25; 13:14; 14:17; 15:14; 17:7 (2x), 8, 9, 10, 19; 18:12, 19; 22:20; 23:19; 24:36, 67; 25:11, 26; 26:18; 35:12; 41:6, 23, 30, 31; 45:15; 48:1, 4, 6; 50:14; Exod 3:20; 7:25; 10:14; 11:1, 8; 28:43; 29:29; 34:32; Lev 13:7, 35; 14:43 (2x), 48; 16:1, 26, 28; 25:46; Num 4:15; 7:88; 8:15, 22; 9:17; 25:13, 19; 30:16; 35:28; Deut 1:4, 8; 4:37, 40; 10:15; 12:25, 28, 30; 24:4, 20, 21;

(51) וַיִּפְשַׁע מוֹאָב בְּיִשְׂרָאֵל אַחֲרֵי מוֹת אַחְאָב

wayyiP̄šaʕ	*moʔcḫ*	*bəyiśrcʔel*
rebel-WCPC.3M.SG.	PN	AGAINST+GN
ʔaḥᵃre	*moṯ*	*ʔaḥʔcḫ*
AFTER	death.of	PN

Moab rebelled against Israel after the death of Ahab. (2 Kgs 1:1)

In five instances, *ʔaḥᵃre* functions as a temporal modifier heading a finite verbal clause.[59] Example (52) demonstrates an adverbial clause headed by this adverbializer usage in the preverbal position. The modifier is postverbal in example (53).

(52) אַחֲרֵי נִמְכַּר גְּאֻלָּה תִּהְיֶה־לּוֹ

ʔaḥᵃre	*nimkar*	*gəʔullɔ*	*tihyɛ-lo*
AFTER	be.sold-SC.3M.SG.	manumission-F.	be-PC.3F.SG.+TO+him

After he is sold, he may be manumitted. (Lev 25:48)

(53) וְרָאָה הַכֹּהֵן אַחֲרֵי הֻכַּבֵּס אֶת־הַנֶּגַע

wərcʔc	*hakkohen*	
examine-WCSC.3M.SG.	the.priest	
ʔaḥᵃre	*hukkabbes*	*ʔɛṯ-hannɛ̄gaʕ*
AFTER	be.washed-SC.3M.SG.	DOM+the.infestation

The priest shall inspect the infected area after it has been washed. (Lev 13:55)

3.2.3.3. PREP (CAUSE)

A plausible third grammatical function of *ʔaḥᵃre* expresses CAUSE. Clines (1993–2011, 1.199) indicates that the meaning "because" is used as a "conj. introducing [the] verb in [the] causal clause, ידע." The most straightforward instance is found in example (54), where the *ʔaḥᵃre* phrase is clause-initial. The adjunct

31:27, 29; Josh 1:1; 7:8; 8:34; 9:16; 10:14, 26; 22:27; 23:1; 24:20, 29, 31; Judg 1:1; 2:7, 10; 3:31; 10:1, 3; 12:8, 11, 13; 16:4; 19:23; Ruth 2:11; 4:4; 1 Sam 1:9 (2x); 9:13; 24:6, 9, 22; 2 Sam 1:1; 2:1; 5:13; 7:12; 8:1; 10:1; 13:1; 17:21; 21:1, 14, 18; 23:9, 11; 24:10; 1 Kgs 1:6, 13, 17, 20, 24, 27, 30; 3:12; 9:21; 13:23 (2x), 31; 15:4; 2 Kgs 1:1; 6:24; 14:17, 22; 18:5; 23:25; 1 Chr 11:12; 17:11; 18:1; 19:1; 27:7, 34; 28:8; 2 Chr 1:12; 2:16; 8:8; 11:20; 21:18; 22:4; 24:17; 25:14, 25; 26:2; 32:1; 33:14; 35:20; Ezra 9:10, 13; Neh 3:16, 17, 18, 20, 21, 22, 23 (2x), 24, 25, 27, 29 (2x), 30 (3x), 31 (2x); 11:8; Job 3:1; 21:21; 29:22; 37:4; 42:16; Prov 20:7; Qoh 3:22; 6:12; 7:14; 9:3; Isa 1:26; Jer 3:7; 12:15; 13:27; 16:16; 21:7; 24:1; 25:26; 28:12; 29:2; 31:19 (2x), 33; 32:16, 18, 39; 34:8, 11; 36:27; 46:26; 49:6; 50:21; 51:46; Ezek 16:23; 44:26; 46:12; Dan 8:1; 9:26; Joel 2:2, 14; 3:1.

59 Lev 13:55, 56; 25:48; 1 Sam 5:9; Jer 2:8.

phrase, אַחֲרֵי הוֹדִיעַ אֱלֹהִים אוֹתְךָ אֶת־כָּל־זֹאת *ʔaḥ^{a}re hoḏi^{a}ʕ ʔ^{e}lohim ʔoṯəḵɔ ʔɛṯ-kɔl-zoṯ*, 'since God revealed to you all of this', reflects the grounds of the following statement, אֵין־נָבוֹן וְחָכָם כָּמוֹךָ *ʔen-nɔḇon wəḥɔḵɔm kɔmoḵɔ* 'there is none as perceptive and wise as you'.

(54) אַחֲרֵי הוֹדִיעַ אֱלֹהִים אוֹתְךָ אֶת־כָּל־זֹאת אֵין־נָבוֹן וְחָכָם כָּמוֹךָ

ʔaḥ^{a}re	*hoḏi^{a}ʕ*	*ʔ^{e}lohim*	*ʔoṯəḵɔ*	*ʔɛṯ-kɔl-zoṯ*
CAUS	reveal-INF	God	DOM+you	DOM+all.of+this
ʔen-nɔḇon		*wəḥɔḵɔm*		*kɔmoḵɔ*
NOT.EXIST+discerning		CJ+wisdom		COMPARE+you

Since God revealed to you all of this, there is none as perceptive and wise as you. (Gen 41:39)

3.2.3.4. Prepositional-Verb Particles

Twenty-five examples of *ʔaḥ^{a}re* may be categorized separately as combining with certain verbs to yield specialized multi-word verb constructions and semantics. The designation "multi-word verb" encompasses prepositional verbs (e.g., English *think about*), phrasal verbs (e.g., *put down*), phrasal-prepositional verbs (e.g., *look up to*), Verb-adjective (e.g., *fall short of*), Verb-nominal (e.g., *catch sight of*), and verb-verb combinations (e.g., *let go*). A multi-word verb is broadly defined as a "unit which behaves to some extent either lexically or syntactically as a single verb" (Quirk et al. 1985, 1150). More specifically, it consists of (1) "a group of two or more words, regardless of whether they for an uninterrupted sequence" and (2) a single "verbal" meaning or "process" (Claridge 2000, 28). While certain syntactic criteria may be used to designate the close relationship between the verb and particle—preposition stranding, question transformation, strict sequencing, etc. (Vestergaard 1977)—many of these criteria are not viable for Biblical Hebrew. Ultimately, multi-word verbs are identified by the production of new semantic meanings, which are not detectable from the sum of the parts.

Two multi-word Hebrew verbal idioms have socioreligious meanings—*ML*ʔ + *ʔaḥ^{a}re* 'to follow faithfully after' and *ZNH* + *ʔaḥ^{a}re* 'to be unfaithful with'. The semantics of the *piel* verb *ML*ʔ 'to fill (transitive)' when combined with the function word *ʔaḥ^{a}re* denote faithful obedience to the complement. In each of the eight examples of this verbal idiom, the verb is always followed immediately by the particle with a deity as the complement. This string is seen in eight instances, including example (55).[60]

60 Num 14:24; 32:11, 12; Deut 1:36; Josh 14:8, 9, 14; 1 Kgs 11:6.

(55) מִלֵּא אַחֲרֵי יְהוָה

milleʔ	***ʔaḥ^{a}re***	*YHWH*
fill-SC.3M.SG.	**PTCL**	PN

He was faithful to Yahweh. (Deut 1:36)

A second example of a Hebrew prepositional verb serves as the semantic opposite of *MLʔ ʔaḥ^{a}re*. Hebrew *ZNH ʔaḥ^{a}re* (literally 'to fornicate with') denotes the act of participating in prostitution or, metaphorically, unfaithfulness with a divinity other than Yahweh. In all seventeen occurrences, the *qal* stem of the verb *ZNH* exhibits a complement structure with *ʔaḥ^{a}re*.[61] In example (56), idolatry is cast as fornication with foreign deities.

(56) וַיִּזְנוּ אַחֲרֵי הַבְּעָלִים

wayyiznu	***ʔaḥ^{a}re***	*habbəʕɔlim*
prostitute-WCPC.3M.PL.	**PTCL**	the.baals

They fornicated with the baals. (Judg 8:33)

A usage in example (57) could be taken as the lone example of *ZNH* taking an object complement without *ʔaḥ^{a}re*. However, a better explanation is that the verb is intransitive and the constituent in question is serving as an adjunct, that is, the adverbial phrase designating the manner of the prostitution, רֵעִים רַבִּים *reʕim rabbim* 'with many lovers', and not the verbal complement.

(57) וְאַתְּ זָנִית רֵעִים רַבִּים

wəʔat	*zɔni<u>t</u>*	*reʕim*	*rabbim*
CJ+you-F.	prostitute-SC.2F.SG.	companions-M.	many-M.PL.

You have prostituted yourself with many lovers. (Jer 3:1)

The passive clause in example (58) demonstrates the status of this multi-word construction as a single unit and not merely as a verb modified by a preposition phrase. The clause-initial *ʔaḥ^{a}re* marks the patient of the deagentified, or the so-called impersonal-passive, verb.

(58) וְאַחֲרַיִךְ לֹא זוּנָּה

*wə**ʔaḥ^{a}rayi<u>k</u>***	*loʔ*	*zunnɔ*
CJ+**PTCL**+you-F.	NEG	be.prostituted-SC.3M.SG.

You were not solicited for sex. (Ezek 16:34)

61 Exod 34:15, 16 (2x); Lev 17:7; 20:5 (2x), 6; Num 15:39; Deut 31:16; Judg 2:17; 8:27, 33; 1 Chr 5:25; Ezek 6:9; 20:30; 23:30; 16:34.

As with similar constructions in Arabic, the impersonal passive does not take an expressed subject, since the close connection between the verb and particle prevents the promotion of the prepositional argument to subject (Saad 1982). Biblical Hebrew passive verbs may designate their patients by a complement marker as found in Exod 10:8 (וַיּוּשַׁב אֶת־מֹשֶׁה וְאֶת־אַהֲרֹן *wayyušaḇ ʔeṯ-mošɛ wəʔeṯ-ʔahᵃron* 'Moses and Aaron were brought back') and Deut 12:22 (יֵאָכֵל אֶת־הַצְּבִי וְאֶת־הָאַיָּל *yeʔɔḵel ʔeṯ-haṣṣəḇi wəʔeṯ-hɔʔayyɔl* 'the gazelle and the deer are eaten'). In these instances, the object marker *ʔeṯ* functions as the marker of the logical subject of the passive verb (Joüon and Muraoka 1991, §128), even though it is not promoted to the nominative position.

3.2.4. Grammaticalization of ʔaḥᵃre

Based on typological comparisons, language-specific usage patterns, and internal diachronic evidence, a preliminary trajectory of change for *ʔaḥᵃre* is outlined as Noun ('back') > LOCATIVE (BEHIND) > TEMPORAL (AFTER) > CAUSE (SINCE). Secondary grammaticalization of the LOCATIVE is suggested to be the origin of the prepositional-verb particles.

3.2.4.1. Noun ('back') > PREP (BEHIND)

The primary grammaticalization of *ʔaḥᵃre* is from a noun referring to the body part 'back' to a prepositional meaning BEHIND. The lexical meaning acquires a locative function, characterized as BACK-REGION. Heine and Kuteva (2004, 47–48) claim that such a shift is a very common grammaticalization trajectory in other languages and represent it as BACK > LOCATIVE. Multiple Semitic examples are given in the previous section (§3.1.3.1) with the parallel change of *ʔaḥar*.

As observed previously, grammaticalization occurs in contexts which may be interpreted in more than one way. Contexts with ambiguous meanings allow for the reinterpreting of one grammatical construction as another. A case of this may be seen in example (59), where *ʔaḥᵃre* could be a noun or a preposition: אַחֲרֵי מֹשֶׁה *ʔaḥᵃre mošɛ* may be construed as the NP 'the back of Moses' or as the PP 'behind Moses'.[62]

62 Also see Gen 16:13; 32:19.

(59) וְהִבִּיטוּ אַחֲרֵי מֹשֶׁה עַד־בֹּאוֹ הָאֹהֱלָה

wəhibbiṭu	***ʔaḥ^{a}re***	*mošɛ*
CJ+look-SC.3C.PL.	**back.of/BEHIND**	PN
ʕaḏ-boʔo	*hɔʔoh^{e}lɔ*	
UNTIL+enter-INF+him	the.tent	

They watched (the back of/behind) Moses until he entered the tent. (Exod 33:8)

3.2.4.2. PREP (BEHIND) > PREP/ADVZ (AFTER)

Secondarily, the locative function was extended to temporal contexts. This progression is noted by Heine and Kuteva (2004, 47) as "a more general process whereby body parts are grammaticalized to spatial concepts which again are used to also express temporal concepts." This process is supported by constructions in Biblical Hebrew where the locative and temporal could be confused providing the context for this secondary grammaticalization. Example (60) from Ruth demonstrates a situation where *ʔaḥ^{a}re* may be construed as a locative or a temporal. Was Ruth being told the location *where* she was to 'follow behind the women', or the occasion *when* she should 'go after the harvesters'? Constructions denoting movement or ordered progression could lead speakers to infer that the preposition marks not merely locative but temporal notions (Svorou 1994, 158–59). Six examples where there is ambiguity between the LOCATIVE and TEMPORAL functions are identified in Biblical Hebrew.[63]

(60) עֵינַיִךְ בַּשָּׂדֶה אֲשֶׁר־יִקְצֹרוּן וְהָלַכְתְּ אַחֲרֵיהֶן

ʕenayiḵ	*baśśɔdɛ*	*ʔ^{a}šɛr-yiqṣorun*
eyes+your	ON+the.field	REL+glean-PC.3M.PL.
wəhɔlaḵt	***ʔaḥ^{a}rehɛn***	
CJ+walk-SC.2F.SG.	**BEHIND/AFTER+them**-F.	

[Keep] your eyes on the field where they are harvesting, then follow the women. (Ruth 2:9)

Temporal *ʔaḥ^{a}re* is also used as an adverbializer. Typological examples of this change have been reviewed previously, including the parallel change witnessed for *ʔaḥar* (§3.1.3.2).[64] Three morphosyntactic contexts of the change from the temporal preposition to the adverbializer are plausible. First and most likely, *ʔaḥ^{a}re* followed by a clause can be reconstructed in the proto-language on analogy to the Semitic construction where a noun is found in construct with a verb.

63 Gen 41:3, 19, 27; Ruth 2:9; 1 Kgs 19:20; 20:15.

64 The grammaticalization of LOCATIVE to SUBORDINATOR is also common cross-linguistically (Heine and Kuteva 2004, 205).

Example (62) corresponds to this Proto-Semitic construction.[65] Second, the coordination of the preposition and the relative, אַחֲרֵי אֲשֶׁר *ʔaḥ^{a}re ʔ^{a}šɛr*, as in example (61), may have been shortened to only the preposition. However, there is no supporting diachronic evidence of this change. Third, the Hebrew construction in which the temporal is combined with an infinitive could have led to the change. As several of these forms are homophonous with finite verbs, a situation such as example (63) could have been reinterpreted as an adverbializer plus verb.

(61) וְכִלָּה אֶתְכֶם אַחֲרֵי אֲשֶׁר־הֵיטִיב לָכֶם

wəkillɔ	*ʔɛtəkɛm*	
vanquish-WCSC.3M.SG.	DOM+you-M.PL.	
ʔaḥ^{a}re	*ʔ^{a}šɛr-heṭiḇ*	*ləkɛm*
AFTER	REL+do.good-SC.3M.SG.	TO+you-M.PL.

He will vanquish you after he benefited you. (Josh 24:20)

(62) תְּחִלַּת דִּבֶּר־יְהוָה בְּהוֹשֵׁעַ

təḥillaṯ	*dibbɛr-YHWH*	*bəhoše^{a}ʕ*
beginning.of	spoke-SC.3M.SG.+PN	WITH+PN

When Yahweh first spoke to Hosea. (Hos 1:2)

(63) וְרָאָה הַכֹּהֵן אַחֲרֵי הֻכַּבֵּס אֶת־הַנֶּגַע

wərɔʔɔ	*hakkohen*	
examine-WCSC.3M.SG.	the.priest-M.	
ʔaḥ^{a}re	*hukkabbes*	*ʔɛṯ-hannɛgaʕ*
AFTER	be.clean-INF./-SC.3M.SG.	DOM+the.infection

The priest shall investigate the infection after it is cleaned. (Lev 13:55)

Some have suggested an adversative usage of *ʔaḥ^{a}re* (Williams 1976, 61).[66] This function could be an extension of the LOCATIVE but is difficult to assess definitively as a separate function. It is exceedingly rare and may not be differentiable from idiomatic uses with certain verbs.

3.2.4.3. PREP (AFTER) > PREP (CAUSE)

On the temporal and causal interface, one finds a handful of examples reflecting the early stages of the change of the TEMPORAL to CAUSE. According to Heine and Kuteva (2004, 291–93) such examples originating with body parts and resulting in CAUSE are found in "only African examples" (three examples are provided from Niger-Congo languages: Mossi, Wolof, and Shona). However, they claim further "that we are dealing with a more general process whereby terms for body parts give rise to spatial markers that again may develop into markers for more

65 See also Lev 14:46 and 1 Sam 25:15.

66 2 Kgs 19:21; also see 1 Kgs 14:10; 21:21.

abstract grammatical relations" (48). In addition to Hebrew *ʔaḥ^{a}re,* the East Semitic example of Akkadian *ištu* 'after, since, because' (von Soden 1995, §176c) provides additional evidence in support of their typological supposition that temporal function words grammaticalize into causal relations.

There are four instances of a PP headed by *ʔaḥ^{a}re* which may be reinterpreted as causal from an original temporal meaning.[67] One instance is seen in example (64). The phrase אַחֲרֵי נָפְלוֹ *ʔaḥ^{a}re nipōlo* may be understood temporally, 'after he fell', or causally, 'because he fell'. Each of these examples could be understood as either function.

(64) וָאֲמִתֶתֵהוּ כִּי יָדַעְתִּי כִּי לֹא יִחְיֶה אַחֲרֵי נָפְלוֹ

waʔ^{a}moṯaṯehu	*ki*	*yɔdaʕti*	*ki*
kill-WCPC.1SG+him	CAUS	know-SC.1SG.	COMP
loʔ	*yiḥyɛ*	***ʔaḥ^{a}re***	*nipōlo*
NEG	live-PC.3.M.SG.	**AFTER/CAUS**	fall-INF+him

I killed him because I knew that he could not live since he fell. (2 Sam 1:10)

3.2.4.4. PREP (BEHIND) > PARTICLE

As discussed earlier, original meaning of the particle making up the multi-word verb is patent, but the combination provides verbal nuance that goes beyond simple adverbial modification.

Cross-linguistically, prepositional verbs originate from the combination of verbs and various function words. O'Dowd (1998, 10) defines these particles "not as syntactic or semantic elements, but as pragmatic, *discourse-orienting* elements." The reason for the pragmatic categorization is that the orienting function of the preposition goes beyond simply adding spatial connotations. Rather, the combining particle signals the addition of new items to the cognitive lexicon of the type VERB + PTCL. In support of this, she claims:

> Many phrasal verbs are … lexicalized as semantic if not structural units: in fact, most of the meanings of *make up*, *make out*, *take up*, and *put out* are unrecoverable compositionally, although we can certainly detect some telicity in the contribution of the particle (O'Dowd 1998, 185).

Moreover, Brinton and Traugott (2005) discuss this type of change as the blending of grammaticalization and lexicalization. Grammaticalization maps the shift of the original function word to a particle marking the verbal complement.

67 Gen 46:30; Judg 11:36; 2 Sam 1:10; 19:31.

And lexicalization explains the addition of the prepositional verb to the cognitive lexicon.

In Biblical Hebrew, the locative preposition *ʔaḥ^{a}re* grammaticalized in constructions with certain verbs and acquired the function of a complement marker as part of a lexicalized prepositional verb. As a result, the reanalyzed environment, VERB + [*ʔaḥ^{a}re*$_{\text{PREP}}$ + NP]$_{\text{PP}}$, developed into the form [VERB + *ʔaḥ^{a}re*$_{\text{PTCL}}$]$_{\text{VP}}$ + NP. Even though these functional shifts may appear to be distinguishable, like most grammaticalization changes, this progression is identified *ex post facto*, that is, by the outcome where new semantic meanings develop, and usage patterns are amended.

3.2.5. Mapping the Grammaticalization Trajectories of ʔaḥ^{a}re

As explained previously (§3.2.4), the functional changes to *ʔaḥ^{a}re* can be mapped as in figure 3.4.

Figure 3.4. Functional Developments of *ʔaḥ^{a}re*

Noun (‘back’) > PREP (BEHIND) > PREP/ADVZ (AFTER) > PREP (CAUSE)
> PARTICLE

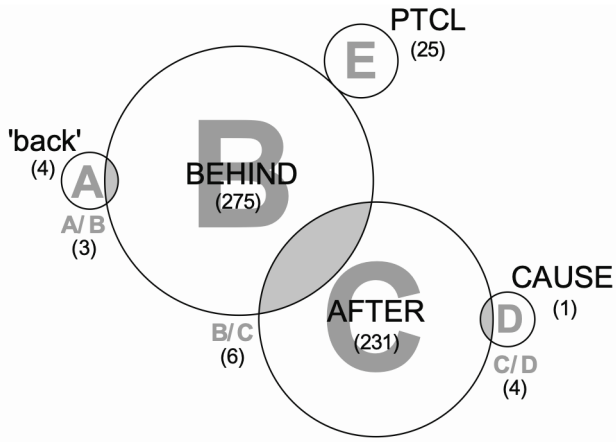
According to the overlap model (fig. 3.5), the noun ‘back’ extended to contexts where it was reinterpreted as the LOCATIVE (BEHIND) at stage II. Subsequently, the temporal and particle usages were developed at stage III, and finally stage IV is marked by the acquisition of the causal function.

Figure 3.5. Overlap Model for *ʔaḥ^{a}re*

Stage:	I	II	III	IV
Noun	‘back’	‘back’	‘back’	‘back’
PREP		BEHIND	BEHIND	BEHIND
PREP/ADVZ			AFTER	AFTER
PTCL			PTCL	PTCL
PREP				CAUSE

Figure 3.6 presents a semantic map of *ʔaḥ^{a}re*. It shows the multiple usages, the number of tokens in parentheses, and the overlapping meanings. The suggested developments are linked by touching functions. Also, the size of each circle demonstrates the relative frequency of each function in Biblical Hebrew.

Figure 3.6. Semantic map of *ʔaḥ^{a}re*



3.2.6. Comparison of ʔaḥar and ʔaḥ^{a}re

As described in the introduction to *ʔaḥar* (§3.1), the present study preferences the morphosemantic differences over the etymological relationship of these two lexemes. This final section, however, will compare the similarities and differences between the usages of *ʔaḥar* and *ʔaḥ^{a}re*. The majority of the cases of both lexemes may be categorized within the locative and temporal functions; nonetheless, the specialized functions and variant frequencies are found with each word.

The anatomic noun BACK is evident with *ʔaḥar* and *ʔaḥ^{a}re* as well as the grammaticalizations to the locative (BEHIND) and temporal (AFTER) usages. Only *ʔaḥar* demonstrates the prepositional usage of ACCORDING TO and the conjunctive adverb AFTERWARDS. The usages as a preposition CAUSE and a particle in multi-word verbs are found exclusively with *ʔaḥ^{a}re*.

Statistical frequency demonstrates further differences in the typical usage of *ʔaḥar* and *ʔaḥ^{a}re*. In table 3.1, the total number of each function is provided, where the value in parentheses represents the examples from the Late Biblical Hebrew dataset. Overall, the tokens of *ʔaḥ^{a}re* number more than five times those of *ʔaḥar*. The small number of examples of the less common functions is not statistically significant for either lexeme. Regarding the better attested semantic usages, the ratio of the locative to temporal function of *ʔaḥ^{a}re* is nearly one-to-one (275:235), whereas the locative use of *ʔaḥar* is found only half as much as the TEMPORAL (17:32).

Table 3.1. Usage Comparison of *ʔaḥar* and *ʔaḥ^{a}re*

	BACK	BEHIND	AFTER	CAUSE	ACCRD	CJ ADV	PTCL
ʔaḥar	1 (0)	15 (0)	31 (6)	0 (0)	2 (0)	37 (2)	0 (0)
ʔaḥ^{a}re	4 (0)	275 (15)	231 (41)	1 (0)	0 (0)	0 (0)	25 (1)

Semantically speaking, this difference indicates that *ʔaḥar* skews toward the secondary grammatical relations (e.g., TEMPORAL, CJ ADV), whereas *ʔaḥ^{a}re* prefers predominately the anterior functions of the LOCATIVE and less so the TEMPORAL. This dissimilarity is evident from the diachronic evidence as well. In Late Biblical Hebrew, *ʔaḥar* is not attested with the locative function at all. In this same corpus, the temporal usage of *ʔaḥ^{a}re* is much more frequent than that of the locative. This change may be understood as analogous to the earlier evolution of *ʔaḥar* in Standard Biblical Hebrew. Therefore, the semantic space vacated by the prepositions *ʔaḥar* and *ʔaḥ^{a}re* provides for the emergence in Post-Biblical Hebrew of an innovative locative function BEHIND from the body part noun *ʔ^{a}ḥore* 'back'. (See further the discussion in §5.2 Diachronic Change for an extended explanation of these later developments.)

3.3. אֵצֶל *ʔeṣɛl*

3.3.1. Morphosyntax of ʔeṣɛl

The vocalic pattern of אֵצֶל *ʔeṣɛl* fits, for the most part, into the morphological category of **qitl* base nouns on the pattern of סֵפֶר *sepēr* 'scroll' and שֵׁבֶט *šeḇeṭ* 'rod; tribe'. The forms with pronominal suffixes are different in that they have an initial *seghol*-vowel, אֶצְלוֹ *ʔɛṣlo*, instead of the more frequently witnessed *hireq*-vowel (e.g., סִפְרוֹ *siprō*; שִׁבטוֹ *šiḇṭo*). The opening and centering of the vowel /i/ is attested elsewhere in similar phonological environments (Bauer and Leander 1922, 207-208). Specifically, a *seghol* realizes from **i* in an unaccented, closed syllable with an initial glottal stop. Examples include: אֶבְלֵךְ *ʔɛḇleḵ* 'your morning' (אֵבֶל *ʔeḇɛl* 'mourning' < **ʔibl*); אֶגְלֵי־טָל *ʔɛḡəle-ṭɔl* 'drops of dew' (אֵגֶל *ʔeḡɛl* 'dew-drop' < **ʔigl*); אֶהְיֶה *ʔɛhyɛ* 'I am'; אֶל־ *ʔɛl-* (< **ʔil*) 'toward'; אֶת־ *ʔɛṯ-* (< **ʔitt*) 'with'; but notably not אִמְרוֹ *ʔimro* 'his word' (אֵמֶר *ʔemɛr* 'word' < **ʔimr*).

Missing from Biblical Hebrew, the primary semantics and root of *ʔeṣɛl* are manifest from the comparative Semitic evidence. The original nominal referenced an anatomic 'joint', like the elbow, or more generally 'side'. Nominal cognates include Syriac *yaṣīlɔ* 'joint, elbow', Hebrew אַצִּיל *ʔaṣṣil* 'joining; joint', Punic *yṣlt* 'joint', and Arabic *wiṣlun* 'limb, side' as well as *mawṣil* 'joint'. A related noun appears in a broken context, *bʔṣl hmšk[b]* 'on the side of the tomb', in Byblian Phoenician.

Ugaritic evidences a cognate verbal root *ʔṢL* ‘to meet, join’. Some have suggested a connection with Sabaic *WṢL* ‘to proceed; arrive; (re)join; to adhere’ and Arabic *waṣala* meaning ‘to reach; to conjoin’ in the first stem and *waṣṣala* ‘to join; connect’ with stem II. Although the phonological shift of initial-*waw* roots to initial-*yod* is indicative of Northwest Semitic, the change of the approximants to glottal stop is not a widespread unconditioned Northwest Semitic sound change (Blau 2010, 103–4). However, a few examples of this weakening may be observed with certain verbal roots (Wright 1890, 71).

3.3.2. Usage of ʔeṣɛl

Biblical Hebrew witnesses three functions of *ʔeṣɛl*: LOCATIVE (BESIDE), PROXIMAL (NEAR), and DIRECTIONAL (TOWARD). The first function specifies the anatomically-based spatial relation, the second a more general proximate distance, and the last the directionality of verbal motion, suggesting the reduction of distance. Each usage is illustrated in the following subsections.

3.3.2.1. PREP (BESIDE)

The function word *ʔeṣɛl* designates a locality ‘next to’ or ‘beside’ something. It stipulates a contiguous SIDE-REGION relation, where nothing intervenes between the TR and LM (Svorou 1994, 237).[68] The orienting object of the preposition, *viz.* the landmark in cognitive linguistic terms, may be a person as in example (65), an intangible object with metaphorical sides as in example (66), or an inanimate entity as in example (67), such as a wall, building, wheel, or altar.

(65) וַתַּנַּח בִּגְדוֹ אֶצְלָהּ

wattannaḥ	*biḡāḏo*	***ʔeṣlɔh***
place-WCPC-3F.SG.	clothing+his	**BESIDE**+**her**

She put his garment beside her. (Gen 39:16)

(66) וּמַצֵּבָה אֵצֶל־גְּבוּלָהּ

umaṣṣeḇɔ	***ʔeṣɛl***-*gəḇulɔh*
CJ+stele	**BESIDE**+border+its

A stele will be beside its border. (Isa 19:19)

68 Gen 39:10, 15, 16, 18; Lev 1:16; 6:3; Deut 16:21; 1 Sam 5:2; 1 Kgs 2:29; 10:19; 13:24 (2x), 25, 28, 31; 2 Kgs 12:10; 2 Chr 9:18; Neh 2:6; 3:23, 35; 8:4; Prov 8:30; Isa 19:19; Jer 35:4; Ezek 1:15, 19; 9:2; 10:6, 9 (3x), 16; 33:30; 39:15; 43:6; Amos 2:8.

(67) וּשְׁנַיִם אֲרָיוֹת עֹמְדִים אֵצֶל הַיָדוֹת

ušnayim	*ʔᵃrɔyoṯ*	*ʕomə̄dim*	***ʔeṣɛl***	*hayyɔ̄doṯ*
CJ+two	lions-M.	standing-PTCP.M.PL.	**BESIDE**	the.sides

(The throne had) two lions standing beside its arms. (1 Kgs 10:19)

3.3.2.2. PREP (NEAR)

The locality designated by *ʔeṣɛl* indicates proximity to a place without reference to a relative direction, metaphorical or not.[69] This relationship is used for indicating the general topographical nearness of one entity relative to another but not necessarily an adjacent locality. Example (68) shows proximity to a geographic location. Example (69) indicates nearness, but not the adjoining SIDE-RELATION, of one structure to another.

(68) וַתָּבֹא לָהֶם הַשֶּׁמֶשׁ אֵצֶל הַגִּבְעָה

wattɔ̄boʔ	*lɔhɛm*	*haššɛmeš*	***ʔeṣɛl***	*haggiḇʕɔ*
enter-WCPC.3F.SG.	FOR+them	the.sun-F.	**NEAR**	Gibeah

The sun went down when they were near Gibeah. (Judg 19:14)

(69) וְלֹא יְטַמְּאוּ עוֹד בֵּית־יִשְׂרָאֵל שֵׁם קָדְשִׁי ... בְּתִתָּם סִפָּם אֶת־סִפִּי וּמְזוּזָתָם אֵצֶל מְזוּזָתִי וְהַקִּיר בֵּינִי וּבֵינֵיהֶם

wəloʔ	*yəṭammə̄ʔu*	*ʕoḏ*	*beṯ-yiśrɔ̄ʔel*	
CJ+NEG	defile-PC.3M.PL.	still	house.of+PN	
šem	*qɔḏ̄ši*	...	*bəṯittɔm*	
name.of	holiness+my	…	WHEN+put-INF+they	
sippɔm	*ʔeṯ-sippi*			
threshold+their	WITH+threshold+my			
umə̄zuzɔṯɔm	***ʔeṣɛl***		*məzuzɔ̄ṯI*	
CJ+doorpost+their	**NEAR**		doorpost+my	
wəhaqqir	*beni*		*uḇenehɛm*	
CJ+the.wall	BTWN+me		CJ+BTWN+them	

The House of Israel will no longer desecrate my holy name … by putting their thresholds in proximity to my threshold and their doorposts near my doorpost with [only] a wall between me and them. (Ezek 43:8)

3.3.2.3. PREP (TOWARD)

The function word may designate the direction, or goal, toward which the movement expressed by the verb occurs.[70] This case reflects the initial stages of the

69 Deut 11:30; Judg 19:14; 1 Sam 20:19; 1 Kgs 1:9; 4:12; Neh 4:6; Prov 7:8, 12; Jer 41:17; Ezek 43:8; Dan 10:13.
70 Dan 8:17.

later expansion evidenced in Mishnaic Hebrew in which *ʔeṣɛl* replaces אֶל *ʔɛl* as the regular marker of the allative function with verbs of motion (Segal 1927, 142).

The context describes the scene of the divine messenger Gabriel being sent to Daniel to explain the vision of chapter eight of Daniel. The passage in example (70) relays that Gabriel came toward (*ʔeṣɛl*) the place where Daniel was standing. In response to this advance Daniel fell prostrate in fear as found in the subsequent clause.

(70) וַיָּבֹא אֵצֶל עָמְדִי וּבְבֹאוֹ נִבְעַתִּי וָאֶפְּלָה עַל־פָּנָי

wayyɔḇoʔ	***ʔeṣɛl***	*ʕɔmḏi*
enter-WCPC	**TOWARD**	location+my
uḇəḇoʔo	*niḇʕatti*	
CJ+WHEN+entering+his	be.fearful-SC.1C.SG.	
wɔʔɛppəlɔ	*ʕal-pɔnɔy*	
fall-WCPC.1C.SG.	UPON+face+my	

He came to me, and when he was near, I was terrified and fell on my face. (Dan 8:17)

3.3.3. Grammaticalization of ʔeṣɛl

The individual changes in the meanings of *ʔeṣɛl* are proposed in this section. It is suggested that the original substantive 'limb; side' acquired the function of a LOCATIVE (BESIDE) which was further extended to contexts denoting the PROXIMAL (NEAR) and DIRECTIONAL (TOWARD). These semantic changes coincide with the structural shift from the noun to the preposition and secondary extensions of the function. The typological evidence for these changes and internal attestations of ambiguity of individual cases are presented in the following subsections.

*3.3.3.1. *Noun ('side') > PREP (BESIDE)*

Nouns designating body parts often grammaticalize as relational notions in the world's languages (Heine and Kuteva 2004, 271–2). The well-attested change in English *beside* is suggested to have obtained from *be sidan* 'by the side' in Old English (Svorou 1994, 72, 255–6) or possibly later in Middle English (Rissanen 2004). In Semitic, an analogous typological change yielding the locative function is observed with Akkadian *aḫu* 'side, flank; beside' (*CAD aḫu* B) and *lētu* 'cheek; beside' along with Aramaic *sṭr* 'side; beside'.

Example (71) may provide a potential illustration of the primary grammaticalization. Just as the workers kept their weapons 'fastened to their loins' according to example (71a), Nehemiah explains that the war-trumpeter with a

shofar was kept nearby in example (71b). This location is expressed as אֶצְלִי *ʔeṣli*, which may be understood nominally as 'my side' or prepositionally as 'beside me'. Similar examples of ambiguity may well have led to the development of the locative semantics and the functional change.

(71) a. וְהַבּוֹנִים אִישׁ חַרְבּוֹ אֲסוּרִים עַל־מָתְנָיו וּבוֹנִים

wəhabbonim		*ʔiš*	*ḥarbo*
CJ+the.builders-PTCP.M.		each	sword+his
ʔᵃsurim	*ʕal-mɔ̱tnɔw*		*uḇonim*
fastened-PP.M.PL.	UPON+loins+his		CJ+building-PTCP.M.PL.

b. וְהַתּוֹקֵעַ בַּשּׁוֹפָר אֶצְלִי

wəhattoqeᵃʕ	*baššopɔr*	***ʔeṣli***
CJ+the.trumpeter-PTCP.M.	WITH+the.horn	**side/LOC+my**

Each laborer had his sword fastened to his loins while building, and the bugler with his horn was at my side. (Neh 4:12)

3.3.3.2. PREP (BESIDE) > PREP (NEAR)

The grammatical morphemes marking general proximity are frequently derived from lexemes functioning to denote 'side' (Heine and Kuteva 2004, 272–73) through the generalization of locative relations (Svorou 1994, 73, 136, 156–57, 260). Example (72) demonstrates one plausible context for the transition from an adjacent position to a generic proximal. With the emergence of the second set of seven lean cows from the river in example (72a), the geographic relation of the two groups is ambiguous. Does each lean cow take its position *beside* a corresponding fattened cow as in example (72b)? Or is the second group situated *near*, that is, in spatial propinquity with, the first? Such vagueness could lead to the addition of the proximal relation to the functions of *ʔeṣɛl*.[71]

(72) a. וְהִנֵּה שֶׁבַע פָּרוֹת אֲחֵרוֹת עֹלוֹת אַחֲרֵיהֶן מִן־הַיְאֹר ...

wəhinne	*šɛḇaʕ*	*pɔroṯ*	*ʔᵃḥeroṯ*
CJ+PTCL	seven	cows	other-F.PL.
ʕoloṯ	*ʔaḥᵃrehɛm*		*min-hayəʔor*
coming.out-PTCP.F.PL.	AFTER+them		FROM+NP

71 Other examples of proximal ambiguity include: Gen 41:3; Lev 10:12; 1 Kgs 21:1, 2.

b. וַתַּעֲמֹדְנָה אֵצֶל הַפָּרוֹת עַל־שְׂפַת הַיְאֹר

wattaʕᵃmoḏnɔ	***ʔeṣɛl***	*happɔroṯ*
stand-WCPC.3F.PL.	**BESIDE/NEAR**	the.cows
ʕal-śəp̄aṯ	*hayəʔor*	
ON+the.shore.of	NP	

Seven more cows were coming out of the Nile after [the first seven cows]… They stood beside the cows at the edge of the Nile. (Gen 41:3)

3.3.3.3. PREP (BESIDE) > PREP (TOWARD)

While a few languages witness the development of directional functions from body parts as a primary grammaticalization (Svorou 1994, 73, 261), other examples, including English *beside*, demonstrate this resulting function from a reorientation of a locative relation "from nearness to distancing [which] can be related to subjectification and to the changing point of view" (Rissanen 2004, 162).

Example (73) provides one possible mediating step along this pathway of change from locative to directional functions. As with example (70) above, *ʔeṣɛl* is used in conjunction with the verbal root *BWʔ*. Unlike this earlier example, however, the exact grammatical relationship is ambiguous. The modifying phrase, אֵצֶל אֲחֵיהֶם *ʔeṣɛl ʔᵃḥehɛm* 'to their family' (v. 15), placed in clear reference to the preceding description of transmigration, שְׁבִיתֶם מֵאֲחֵיכֶם *šəḇiṯɛm meʔᵃḥeḵɛm* 'you deported [them] from their family' (v. 11), could describe the repatriation locality or the directionality (goal) of the conveyance.

(73) וַיְבִיאוּם יְרֵחוֹ ... אֵצֶל אֲחֵיהֶם

wayəḇiʔum	*yəreḥo*	...
bring-WCPC.3M.PL.+them	Jericho	…
ʔeṣɛl	*ʔᵃḥehɛm*	
BESIDE/TOWARD	brothers+their	

They brought them [back] to Jericho … to their family. (2 Chr 28:15)

In the eighth chapter of Daniel, this preposition is found in the last of a series of verb-prepositional combinations indicating the progression in the direction of an individual. First, the king of Greece is envisioned by Daniel as a male goat advancing away from the west (*min-hammᵃʕarɔḇ*) in example (74a) in the direction of the ram (*ʕaḏ-hɔʔayil*), which symbolized the kings of Media and Persia in example (74b). Motivated by passionate anger, he quickened his advance headed for the enemy (*ʔelɔw*) in example (74c). Then, Daniel observed the goat approaching or attaining to the ram (*ʔeṣɛl hɔʔayil*), becoming enraged, and striking it in example (74d). The progression of the scene is indicated by the series of temporal

functions: *min*, *ʕaḏ*, *ʔɛl,* and *ʔeṣɛl*. In this sequence, the preposition *ʔeṣɛl* designates either the final movement to the ram (TOWARD), or the final location within arm's length of the destination (BESIDE).

(74)a. ... וְהִנֵּה צְפִיר־הָעִזִּים בָּא מִן־הַמַּעֲרָב

wəhinne	*səp̄ir-hɔʕizzim*	*bɔʔ*	*min-hamm[a]ʕarɔḇ*
CJ+PTCL	male+goat	entering-PTCP	FROM+the.west

b. ... וַיָּבֹא עַד־הָאַיִל

wayyɔḇoʔ	*ʕaḏ-hɔʔayil*
enter-WCPC.3M.SG.	UNTO+the.ram

c. וַיָּרָץ אֵלָיו בַּחֲמַת כֹּחוֹ

wayyɔrɔṣ	*ʔelɔw*	*baḥ[a]maṯ*	*koḥo*
run-WCPC.3M.SG.	TOWARD+him	WITH+wrath.of	strength+his

d. וּרְאִיתִיו מַגִּיעַ אֵצֶל הָאַיִל וַיִּתְמַרְמַר אֵלָיו וַיַּךְ אֶת־הָאַיִל

urəʔiṯiw	*maggi[a]ʕ*	***ʔeṣɛl***	*hɔʔayil*
CJ+see-SC.3M.SG.+him	attaining	**TOWARD/BESIDE**	the.ram
wayyiṯmarmar		*ʔelɔw*	
be.enraged-WCPC.3M.SG.		TOWARD+him	
wayyaḵ		*ʔɛṯ-hɔʔayil*	
strike-WCPC.3M.SG.		DOM+the.ram	

[I saw] a billy-goat coming from the west… He went in the direction of the ram… He ran toward him with bitter anger—I saw him coming close to the ram and he was embittered against him and struck the ram. (Dan 8:5–7)

3.3.4. Mapping the Grammaticalization Trajectories of ʔeṣɛl

The functional developments of the usage of *ʔeṣɛl* are mapped in figure 3.7.

Figure 3.7. Functional Developments of *ʔeṣɛl*
*Noun ('side') > PREP (BESIDE) > PREP (NEAR)
> PREP (TOWARD)

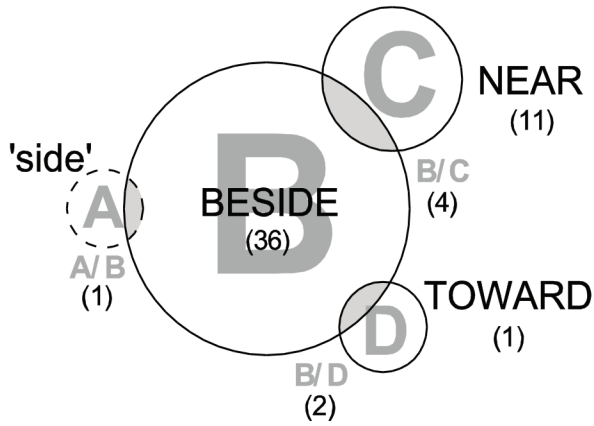
The original noun 'side' is restructured as a preposition acquiring a LOCATIVE function. This function was extended to the proximal NEAR and later the directional TOWARD with verbs of motion. In Biblical Hebrew, the anatomical meaning 'side' was almost certainly lost as represented in the final stage of the Overlap Model of figure 3.8.

Figure 3.8. Overlap Model for *ʔeṣɛl*

Stage:	I	II	III
Noun	‘side’	‘side’	(‘side’)
PREP		BESIDE	BESIDE
PREP			NEAR
PREP			TOWARD

Figure 3.9 provides a mapping of the semantic uses of *ʔeṣɛl*. The originating lexeme ‘side’ is only evidenced with one ambiguous example. The proximal BESIDE comprises the majority of examples. The other prepositions are less well attested.

Figure 3.9. Semantic Map of *ʔeṣɛl*



3.4. בֵּין *ben*

*3.4.1. Morphosyntax of *ben*

The originating noun meaning ‘interval, span between’ is a **qatl* base of the Semitic middle-weak root *BYN* (Bauer and Leander 1922, §81b, g"). Only the monothongized forms (**bayn* > **báyin* [ABS] ~ *ben-* [CSTR]) are witnessed with Tiberian forms. These include the construct state, בֵּין *ben,* בֵּינוֹת *benoṯ*, the dual, בֵּינַיִם *benayim*, and the pronominal, בֵּינִי *beni,* בֵּינְךָ *benəḵɔ,* בֵּינֵךְ *beneḵ,* בֵּינוֹ *beno*. The plural ending *-(oṯ)e-* is added with the plural pronominal suffixes: בֵּינֵינוּ *benenu* (masculine-type) and בֵּינוֹתֵינוּ *benoṯenu* (feminine-type). Joüon and Muraoka (1991, §103n) suggest that the addition of the plural-type endings is analogical to עֲלֵי *ʕᵘle* (§94b). This hypothetical is improbable, since the expanding

particle *-(ot)e-* is found only with the plural pronominal suffixes and not the independent forms.[72] Alternatively, Blau (2010, §5.1.4) explains that this analogy is partial as it "has not yet been completed."

Cognate nominals and function words are common throughout West Semitic: Phoenician *bn* 'between', Ugaritic *bn* 'between', Nabataean *byny* 'between'; Syriac *baynay* (also *baynāṯ*) 'between'; Arabic *ab-baynun* 'the separating space' or the abstract 'disunity; enmity'; Old South Arabian *b*(*y*)*n* 'between'; and Geʕez *bayna* 'between'. The verbal root is fully productive in Arabic *bāna*/*yabīnu* 'to be(come) separated' and may be related to the widely attested root *BYN* 'to know', that is, the act of separating or discerning ideas, as known from cognate roots in Hebrew, Ugaritic, Palmyrene, Mandaic, Syriac, Old South Arabian, and Geʕez.

3.4.2. Usage of ben

A wide range of explanations for the semantics of Biblical Hebrew *ben* have been suggested in previous scholarship. The central prepositional relation of BETWEEN is nearly universally agreed upon by Hebrew grammarians, at times, without additional comment (Gesenius, Kautzsch, and Cowley 1910, §101a, Joüon and Muraoka 1991, §103n). Expanding this usage, van der Merwe, Naudé, and Kroeze detail three basic construction types: (1) the preposition with one complement, *ben* NP, (2) the preposition with two complements, the second marked by the preposition *l-* as the string, *ben* NP_1 *(w)l-*NP_2, and (3) two (or more) prepositions with two (or more) complements, *ben* NP_1 *uben* NP_2 (*uben* NP_3). Corresponding to these three construction types, they specify three different but overlapping semantic uses (van der Merwe, Naudé, and Kroeze 1999, §39.7):

1. Indicate localization in a space
2. a. Indicate localization in a space
   b. Distinguish different parties that are each actively involved in a process
3. Distinguish different objects

Waltke and O'Connor (1990, §11.2.6), in contrast, state that the one-term construction has an inclusive sense, "between or among a quantity of things considered as a group," and the two-term constructions are exclusive, "between or among two or more diverse things considered as over against one another." Following Brockelmann (1913, §254), Blau (2010, §5.1.4n) designates the feminine-type plural form בֵּינוֹתֵינוּ *benoṯenu* 'between us' as "having [an] inclusive sense," whereas the masculine-type plural form בֵּינֵינוּ *benenu* 'between us' is "exclusive."

72 The singular form, בֵּינֵיךְ *benēḵ*, in Gen 16:5 is likely a textual error as indicated in the MT (Yeivin 1980, §79).

Barr criticizes the inclusive and exclusive arrangement as an external and unwarranted distinction. He clarifies:

> It is the ambiguity of the pronouns that is the cause of the trouble. They do not specify whether a closer "we" or a more extended and universal "we" is intended. The view … can be seen as an attempt to make the preposition "between" specify what the pronouns themselves had failed to specify. In fact it was not specified anywhere in the language (Barr 1978, 12–22).

Instead, he suggests that *ben* NP_1 *(w)l*-NP_2 designates the Noun Phrases as a class of referents and never specific ones; however, he admits that "it would be going too far to suppose that phrases with *ben … l*^{e} and those with *ben … ben* form mutually exclusive classes" (7).

This situation is further complicated by Biblical Hebrew diachronic variation. There is evidence suggesting a temporal distinction between the construction *ben* NP_1 *(w)l*-NP_2 being "newer" and *ben* NP_1 *uben* NP_2 "older" (Hannemann 1975–1976, Hurvitz 1982, 113–5). Barr (1978, 9–12) finds further support for his differentiation in the attestations from the later documents of Ben Sira and the Dead Sea Scrolls, which is confirmed in the latter corpus by Qimron (1986, §400.17). Nonetheless, Barr fails to suggest any correlation between semantics and diachrony or formulate a broader picture of the functions of *ben*. The data suggest an increase of the NP_1 *(w)l*-NP_2 pattern in Late Biblical Hebrew (see §5.2), but no clear semantic differences may be assessed based on diachrony alone.

3.4.3. Noun ('interval')

The originating noun meaning 'interval, space between; distinction' is recognizable in a small number of possible examples. Two constructions likely preserve this nominal sense: example (75) אִישׁ־הַבֵּנַיִם *ʔiš-habbenayim* 'man of two intervals', meaning one who fights in representative combat or a duel in the area between two opposing armies (Gordon 2004, 30),[73] and example (76) מִבֵּינוֹת ל- *mibbenoṯ l-* 'the space between'.[74]

73 See also the later use of the term for general infantry in the Dead Sea Scrolls: שלושה דגלי בינים *šlwšh dgly bynym* 'three divisions of light infantry' (1Q33 VI:1).

74 The former is found in 1 Samuel 17:4, 23; the latter in Ezek 10:2 (2x), 6 (2x), 7. Several constructions with other preposition combinations may also be included here: Isa 44:4, Ezek 10:7; 19:11; 31:14 (see below §3.4.4.1).

(75) וַיֵּצֵא אִישׁ־הַבֵּנַיִם מִמַּחֲנוֹת פְּלִשְׁתִּים גָּלְיָת שְׁמוֹ מִגַּת

wayyeṣeʔ	*ʔiš-**habbenayim***		*mimmaḥ[a]noṯ*
come.out-WCPC.3M.SG.	man.of+**the.space**-DU.		FROM+camps.of
pəlištim	*gɔlyɔṯ*	*šəmo*	*miggaṯ*
GN	PN	name+his	FROM+GN

A dueling champion came out from the Philistine camp—his name was Goliath of Gath. (1 Sam 17:4)

(76) קַח אֵשׁ מִבֵּינוֹת לַגַּלְגַּל מִבֵּינוֹת לַכְּרוּבִים

qaḥ	*ʔeš*	***mibbenoṯ***	*laggalgal*
take-IMP.M.SG.	fire	**FROM**+**spaces**	AT+the.wheel
mibbenoṯ	*lakkəruḇim*		
FROM+spaces	AT+the.cherubs		

Take fire from the area between the wheels, that is, from the area between the cherubs. (Ezek 10:6)

3.4.3.1. PREP (BETWEEN)

The word *ben* has a locative function in a large number of instances.[75] This function designates the spatial relationship of an object or verbal action in reference to two (or more) entities. The locative usage is found in phrases of the three types of constructions: *ben* NP in example (77), *ben* NP *(w)l*-NP in example (78), and *ben* NP *uben* NP in example (79).

(77) וַיֵּפֶן זָנָב אֶל־זָנָב וַיָּשֶׂם לַפִּיד אֶחָד בֵּין־שְׁנֵי הַזְּנָבוֹת בַּתָּוֶךְ

wayyɛpēn		*zɔnɔḇ*	*ʔɛl-zɔnɔḇ*	*wayyɔśɛm*
turn-WCPC.3M.SG.		tail	TOWARD+tail	put-WCPC.3M.SG.
lappiḏ	*ʔɛḥɔḏ*	***ben**-šne*	*hazzənɔḇoṯ*	*battɔwɛḵ*
torch-M.	one-M.SG.	**BTWN**+two	tails	IN+the.middle

He put [two foxes] tail-to-tail and tied a torch between each pair at the middle. (Judg 15:4)

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75 Gen 10:12 (2x); 13:3 (2x); 15:17; 16:14 (2x); 20:1 (2x); 30:36 (2x); 31:51 (2x); 32:17 (2x); 49:14; Exod 8:19 (2x); 13:9, 16; 14:2 (2x), 20 (2x); 16:1 (2x); 30:18 (2x); 40:7 (2x), 30 (2x); Num 11:33; 17:13 (2x); Deut 1:1 (2x); 6:8; 11:18; 14:1; 33:12; Josh 3:4 (2x); 8:9 (2x), 11 (2x), 12 (2x); 18:11 (2x); 22:25 (2x); 24:7 (2x); Judg 4:4, 5; 5:16, 27 (2x); 13:25 (2x); 15:4; 16:25, 31 (2x); Ruth 2:15; 1 Sam 7:12 (2x); 14:4; 17:1 (2x), 3, 6; 20:3 (2x); 26:13; 2 Sam 18:9 (2x), 24; 1 Kgs 7:28, 29, 46 (2x); 18:42; 22:34 (2x); 2 Kgs 9:24; 25:4; 1 Chr 21:16 (2x); 2 Chr 4:17 (2x); 18:33 (2x); Neh 3:32; Job 24:11; 30:7; 34:37; 41:8; Pss 68:14; 104:10; Prov 26:13; Song 1:13; 2:2 (2x), 3; Isa 22:11; Jer 34:18, 19; 39:4; 52:7; Lam 1:3, 17; Ezek 1:13; 4:3 (2x); 8:3 (2x), 16 (2x); 19:2; 40:7; 41:10, 18; 43:8 (2x); 47:16 (2x); 48:22 (2x); Dan 8:5, 16, 21; 11:45; Joel 2:17; Obad 4; Zech 1:8, 10, 11; 3:7; 5:9 (2x); 13:6.

(78) וְיִטַּע אָהֳלֵי אַפַּדְנוֹ בֵּין יַמִּים לְהַר־צְבִי־קֹדֶשׁ

wəyiṭṭaʕ	*ʔɔhʾlɛ*	*ʔappaḏno*	***ben***
pitch-WCPC.3M.SG.	tents.of	palace+his	**BTWN**
yammim	*ləhar-ṣəḇi-qoḏeš*		
sea	TOWARD+mountain.of+splendor.of+holiness		

He will set up his palatial tents between the sea and the glorious holy mountain. (Dan 11:45)

(79) וַיֵּשֶׁב בֵּין־קָדֵשׁ וּבֵין שׁוּר

wayyešɛḇ	***ben***-*qɔḏeš*	***uḇen***	*šur*
dwell-WCPC.3M.SG.	**BTWN**+Kadesh	**CJ+BTWN**	Shur

He lived between Kadesh and Shur. (Gen 20:1)

3.4.3.2. PREP (SEPARATIVE)

Using *ben* to mark the divarication of two entities is common.[76] As with the locative function, it may be found in any of the three basic construction types and is used with verbs of separation, such as *PRD* 'to disperse' in example (80), and verbal phrases like *HLQ naḥᵃlɔṯo* 'to apportion by lot' in example (81) and *ŠLḤ ruᵃḥ rɔʕɔ* 'to send an evil spirit' in example (82). A fourth innovative construction type (*ben* NP *l-ben* NP), a fusion of type two (*ben* NP *l*-NP) and three (*ben* NP *uben* NP), is evidenced in example (83) with the verb *BDL* 'to separate'.

(80) יֶשְׁנוֹ עַם־אֶחָד מְפֻזָּר וּמְפֹרָד בֵּין הָעַמִּים בְּכֹל מְדִינוֹת מַלְכוּתֶךָ

yɛšno	*ʕam-ʔɛḥɔḏ*	*məpūzzɔr*		*uməpōrɔḏ*
EXIST	nation+one	be.scattered-PTCP		CJ+be.dispersed
ben	*hɔʕammim*	*bəḵol*	*məḏinoṯ*	*maləḵuṯɛḵɔ*
SPRT	the.peoples	IN+all	providences.of	kingdom+your

There is a nation which has been scattered and dispersed among the people in every region of your kingdom. (Esth 3:8)

(81) עַל־פִּי הַגּוֹרָל תֵּחָלֵק נַחֲלָתוֹ בֵּין רַב לִמְעָט

ʕal-pi	*haggorɔl*	*teḥɔleq*	*naḥᵃlɔṯo*
ACCRD	the.lot	be.divided-SC.3F.SG.	inheritance-F.+its
ben		*raḇ*	*limʕɔṭ*
SPRT		many	TO+few

Each inheritance will be apportioned by lot to the largest and the smallest [tribes] (*literally*, between the numerous and the few). (Num 26:56)

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76 Gen 1:4 (2x), 6, 7 (2x), 14 (2x), 18 (2x); 3:15 (4x); Exod 9:4 (2x); 11:7 (2x); 26:33 (2x); Num 26:56; 31:27 (2x); Judg 5:11; 9:23 (2x); 11:10; Ruth 1:17 (2x); 1 Sam 14:42 (2x); 2 Sam 14:6; 2 Chr 14:10; 19:10 (2x); Esth 3:8; Job 40:30; Prov 6:19; 18:18; Isa 59:2 (2x); Jer 25:16, 27; Zech 11:14 (2x); Mal 2:14 (2x).

(82) וַיִּשְׁלַח אֱלֹהִים רוּחַ רָעָה בֵּין אֲבִימֶלֶךְ וּבֵין בַּעֲלֵי שְׁכֶם

wayyišlaḥ		*ʔlohim*	*ruªḥ*	*rɔʕɔ*
send-WCPC.3M.SG.		God	spirit-F.	evil-F.
ben	*ʔªbimɛlɛḵ*	***uḇen***	*baʕªle*	*šəḵɛm*
SPRT	PN	**CJ+SPRT**	lords.of	GN

God sent an iniquitous spirit between Abimelech and the citizens of Shechem. (Judg 9:23)

(83) כִּי אִם־עֲוֹנֹתֵיכֶם הָיוּ מַבְדִּילִים בֵּינֵכֶם לְבֵין אֱלֹהֵיכֶם

ki ʔim-ʕªwonoṯeḵɛm	*hɔyu*	*maḇdilim*
CJ+sins+your-M.PL.	be-SC.3C.PL.	separate-PTCP.M.PL.
beneḵɛm	***leḇen***	*ʔloheḵɛm*
SPRT+**you**-M.PL.	**TO+SPRT**	God+your-M.PL.

But your sins are separating you from your God. (Isa 59:2)

A subset of this separative function is found with certain verbs of discrimination, such as example (84) *YKḤ* 'to decide', example (85) *BYN* 'to discern', and example (86) *ŠPṬ* 'to judge', to mark an evaluative relation between two options.[77] All three basic constructions are used without any clear semantic difference.

(84) וְיוֹכִיחוּ בֵּין שְׁנֵינוּ

wəyoḵiḥu	***ben***	*šnenu*
CJ+decide-PC.3M.PL.	**EVAL**	two.of+us

Let them decide between the two of us. (Gen 31:37)

(85) וְנָתַתָּ לְעַבְדְּךָ לֵב שֹׁמֵעַ לִשְׁפֹּט אֶת־עַמְּךָ לְהָבִין בֵּין־טוֹב לְרָע

wənɔṯattɔ	*ləʕaḇdəḵɔ*	*leḇ*	*šomeªʕ*
give-WCSC.2M.SG.	TO+servant+your	heart.of	listening
lišpoṭ	*ʔɛṯ-ʕamməḵɔ*		*ləhɔḇin*
TO+judge-INF.	DOM+people+your		TO+discern-INF.
ben-ṭoḇ	*lərɔʕ*		
EVAL+good	TO+evil		

May you give your servant an understanding mind to judge your people [and] to discern between good and bad. (1 Kgs 3:9)

(86) יִשְׁפֹּט יְהוָה בֵּינִי וּבֵינֶיךָ

yišpoṭ	*YHWH*	***beni***	***uḇenɛḵɔ***
judge-PC.3M.SG.	PN	**EVAL+me**	**EVAL+you**

May Yahweh judge between you and me. (Gen 16:5)

77 Gen 16:5 (2x); 31:37, 53; Exod 18:16 (2x); Lev 27:12 (2x), 14 (2x), 33; Num 35:24 (2x); Deut 1:16 (4x); 17:8 (3x); Judg 11:27 (2x); 1 Sam 24:13 (2x), 16 (2x); 2 Sam 19:36; 1 Kgs 3:9; Isa 2:4; 5:3 (2x); Ezek 22:26; 34:17, 20 (2x), 22; 44:23 (2x); Mic 4:3; Mal 3:18 (2x).

3.4.3.3. PREP (RECIPROCATIVE)

The antithesis of the separative function is the reciprocative function [RCPR], linking two or more mutually related entities.[78] This reciprocative relationship should not be confused with reciprocality which designates a particular grammatical relationship between the subject and object of a clause. All three of the construction types are found with the RECIPROCATIVE functioning in copula (87), verbal (88), and verbless clauses (89).

(87) שְׁבֻעַת יְהוָה תִּהְיֶה בֵּין שְׁנֵיהֶם

šəḇuʕaṯ	*YHWH*	*tihyɛ*	***ben***	*šnehɛm*
oath.of-F.	PN	be-PC.3F.SG.	**RCPR**	two.of+them

The oath to Yahweh will be between the two of them. (Exod 22:10)

(88) מִשְׁפַּט אֱמֶת יַעֲשֶׂה בֵּין אִישׁ לְאִישׁ

mišpaṭ	*ʔᵉmeṯ*	*yaʕᵃśɛ*	***ben***	*ʔiš*	*ləʔiš*
justice.of	truth	do-PC.3M.SG.	**RCPR**	man	TO+man

He shall execute true justice between people. (Ezek 18:8)

(89) הַגַּל הַזֶּה עֵד בֵּינִי וּבֵינָךְ הַיּוֹם

haggal	*hazzɛ*	*ʕeḏ*	***beni***	***uḇenaḵ***	*hayyom*
the.rock.heap	DEM	witness	**RCPR+me**	**CJ+RCPR+you**	today

This rock pile is a witness between you and me today. (Gen 31:48)

3.4.3.4. PREP (TEMPORAL)

A specialized temporal function designating ‘twilight’, that is, the time between sunset and nightfall, is denoted by the phrase בֵּין הָעַרְבָּיִם *ben hɔʕarbɔyim* ‘between the two evenings’ (90). This idiom is found eleven times exclusively in the priestly literature.[79]

78 Gen 9:12 (3x), 13 (2x), 15 (3x), 16 (2x), 17 (2x); 13:7 (2x), 8 (4x); 17:2 (2x), 7 (3x), 10 (3x), 11 (2x); 23:15 (2x); 26:28 (3x); 31:44 (2x), 48 (2x), 49 (2x), 50 (2x); Exod 22:10; 31:13 (2x), 17 (2x); Lev 26:46 (2x); Num 30:17 (2x); Deut 25:1; Josh 22:27 (3x), 28 (2x); Judg 4:17 (2x); 1 Sam 7:14 (2x); 20:23 (2x), 42 (4x); 2 Sam 3:1 (2x), 6 (2x); 21:7 (3x); 1 Kgs 5:26 (2x); 14:30 (2x); 15:6 (2x), 7 (2x), 16 (2x),19 (4x), 32 (2x); 22:1 (2x); 2 Kgs 11:17 (5x); 2 Chr 13:2 (2x); 16:3 (4x); 23:16 (3x); Job 34:4; Prov 14:9; Jer 7:5 (2x); Ezek 18:8; 20:12 (2x), 20 (2x); Zech 6:13.

79 Exod 12:6; 16:12; 29:39, 41; 30:8; Lev 23:5; Num 9:3, 5, 11; 28:4, 8.

(90) וְשָׁחֲטוּ אֹתוֹ כֹּל קְהַל עֲדַת־יִשְׂרָאֵל בֵּין הָעַרְבָּיִם

wəšcḥ^{a}ṭu	*ʔoṯo*	*kol*	*qəhal*
kill-WCSC.3C.PL.	DOM+him	all.of	assembly.of
ʕ^{a}ḏaṯ-yiśrɔʔel	***ben***		*hɔʕarbɔyim*
congregation.of+PN	**TEMP**		the.evening-DU.

Then the entire assembled congregation of Israel will slaughter [their lambs] at dusk. (Exod 12:6)

3.4.4. Grammaticalization of ben

The putative lexical and semantic changes of *ben* are discussed in this section. The primary grammaticalization is found with the structural change of the noun to the preposition. The preposition obtains as the locative function BETWEEN. This relational usage was expanded further to convey reciprocative and separative meanings. The expansion to the temporal function likely also originated from the locative relation. Typological changes and extant ambiguous examples will form the basis to demonstrate these proposed pathways.

3.4.4.1. Noun ('interval') > PREP (BETWEEN)

The change from a noun denoting bounded space to a preposition denoting a LOCATIVE is well-known in the world's languages. Heine and Kuteva (2004, 64) suggest that this type of grammaticalization is a part of "a more general process whereby relational nouns … give rise to relational (typically spatial or temporal) grammatical markers." As such, they designate the change from 'center, middle' to LOCATIVE (BETWEEN) (63). Elsewhere in Semitic, an analogous extension to a locative relation occurred with Akkadian *birītu* 'space; between'.

A sequence of Biblical Hebrew examples from Ezekiel demonstrates the plausibility of this expansion of the noun meaning 'space, interval' to contexts where it may be reinterpreted as marking a grammatical relation. These clauses are part of two prophetic oracles which describe the nations of Israel (ch. 19) and Assyria (ch. 31) as towering flora. The first, example (91), uses *ben* as a noun comparing the height of the vine to that of the treetops. In example (92), *ben* governed by *ʔɛl-* TOWARD. Here it is either the location at which the top of the tree resides or designates a locative relation. Finally, example (93) locates the arborary apex with *ben* without employing a preceding function word. Although the second example possibly could be construed as a transitional state between lexical meaning and function, the last demonstrates a syntactic situation in which the expansion to a locative preposition has occurred.

(91) וַתִּגְבַּהּ קוֹמָתוֹ עַל־בֵּין עֲבֹתִים

wattigbah	*qomoṯo*	*ʕal-**ben***	*ʕᵃḇoṯim*
be.high-WCPC.3F.SG.	height-F.+his	ABOVE+**space.of**	branches

Its height reaches above the treetops. (Ezek 19:11)

(92) וַיִּתֵּן צַמַּרְתּוֹ אֶל־בֵּין עֲבוֹתִים

wayyitten	*ṣammarto*	*ʔɛl-**ben***	*ʕᵃḇoṯim*
put-WCPC.3M.SG.	top-M.+his	TOWARD+**space.of/BTWN**	branches

He set its zenith in amongst the branches. (Ezek 31:10)

(93) וּבֵין עֲבֹתִים הָיְתָה צַמַּרְתּוֹ

uḇen	*ʕᵃḇoṯim*	*hɔyəṯɔ*	*ṣammarto*
CJ+BTWN	branches	be-SC.3M.SG.	top-M.+his

Its top was among the branches. (Ezek 31:3)

3.4.4.2. PREP (BETWEEN) > PREP (SEPARATIVE)

The preposition acquired additional grammatical meanings from the locative relation including a separative function. This expansion likely arose from viewing the intervening distance between entities as a connective or separating space. Locating a landmark in this between space provides a separative entity and function. Elsewhere in Semitic, a similar transition may be seen with Tigrinya *bäyn* 'alone; apart from' (Leslau 1987, 116).

In Biblical Hebrew, contexts where the locative preposition was used to separate two geographic entities likely provided contexts for this functional expansion. Example (94) situates a river as the LM separating two entities. The location of two individuals is in view with example (95). The derivative notion of mediation may also be cited wherein an arbiter separates between two individuals, be they human such as example (96) or divine such as example (97).[80]

(94) וַיַּחֲנוּ מֵעֵבֶר אַרְנוֹן ... כִּי אַרְנוֹן גְּבוּל מוֹאָב בֵּין מוֹאָב וּבֵין הָאֱמֹרִי

wayyaḥ^{a}nu		*meʕeḇɛr*	*ʔarnon*	*...*
camp-WCPC.3M.PL.		FROM+opposite.of	GN	…
ki	*ʔarnon*	*gəḇul*	*moʔɔḇ*	
CAUS	GN	border.of	GN	
ben	*moʔɔḇ*	***uḇen***	*hɔʔᵉmori*	
BTWN/SPRT	GN	**CJ+BTWN/SPRT**	GN	

They encamped on the other side of the Arnon River … because the Arnon was the border of Moab separating Moab and the Amorites. (Num 21:13)

80 Note also the situation in Gen 42:23 where an interpreter acts as the individuation entity.

(95) וְהִנֵּה רֶכֶב־אֵשׁ וְסוּסֵי אֵשׁ וַיַּפְרִדוּ בֵּין שְׁנֵיהֶם

wəhinne	*rɛ̱kɛ̱b-ʔeš*	*wəsuse*	*ʔeš*
CJ+PTCL	chariot.of+fire	CJ+horses.of	fire
wayyaprid̲u	***ben***		*šnehɛm*
separate-WCPC.3M.PL.	**BTWN/SPRT**		two.of+them

Suddenly a chariot of fire drawn by horses of fire separated the two of them. (2 Kgs 2:11)

(96) לֹא יֵשׁ־בֵּינֵינוּ מוֹכִיחַ יָשֶׁת יָדוֹ עַל־שְׁנֵינוּ

loʔ	*yeš-**benenu***	*mo̱kiʰḥ*
NEG	EXIST+**BTWN/SPRT**+**us**	arbitrator-M.
yɔšet̲	*yɔd̲o*	*ʕal-šnenu*
set-PC.3M.SG.	hand+his	UPON+two.of+us

There is no intermediary between us [who] might set his hands upon us. (Job 9:33)

(97) אָנֹכִי עֹמֵד בֵּין־יְהוָה וּבֵינֵיכֶם בָּעֵת הַהִוא לְהַגִּיד לָכֶם אֶת־דְּבַר יְהוָה

ʔɔnoḵi	*ʕomeḏ*	***ben**-YHWH*	
I	stand+PTCP.M.SG.	**BTWN/SPRT**+PN	
uḇeneḵɛm	*bɔʕet̲*		*hahiʔ*
CJ+BTWN/SPRT+you-M.PL.	IN+time		that
ləhaggiḏ	*lɔḵɛm*	*ʔɛt̲-dəḇar*	*YHWH*
TO+inform-INF	TO+you-M.PL.	DOM+word.of	PN

I was standing between you and Yahweh at that time to relay to you his message. (Deut 5:5)

As noted previously, the separative function may further be used in evaluative contexts, designating the religious or moral polarity of two entities. This relation may be classed as a derivative of the SEPARATIVE based on the functional overlap of the two. Such a context may be observed with example (98) where the verb *BDL* 'to separate' produces the setting to evaluate between two binary groups of clean and unclean animals. Further, the use as a function word with the verb *YDʕ* 'to know' forms an idiom which requires a religious and moral evaluation of the prepositional objects as in example (99).

(98) וְהִבְדַּלְתֶּם בֵּין־הַבְּהֵמָה הַטְּהֹרָה לַטְּמֵאָה וּבֵין־הָעוֹף הַטָּמֵא לַטָּהֹר

wəhiḇdaltɛm	***ben**-habbəhemɔ*		*haṭṭəhorɔ*
separate-WCSC.2M.PL.	**SPRT/EVAL**+the.animal		the.clean
laṭṭəmeʔɔ	***uḇen**-hɔʕopɔ̄*	*haṭṭɔmeʔ*	*laṭṭɔhor*
TO+the.unclean	**CJ+SPRT/EVAL**+the.bird	the.unclean	TO+the.clean

You shall separate between the clean animal and the unclean, and between the unclean bird and the clean. (Lev 20:25)

(99) לֹא־יָדַע בֵּין־יְמִינוֹ לִשְׂמֹאלוֹ

loʔ-yəḏaʕ	***ben**-yəmino*	*liśmoʔlo*
NEG+know-SC.3M.SG.	**SPRT/EVAL**+right+his	TO+left+his

He does not know his right [hand] from his left. (Jonah 4:11)

3.4.4.3. PREP (BETWEEN) > PREP (RECIPROCATIVE)

The locative construction may be used not only, as noted previously, to mark a separative function but also as a connecting relation. This connective function obtains as a relation expressing the interconnection of two or more entities with one another. A similar function having derived from the LOCATIVE is detectable with the English preposition *between*. Also, this functional extension is paralleled in Geʕez, where the etymologically similar compound *babayna-* may mean 'between', 'among', or 'to one another' (Leslau 1987, 116).

An overlapping functional context is seen in example (100). The designated altar was erected by the two Israelite tribes as a commemoration of their shared religious community. Not only was it located in the geographic area between the two groups, it was also functioning to remind them of their reciprocal relationship. Therefore, *benoṯenu* 'between us' could express the locative function or the logical separation between the two groups.

(100) וַיִּקְרְאוּ בְּנֵי־רְאוּבֵן וּבְנֵי־גָד לַמִּזְבֵּחַ כִּי עֵד הוּא בֵּינֹתֵינוּ כִּי יְהוָה הָאֱלֹהִים

wayyiqrəʔu	*bəne-rəʔuḇen*	*uḇəne-ḡaḏ*	*lammizbeᵃḥ*
call-WCPC.3M.PL.	sons.of+PN	CJ+sons.of+PN	TO+the.altar
ki	*ʕeḏ*	*huʔ*	***benoṯenu***
CAUS	witness-M.	that-M.	**BTWN/RCPR+us**
ki		*YHWH*	*hɔʔᵉlohim*
COMP		PN	the.god

The Reubenites and Gadites named the altar [Witness], because it was a witness between us that Yahweh is God. (Josh 22:34)

3.4.4.4. PREP (BETWEEN) > PREP (TEMPORAL)

The temporal function of *ben* is likely derived from a spatial metaphor. This typologically common shift from spatial to temporal notions is well documented in the world's languages (Svorou 1994). Example (101) demonstrates the fluid notion movement through space and time. The location in time of these events is וּבֵין עֲשֶׂרֶת יָמִים *uḇen ʕᵘśərəṯ yɔmim* which may be understood adverbially or as a TEMPORAL denoting 'during ten days'.

(101) שׁוֹר אֶחָד צֹאן שֵׁשׁ־בְּרֻרוֹת וְצִפֳּרִים נֶעֱשׂוּ־לִי וּבֵין עֲשֶׂרֶת יָמִים בְּכָל־יַיִן לְהַרְבֵּה

šor	*ʔeḥaḏ*	*ṣon*	*šeš-bəruroṯ*	*wəṣipporim*	
ox	one	sheep-F.	six+chosen-PP.F.PL.	CJ+birds	
naʕᵃśu-li		***uḇen***	*ʕᵃśereṯ*	*yɔmim*	
be.made-SC.3C.PL.+FOR+me		**CJ+BTWN/TEMP**	ten	days	
bəḵɔl-yayin		*ləharbe*			
COM+all.of+wine		IN+abundance			

An ox, six select sheep, and birds were prepared for me every ten days along with plenty of wine. (Neh 5:18)

3.4.5. Mapping the Grammaticalization Trajectories of ben

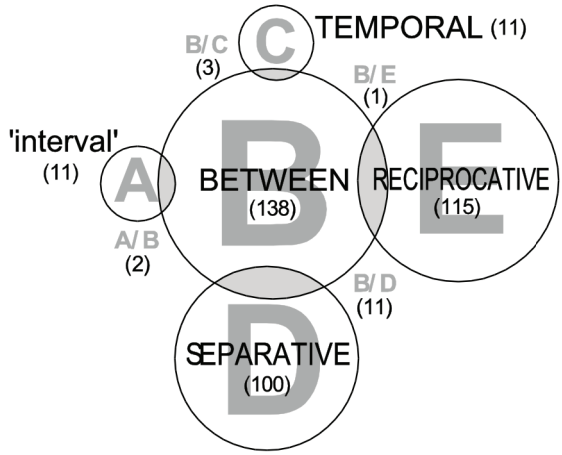
The attested pathways of change are chained to show the functional developments of *ben* in figure 3.10. Expanding from the noun, the preposition first expressed a locative relation. The LOCATIVE later acquired temporal, separative, and reciprocative functions. These expansions are presented as an Overlap Model in figure 3.11. In the third model, figure 3.12, the tokens of each function and ambiguous contexts are mapped as the union of the semantic sets.

Figure 3.10. Functional Developments of *ben*
Noun ('interval') > PREP (BETWEEN) > PREP (SEPARATIVE)
> PREP (RECIPROCATIVE)
> PREP (TEMPORAL)

Figure 3.11. Overlap Model for *ben*

Stage:	I	II	III	IV
Noun	'space'	'space'	'space'	'space'
PREP		BETWEEN	BETWEEN	BETWEEN
PREP			TEMP	TEMP
PREP			SPRT	SPRT
PREP			RCPR	RCPR

Figure 3.12. Semantic Map of *ben*



Having presented this functional assessment, several connections can be suggested correlating the structures and semantic usages of the various *ben* constructions. Evaluating only the unambiguous instances of four functions of *ben*, table 3.2 presents the relationship between these functions and the three basic patterns. The percentages indicate the ratio of usage tokens for each structural type.

Table 3.2. Semantic Distribution of *ben* Usage Patterns

	ben-NP	*ben*-NP *(w)l*-NP	*ben*-NP *w-ben*-NP
LOCATIVE	56 (63%)	3 (11%)	78 (33%)
SEPARATIVE	16 (18%)	22 (78%)	59 (25%)
TEMPORAL	11 (12%)	0 (0%)	0 (0%)
RECIPROCATIVE	6 (7%)	3 (11%)	103 (43%)
Totals:	89	28	240

The data may be summarized as follows. The string *ben*-NP evidences all four uses. But the primary usage is the locative function. This pattern is the only one attested with the temporal function. The construction *ben*-NP *(w)l*-NP designates most prominently a separative relation with rare locative and reciprocative functions. Finally, *ben*-NP *w-ben*-NP relates reciprocative notions most prominently, with less common locative and separative uses.

3.5. בַּעַד *baʕaḏ*

3.5.1. Morphosyntax of baʕaḏ

The word בַּעַד *baʕaḏ* may be classified as the absolute form of the **qatl* pattern from the root *BʕD*. In general, this analysis is secure; however, a few morphosyntactic difficulties should be noted. First, the absolute state form *baʕaḏ* is only attested in three instances as part of the construction מִבַּעַד ל- *mibbaʕaḏ l-* (Song 4:1, 3; 6:7). In the more typical construct state, the primary accent is lost yielding the form בְּעַד *bəʕaḏ*, which occurs with a conjoining *maqqef* or conjunctive accent (Bauer and Leander 1922, 573–74). Second, the pronominal form is construed most commonly without additional suffixes as with בַּעֲדוֹ *baʕᵃḏo*-3M.SG., בַּעַדְךָ *baʕaḏəḵɔ*-2M.SG. (pausal בַּעֲדֶךָ *baʕᵃḏɛḵɔ*), בַּעֲדִי *baʕᵃḏi*-1C.SG., et cetera. Rare alternate verbal and plural-type suffixed forms of the first-person forms, singular בַּעֲדֵנִי *baʕᵃḏeni* and plural בַּעֲדֵינוּ *baʕᵃḏenu*, are attested in Ps 139:11 and Amos 9:10. An analogous paradigm is found with תַּחַת *taḥaṯ* (§3.12.1). These plural forms may well demonstrate the early stages of incorporation of this lexeme into the *-e* (< **-ay*) paradigms discussed previously with regard to *ʔaḥᵃre* (§3.2.1) and *ben* (§3.4.1).

Establishing the root and its originating semantics poses a problem in that no related Hebrew lexemes witness the underlying consonantal structure of *BʕD*. Cognate lexemes and verbs are attested throughout West Semitic.[81] Function words derived therefrom are witnessed by Ugaritic *bʕd* 'behind; for',[82] Aramaic *bʕd* 'after', Arabic *baʕdu* 'after', and Old South Arabian *bʕd(n)* 'after'. Geʕez, Old South Arabian, and Arabic attest cognate nouns meaning 'strange; alien; different', 'deaf', and 'distant; remoteness', respectively. Semitic verbal roots from *BʕD* are known from Old South Arabian ('to take, carry away'), Geʕez ('to separate'), Arabic ('remove; be far off') and various Aramaic dialects (Palmyrene 'to remove, cede [property]', Syriac 'to depart; be distant').

As for the original semantics of this Semitic root, Hoch de Long (1905, 8–9) over a century ago aptly pointed out:

> The basic meaning of the root בעד in Semitic, insofar as it can be traced, is, as just stated "far, distant," from the simple verb "to be far away". The simple noun

81 The single attestation of a homophonous noun בַּעַד *baʕaḏ* 'price' does not appear to be related; however, Driver (1954, 244) speciously postulates an unattested original noun "*baʕaḏ* change, exchange, price" as a derivative of this selfsame *BʕD* root.

82 Note, also, the Ugaritic adverb *bʕdn* 'behind' found at RS 2.[014] iii:33.

in Hebrew from this root must therefore have the meaning of "distance, space", i.e., distance or remoteness.[83]

Building on the work of Hoch de Long, the term may well have arisen from the original meaning of 'distance'. It does not seem implausible that such a root was inherited into Hebrew from an earlier Semitic stratum; however, such an addition could have been borrowed directly as a noun or even a function word.

3.5.2. Usage of baʕaḏ

The grammatical relations expressed by *baʕaḏ* are discussed in this section including those proposed by several Hebrew grammarians. Generally, it is used to indicate 'behind, around' (Gesenius, Kautzsch, and Cowley 1910, §101a) or 'against, across, for' (Joüon and Muraoka 1991, §103e). Waltke and O'Connor (1990, §11.2.7a) suggest several locative meanings—'behind', 'around, about', and 'away from, over'—and a basic "idea of protection *for* ('for the benefit/sake of')" which developed into expressions of 'interest' or 'advantage' and 'exchange'. These functions are limited to the locative and the benefactive senses by others (van der Merwe, Naudé, and Kroeze 1999, §39.8, Williams 1976, §354–56).

Three main functions are differentiated in the present study. They overlap with those suggested previously but provide better coverage for nearly all of the attested contexts.[84] These functions express the spatiodirectional relation PATH (THROUGH), the LOCATIVE (BEHIND), and the INTENDED RECIPIENT (FOR). The following sections will outline and illustrate the usage of each function.

3.5.2.1. PREP (THROUGH)

The relation *baʕaḏ* may be schematized as a dynamic concept or PATH function. Dynamic relations can exhibit movement along a path or through space. Such a notion is characterized in terms of location and vector, that is to say, an initial position and an axis along which the movement occurs (Talmy 2000, 180–85). The path function, moreover, "requires a particular spatial goal, which is achieved by being connected to a spatial source by virtue of a series of contiguous points" (Tyler and Evans 2003, 217–18). Thirteen examples of *baʕaḏ* may be categorized

83 "Die Grundbedeutung der Wurzel בעד im Semitischen, soweit sich diese aufspüren läßt, ist, wie soeben angegeben ‚fern'; vom einfachen Verbum ‚fern sein'. Das einfache Nomen im Hebräischen von dieser Wurzel muß also die Bedeutung von ‚Abstand, Zwischenraum', *distance* oder *remoteness* haben."

84 Two examples, Isa 32:14 and Joel 2:8, deviate widely from this proposal and have been suggested to represent errors in the transmission of the text (Hoch de Long 1905, 30, 32).

as PATH.[85] The most common Hebrew usage of this function designates the action of looking *through* a bounded entity, such as a window in example (102), or exacting divine judgment *through* a dark cloud as with example (103).

(102) וַיַּשְׁקֵף אֲבִימֶלֶךְ מֶלֶךְ פְּלִשְׁתִּים בְּעַד הַחַלּוֹן

wayyašqep̄	*ʔaḇimɛleḵ*	*mɛleḵ*	*pəlištim*
look.down-WCPC.3M.SG.	PN	king.of	GN
bəʕaḏ	*haḥallon*		
THROUGH	the.window		

Abimelech, king of the Philistines, looked down through the window. (Gen 26:8)

(103) מַה־יָּדַע אֵל הַבְעַד עֲרָפֶל יִשְׁפּוֹט

mah-yɔḏaʕ	*ʔel*	***haḇəʕaḏ***	*ʕarɔp̄el*	*yišpoṭ*
INTR+know-SC.3M.SG.	god	**Q+THROUGH**	cloud	judge-PC.3M.SG.

What does God know? Can he (really) judge through the dark clouds? (Job 22:13)

The PATH designated by *baʕaḏ*, however, does not necessarily specify collinear motion over the shortest distance. For instance, the motion may follow the geometry of a building as one is lowered בְּעַד הַחַלּוֹן *bəʕaḏ haḥallon* 'through a window' as in example (104). Example (105) specifies a similar trajectory. In example (106), the motion is reversed. The relation marked by *baʕaḏ* in example (107) designates a parabolic motion בְּעַד הַחוֹמָה *bəʕaḏ haḥomɔ* 'over the wall', expelling a head from a besieged city.

(104) וַתּוֹרֶד מִיכַל אֶת־דָּוִד בְּעַד הַחַלּוֹן

wattoreḏ	*miḵal*	*ʔɛṯ-dɔwiḏ*	***bəʕaḏ***	*haḥallon*
lower-WCPC.3F.SG.	PN	DOM+PN	**THROUGH**	the.window

Michal lowered David through the window. (1 Sam 19:12)

(105) וַיִּפֹּל אֲחַזְיָה בְּעַד הַשְּׂבָכָה בַּעֲלִיָּתוֹ

wayyippol	*ʔᵃḥazyɔ*	***bəʕaḏ***	*haśśəḇɔḵɔ*
fall-WCPC.3M.SG.	PN	**THROUGH**	the.lattice
baʕᵃliyyɔṯo			
IN+upper.chamber+his			

Ahaziah fell through the lattice-window of his second-floor room. (2 Kgs 1:2)

(106) בְּעַד הַחַלּוֹנִים יָבֹאוּ כַּגַּנָּב

bəʕaḏ	*haḥallonim*	*yɔḇoʔu*	*kaggannɔḇ*
THROUGH	the.windows	enter-PC.3M.PL.	LIKE+the.thief

They entered in through windows like a thief. (Joel 2:9)

85 Gen 26:8; Josh 2:15; Judg 5:28 (2x); 1 Sam 19:12; 2 Sam 6:16; 20:21; 2 Kgs 1:2; 9:30; 1 Chr 15:29; Job 22:13; Prov 7:6; Joel 2:9.

(107) הִנֵּה רֹאשׁוֹ מֻשְׁלָךְ אֵלֶיךָ בְּעַד הַחוֹמָה

hinne	*rošo*	*mušlɔ̰k*	*ʔelɛ̰kɔ*
PTCL	head+his	be.caste-PTCP.M.SG.	TOWARD+you
bəʕaḏ		*haḥomɔ*	
THROUGH		the.wall	

His head will be thrown to you over the wall. (2 Sam 20:21)

3.5.2.2. PREP (BEHIND)

The preposition *baʕaḏ* express a locative notion designating the BACK-REGION, that is, the rear of the LM.[86] This function typically marks the spatial separation of one entity from another by means of an intermediary. Most commonly, the separating entity is a door as in example (108). The LM is behind a wall in example (109) and body-fat in example (110).

(108) וַיִּסְגֹּר דַּלְתוֹת הָעֲלִיָּה בַּעֲדוֹ

wayyisgor	*dalə̰to̰t*	*hɔʕaliyyɔ*	***baʕᵘḏo***
shut-WCPC.3M.SG.	doors.of	the.upper.chamber	**BEHIND**+**him**

He closed the doors of the upper chamber behind him. (Judg 3:23)

(109) גָּדַר בַּעֲדִי וְלֹא אֵצֵא

gɔḏar	***baʕᵘḏi***	*wəloʔ*	*ʔeṣeʔ*
wall.up+SC.3M.SG.	**BEHIND**+**me**	CJ+NEG	come.out-PC.1C.SG.

He has walled me in so that I cannot escape. (Lam 3:7)

(110) וַיָּבֹא גַם־הַנֶּצֶב אַחַר הַלַּהַב וַיִּסְגֹּר הַחֵלֶב בְּעַד הַלַּהַב

wayyɔḇoʔ	*gām-hanniṣṣɔḇ*	*ʔaḥar*	*hallahaḇ*
enter-WCPC.3M.SG.	also+the.handle	BEHIND	the.blade
wayyisgor	*haḥelɛḇ*	***bəʕaḏ***	*hallahaḇ*
shut-WCPC.3M.SG.	the.fat	**BEHIND**	the.blade

Even the hilt went in after the blade, and his fat closed over the blade. (Judg 3:22)

3.5.2.3. PREP (FOR)

The largest number of tokens of *baʕaḏ* marks the intended recipient of the particular action.[87] In English, this function is commonly conveyed by the preposition

86 Gen 7:16; Judg 3:22, 23; 9:51; 1 Sam 4:18; 2 Kgs 4:4 (2x), 5 (2x), 21, 33; Isa 26:20; Lam 3:7; Jonah 2:7.

87 Gen 20:7, 18; Exod 8:24; 32:30; Lev 9:7 (3x); 16:6 (2x), 11 (2x), 17 (3x), 24 (2x); Num 21:7; Deut 9:20; 1 Sam 1:6; 7:5, 9; 12:19, 23; 2 Sam 10:12 (2x); 12:16; 1 Kgs 13:6; 2 Kgs

for (Tyler and Evans 2003, 154). Although related to the benefactive function, this relation does not necessarily require that the action be directed *for the benefit of* an entity only that the action be directed at a recipient. Hence, one may pray for someone as with example (111) or make atonement for a group in example (112), but also Yahweh is said to restrain wombs from becoming pregnant in example (113).

(111) וְיִתְפַּלֵּל בַּעֲדֶךָּ

wəyiṯpallel	***baʕaḏəḵɔ***
pray-WCPC.3M.SG.	**FOR+you**

He prayed for you. (Gen 20:7)

(112) וְכִפֶּר בַּעֲדָם

wəḵapper	***baʕᵃḏɔm***
CJ+atone-IMPV.M.SG.	**FOR+them**

Make atonement for them. (Lev 9:7)

(113) כִּי־עָצֹר עָצַר יְהוָה בְּעַד כָּל־רֶחֶם לְבֵית אֲבִימֶלֶךְ

ki-ʕɔṣor		*ʕɔṣar*	*YHWH*
CAUS+restrain-INF.		restrain-SC.3M.SG.	PN
bəʕaḏ	*kɔl-rɛḥɛm*	*ləḇeṯ*	*ʔᵃbimɛlɛḵ*
FOR	every+womb	AT+house.of	PN

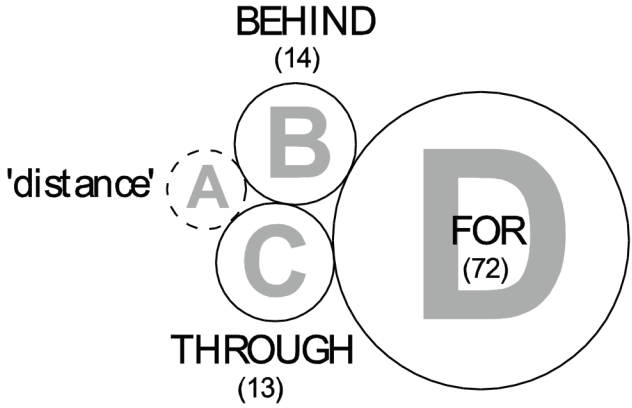
Because Yahweh withheld every womb in Abimelech's household. (Gen 20:18)

3.5.2.4. Grammaticalization of baʕaḏ

The grammaticalization pathways of *baʕaḏ* are uncertain because of the lack of ambiguous examples and no clear typological examples of similar shifts in other languages. These two criteria form the basis for positing the trajectory of change, thus this paucity of data does not provide a clear indication of the shifts from one function to another. Nevertheless, one may postulate using what is known about other changes that the original noun was plausibly extended to the locative or spatiodirectional function first and subsequently extended to mark the recipient of the verbal action (fig. 3.13).

19:4; 22:13 (3x); 1 Chr 19:13 (2x); 2 Chr 30:18; 34:21 (2x); Job 1:10 (3x); 2:4 (2x); 3:23; 6:22; 9:7; 42:8, 10; Pss 3:4; 72:15; 138:8; 139:11; Prov 20:16; 27:13; Isa 8:19; 37:4; Jer 7:16 (2x); 11:14 (3x); 14:11; 21:2; 29:7; 37:3; 42:2 (2x), 20; Ezek 22:30; 45:17, 22 (2x); Amos 9:10; Zech 12:8.

Figure 3.13. Semantic Map of *baʕaḏ*



Thus, a hypothetical continuum of change would be outlined as Noun > [LOC, PATH] > INTENDED RECIPIENT. A parallel change may be sited with the well-known typological shift from the allative to the dative case (Heine and Kuteva 2004, 32–33). A comparable functional change is probably attested in Akkadian (von Soden 1995, §67). However, it must be recognized that this hypothesized pathway of change is based entirely upon generalized analogy.

3.6. חֶלֶף ḥelɛp̄

3.6.1. Morphosyntax of ḥelɛp̄

Only two instances of the lexeme חֶלֶף *ḥelɛp̄* are attested in Biblical Hebrew, both in the eighteenth chapter of Numbers. A **qitl* nominal pattern of the root *ḤLP* accounts well for the morphological forms of *ḥelɛp̄* (Bauer and Leander 1922, 459–60). Two Biblical Hebrew verbal roots have the consonants of *ḤLP*. They may be divided by the etymology of the initial-root consonant, that is, between *ḫ* and *ḥ*—the velar [x] and pharyngeal [ħ] voiceless fricatives—even though they are heteronyms.

The first root *ḪLP*, from which this **ḫilp* nominal form is derived, denotes the verbal meaning ‘to pass on’ and in the derived stems ‘to change’. Cognate verbs are known in Arabic, Aramaic, and Geʕez. The Hebrew **qatīlat* noun meaning ‘replacement, exchange’ is related as well. The *ḪLP* verb is unlikely correlated. The semantics denote the idea of piercing as with the Hebrew verb ‘to pierce (through)’ (Josh 5:26; Job 20:24), Syriac verbal root ‘to pierce’, and Arabic noun *ḫalīfun* ‘sharp spear-head’.

3.6.2. Usage of ḥelɛp̄

The function word is used in two contexts to indicate the EXCHANGE of services for economic gain. According to the Torah, those in the tribe of Levi were not given a land apportionment in Canaan, but they were to serve the cult. In exchange for their cultic service in example (114), they were given the tithe of the people. Ninety percent of the tithe was theirs to keep as payment per example (115). In both of these clauses, the LM of *ḥelɛp̄* designates the exchanged commodity, that is, עֲבֹדָה *ʕᵃḇoḏɔ* 'service' to the cultus.

(114) וְלִבְנֵי לֵוִי הִנֵּה נָתַתִּי כָּל־מַעֲשֵׂר בְּיִשְׂרָאֵל לְנַחֲלָה חֵלֶף עֲבֹדָתָם

wəliḇəne	*lewi*		*hinne*	*nɔṯatti*
CJ+TO+sons.of	PN		PTCL	give-SC.1C.SG.
kɔl-maʕᵃśer	*byiśrɔʔel*	*lənaḥᵃlɔ*	***helɛp̄***	*ʕᵃḇoḏɔṯɔm*
every+tithe	IN+PN	FOR+inheritance	**EXCHANGE**	service+their

I gave the Levites the entire tithe of Israel as an inheritance for their service. (Num 18:21)

(115) כִּי־שָׂכָר הוּא לָכֶם חֵלֶף עֲבֹדַתְכֶם בְּאֹהֶל מוֹעֵד

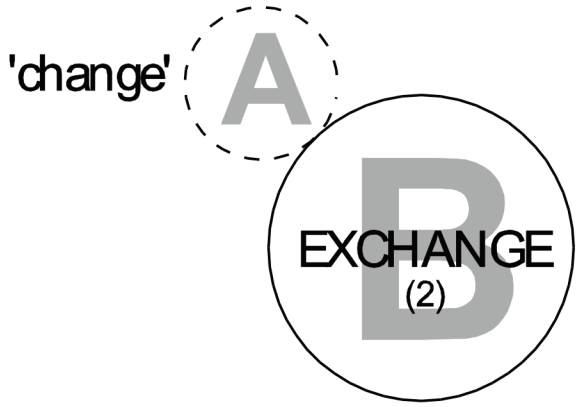
ki-śɔḵɔr	*huʔ*		*lɔḵɛm*
CAUS+payment-M.	that-M.		FOR+you-M.PL.
ḥelɛp̄	*ʕᵃḇoḏaṯəḵɛm*	*bəʔohɛl*	*moʕeḏ*
EXCHANGE	service+your-M.PL.	IN+tent.of	meeting

For that is your payment for your service in the Tent of Meeting. (Num 18:31)

3.6.3. Grammaticalization of ḥelɛp̄

As with the previous example, the paucity of transitional data precludes a sure analysis of the grammaticalization trajectory of *ḥelɛp̄*. However, two data point to the likely change of nominal to function word, Noun ('change') > PREP (EXCHANGE). First, the morphological form of the *ḥelɛp̄* can only be explained as originating from a nominal pattern, which semantically may be related to the Hebrew word חֲלִיפוֹת *ḥᵃlip̄ɔ* 'change (of clothes)' (Judg 14:12, 13, 19) indicating the idea of 'change'. Second, similar cross-linguistic shifts, such as French *en échange de* 'in exchange for', Arabic *badala* 'instead of', and Russian в обмен на 'in exchange for', may point to a broader typological phenomenon where nouns meaning 'change' or 'exchange' acquire the function EXCHANGE. Figure 3.14 graphs these supposed relations.

Figure 3.14. Semantic Map of *ḥelɛp̄*



3.7. יַעַן yaʕan

3.7.1. Morphosyntax of yaʕan

Two basic etymologies—one nominal and one verbal—have been suggested for the morphological form of יַעַן *yaʕan* (< **yaʕn*). The originating morphological structure from which it derives, however, ultimately remains indeterminate. In the words of Mulder (1973, 51), "The etymology … must be considered dubious."[88]

In his seminal work on noun patterns, Barth (1889, 226) suggests that *yaʕan* be classed with a handful of Hebrew examples exhibiting an archaic Semitic nominal prefix *y*-.[89]

> The earliest noun formation with prefixed *y*- was already disappearing when the Semitic languages were separated from one another. Ethiopic hardly has any, [and] Aramaic and Hebrew preserve very few remnants.[90]

Along with *yiṣhɔr* 'oil', he derives *yaʕan* from a **yaqtal* noun pattern (**yaʕnayu* > **yaʕᵘnɛ*), connecting it further with Arabic *maʕnan* 'meaning; sense' and Hebrew *ləmaʕan* 'so that' (Barth 1889, 230; also see Joüon and Muraoka 1991, §170f, n. 1). The proper names *yiṣḥɔq* and *yiṣhɔr* also attest this pattern

88 "Die Etymologie des Grundstammes dieser Partikel muss jedoch dunkel genannt werden."

89 See, also, Brockelmann 1908, §191–94, Kienast 2001, §109.

90 "Die uralte Nominalbildung mit präfigirtem *j* war bei der Trennung der semitischen Sprachen von einander bereits im Schwinden begriffen. Das Aethiop. hat fast gar keine, das Aram. und Hebr. nur sehr wenige Reste derselben erhalten."

(Layton 1990, 11). According to Bauer and Leander (1922, 487–88), the only other *yod*-prefixed, common nouns consist principally of the patterns **yaqtul* (*yaḥmur* 'roebuck', *yalquṭ* 'pouch', *yanšupˉ* 'heron') and **yuqūl* (*yḇul* 'produce'; *yqum* 'substance').

An alternative etymology derives *yaʕan* from a verb. Torczyner (1912, 391) suggests that it was semantically cognate to the Arabic idiom *yaʕni* 'that is (called), means', which he claims to have observed used identically to Hebrew 'because'.[91] Further, Bauer (1913, 241) suggests that *yaʕan* developed from **yaʕni*, the third-person "aorist" form of עָנָה *ʕnכ* 'to have in mind' (also, Bauer and Leander 1922, §81b). Elsewhere it is derived from the homophonous verb 'to answer' (Waltke and O'Connor 1990, §38.4.a).

This second verbal explanation is more probable considering the uniqueness of the nominal form and the uncommonness of *y*-prefix noun patterns in Hebrew. The stress and sound changes required for a nominal origin would require special pleading as they are uncharacteristic of typical Biblical Hebrew phonology. Such changes, however, are evidenced with the third-weak verbal paradigm. And the form itself is identical to the short prefix conjugation (**yiqtulØ*) of the root *ʕNY* 'to answer': יַעַן *yaʕan* 'he answered' (< **yaʕnay*).

3.7.2. Usage of yaʕan

Although the morphology of *yaʕan* is somewhat tentative, the semantic meaning and usages are certain. Some have suggested elaborate usage patterns based on form-critical analysis (Gowan 1971), but, at bottom, the lexeme marks a simple causal relation. Regarding its morphosyntax, it may serve as a hypotactic clause linker or as the head of an ad-verbal modifier with nouns, infinitives, or complementizers. In traditional grammatical terms, these functional usages are designated as conjunctions and prepositions (Joüon and Muraoka 1991, §170f, Waltke and O'Connor 1990, §11.2.8). As with previous examples, this structural variance does not account for an instance of grammaticalization as the function is identical for both the prepositional and conjunction usage. So, without a sure etymology and no functional variation, *yaʕan* cannot be accounted for within the present study of grammaticalization.

3.8. נֶגֶד nɛḡɛḏ

3.8.1. Morphosyntax of nɛḡɛḏ

The morphological derivation of נֶגֶד *nɛḡɛḏ* is anything but certain. In contrast with the normal paradigms of **qvtl*-type nouns, the forms of *nɛḡɛḏ* with a singular

91 "Ich selbst hörte es mehrmals geradezu in der Bedeutung von hebr. יען 'weil'."

suffix obscure the original base by preserving a realized *seghol* vowel in the first syllable—נֶגְדִּי *nɛḡdi*, נֶגְדְּךָ *nɛḡdəḵɔ*, נֶגְדּוֹ *nɛḡdo*, and נֶגְדָּה *nɛḡəḏɔ* (with the directive *he*). A similar phenomenon in which the pronominal forms preserve the initial vowel of the absolute form and not that of the originating base is identifiable with several lexemes, including נֶכֶד *nɛḵɛḏ* 'progeny' (נֶכְדִּי *nɛḵdi*) and יֶשַׁח *yɛšaḥ* 'filth' (יֶשְׁחֲךָ *yɛšḥᵃḵɔ*). The nominal pattern of *nɛḡɛḏ*, then, may be reconstructed as either **qatl* or **qitl* (Bauer and Leander 1922, 567g). The transcription data from the Hexapla, however, allows a preference for the latter (Brønno 1943, 242–43).

Regarding the root of *nɛḡɛḏ*, there is no question as to its consonant structure; however, its meaning is less transparent. Biblical Hebrew evidences a verbal root *NGD* meaning 'to announce, inform' and a noun נָגִיד *nɔḡiḏ* designating a 'ruler'. Elsewhere in Semitic, Syriac witnesses a cognate noun *naggidɔ* 'guide' which appears to be related to the verb *NGD* 'to lead'. The verbal meanings of 'to overcome, subdue' (G stem), 'to assist; draw near' (C stem), and 'ask for assistance' (Št stem) are found with the Arabic verbal root *NGD*. In Geʕez, the noun *ʔəngədā* 'foreigner' is related to the verb *nagada* 'to travel, journey'.[92] The lack of clear nominal usages of *nɛḡɛḏ* in Biblical Hebrew and the variation in verbal meanings witnessed across the Semitic languages make it difficult to ascertain with any degree of certainty the originating semantics of the root.

3.8.2. Usage of nɛḡɛḏ

Despite claims to the contrary in several lexica, no definitive nominal usage is found in Biblical Hebrew. An original substantive—designated variously as "what is conspicuous" (Brown, Driver, and Briggs 1906, 617) or "that which is opposite, that which corresponds" (Koehler and Baumgartner 2001, 666)—is dubious.[93] It is not too fanciful to suggest that the function word originated with a relational noun as the morphological form is indeed nominal in nature and typologically locative function words frequently derive from substantives. It is

92 The etymologically similar Geʕez noun *nagad* 'tribe; progeny' should plausibly be connected with the Hebrew semantic cognate נֶכֶד *nɛḵɛḏ* 'progeny, posterity' as the phonetic distance between the dorsal velar fricatives is close and other Semitic examples are attested for the confusion of /g/ and /k/ (Barth 1893, 33–34). Connecting these to Arabic *naǧl* 'offspring, child' (Leslau 1987, 391) or for that matter Arabic *naǧd* 'highland, plateau' as suggested by Bauer and Leander (1922, §81b) seems less probable on account of far fewer witnessed phonological variants of this type.

93 The form found twice in Psalm 116 (vv. 14, 18) in the phrase נֶגְדָּה־נָּא לְכָל־עַמּוֹ *nɛḡəḏɔ-nnɔʔ ləḵɔl-ʕammo* 'before[?] all of his people' is too enigmatic both morphologically and pragmatically to be classified with any surety as a singular noun (Bauer and Leander 1922, 567g).

important to note that no such usage is known in Biblical Hebrew and the comparative data do not provide a definite picture of what the original meaning of such a lexeme would be. The examination of *nɛḡɛḏ* must ultimately be limited to the functions only.

All usages of this function word may be classed generally as denoting the LOCATIVE (IN FRONT OF), that is, the FRONT-REGION designating the frontal orientation of the corresponding complement (van der Merwe, Naudé, and Kroeze 1999, §39.16).[94] The perspective is purely landmark-oriented, unlike the complex prepositions with *l-* and *min-* which exhibit orientation with regard to both the landmark and the trajector. This relation between landmark-only orientation and joint landmark-trajector orientation is analogous to the difference between English *in front of* and *before* (Tyler and Evans 2003, 156–69). For the most part, the FRONT-BACK spatial relationship is clear as in example (116). In instances where the landmark has no intrinsic front or back orientation, such as a mountain with example (117), the perspective is "conceived of as facing the speaker or deictic centre" akin to most European languages in distinction from several African languages in which "such objects are conceived of as facing in the same direction as the speaker or deictic centre" (Heine 1989, 86–87).

(116) נֶגֶד כָּל־עַמְּךָ אֶעֱשֶׂה נִפְלָאֹת

nɛḡɛḏ	*kɔl-ʕammək̲ɔ*	*ʔɛʕˤśɛ*	*nipīlɔʔoṯ*
LOC	all.of+nation+your	do-PC.1C.SG.	miracles

In front of all of your people, I will do wonders. (Exod 34:10)

(117) וַיִּחַן־שָׁם יִשְׂרָאֵל נֶגֶד הָהָר

wayyiḥan-šɔm	*yiśrɔʔel*	***nɛḡɛḏ***	*hɔhɔr*
camp-WCPC.3M.SG.+DEM	PN	**LOC**	the.mountain

Israel encamped there in front of the mountain. (Exod 19:2)

The locative sense is also extended metaphorically. It indicates that which is epistemologically known, and not just what is seen corporally as in example (118).

94 Gen 31:32, 37; 47:15; Exod 10:10; 19:2; 34:10; Num 25:4; Deut 31:11; Josh 3:16; 6:5, 20; 8:11, 33, 35; Ruth 4:4 (2x); 1 Sam 12:3 (2x); 15:30 (2x); 16:6; 2 Sam 12:12 (2x); 22:13; 1 Kgs 8:22; 20:27; 21:10, 13 (2x); 1 Chr 8:32; 9:38; 2 Chr 6:12, 13; 7:6; 8:14; Neh 3:10, 23, 29, 30, 31; 7:3; 8:3; 12:37; 13:21; Job 10:17; 26:6; Pss 16:8; 18:13; 22:26; 23:5; 31:20; 38:10, 18; 39:6; 44:16; 51:5; 52:11; 69:20; 78:12; 88:2; 89:37; 90:8; 109:15; 119:46, 168; 138:1; Prov 4:25; 15:11; Qoh 4:12; 6:8; Isa 5:21; 24:23; 40:17; 47:14; 49:16; 59:12; 61:11; Jer 31:39; Lam 3:35; Ezek 40:13, 23; 41:16; 42:1 (2x), 3 (2x); Hos 7:2; Joel 1:16; Amos 4:3.

(118) כִּי־פְשָׁעַי אֲנִי אֵדָע וְחַטָּאתִי נֶגְדִּי תָמִיד

ki-pāšɔʕay	*ʔᵃni*	*ʔeḏɔʕ*
CAUS+offenses+my	I	know-PC.1C.SG.
wəḥaṭṭɔṯi	***nɛḡdi***	*ṯɔmiḏ*
CJ+sin+my	**LOC+me**	continually

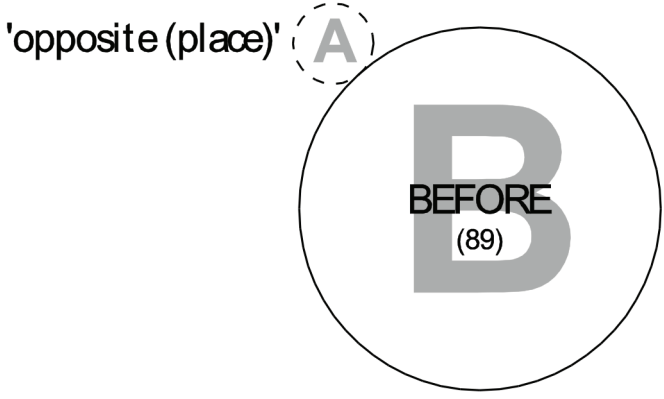
For I know my transgressions, and my sin is constantly before me. (Ps 51:5)

The relationship between this locative function and other similar functions, such as לִפְנֵי *lip̄ne*, is not entirely transparent. It may be posited that when used in conjunction, *nɛḡɛḏ* indicates the more distant of the two entities (see 1 Kgs 8:22 [2 Chr 6:12]; Ps 23:5). Nevertheless, when two distal relations are indicated, they need not be spatially equidistant whether the function word is repeated with each landmark (e.g., 1 Sam 12:3; 15:30; Ezek 42:1, 3) or not (e.g., Neh 8:3).

3.8.3. Grammaticalization of nɛḡɛḏ

On account of the paucity of evidence for the originating element, a full picture of the grammaticalization pathways of *nɛḡɛḏ* cannot be ascertained. Additionally, the present data do not support any obvious changes in the grammatical relations of the lexeme within Biblical Hebrew. There are no detectable shifts in functional usage. Figure 3.15 provides only a tentative assessment of the relationship.

Figure 3.15. Semantic Map of *nɛḡɛḏ*



3.9. נֹכַח noḵaḥ

3.9.1. Morphosyntax of noḵaḥ

The basic morphological form of נֹכַח *noḵaḥ* is consistent with the **qVtl* noun pattern, more specifically as a **qutl* form of the root *NKḤ*. It should further be noted that two instances of this lexeme (Exod 14:2; Ezek 46:9) exhibit a vowel dissimilation with the third-person masculine singular pronominal suffix of the expected form **nuḵḥVhu* to נִכְחוֹ *niḵḥo* (Gesenius, Kautzsch, and Cowley 1910, §27w; §93q, Bauer and Leander 1922, §81c").

The related Hebrew **qatul* lexeme of this root may well be connected (de Lagarde 1889, 30). This related lexeme נָכֹחַ indicates 'what is straight in front' which has been extended metaphorically to denote ethical 'uprightness' or 'honesty'. This latter usage is similar to the cognate Syriac adjective *nkiḥ* 'gentle, modest' and noun *nkiḥutɔ* 'meekness' as positive moral attributes. Any etymological connection to the Arabic verbal root *NKḤ* having to do with marriage is, at best, debatable.

3.9.2. Usage of noḵaḥ

Two uses of *noḵaḥ* are found: a noun meaning 'front' or 'opposite locality' and a function word expressing the locative relation BEFORE. The usage of this lexeme in combination with the preceding preposition *l-* to mark the BENEFACTIVE or intended recipient is discussed below (§4.13).

3.9.2.1. Noun ('front')

The noun *noḵaḥ* marks geographical locations or direction.[95] A polysemous anatomical source may be plausibly suggested (Svorou 1994, 84–85) but is not evidenced. Construed within a preposition phrase, the noun indicates a locality opposite a designated topographical feature. In example (119), the western border of the land is distinguished as the Mediterranean Sea running north to the Orontes River in Syria and extending עַד־נֹכַח לְבוֹא חֲמָת *ʕaḏ-noḵaḥ ləḇoʔ ḥᵃmɔṯ* 'to the point opposite the entrance of Hamath'. The locative PREP *ʕaḏ* 'unto' is combined with the noun *noḵaḥ* to form the first of two prepositional clauses which describe the western boundary of the land allotments of the twelve tribes of Israel.

95 Num 19:4; Josh 15:7; Ezek 47:20.

(119) וּפְאַת־יָם הַיָּם הַגָּדוֹל מִגְּבוּל עַד־נֹכַח לְבוֹא חֲמָת

upəʔaṯ-yɔm	*hayyɔm*	*haggɔḏol*	*miggəḇul*
CJ+side.of+west	the.sea	the.great	FROM+border
*ʕaḏ-**noḵaḥ***		*ləḇoʔ*	*ḥᵃmaṯ*
UNTO+**front**		AT+entrance.of	GN

As for the western side, the border will be the Great Sea unto the point opposite of the entrance of Hamath. (Ezek 47:20)

3.9.3. PREP (BEFORE)

The most common usage of *noḵaḥ* is the preposition expressing a locative relation situating an entity directly 'in front of' or 'before' the LM.[96] Unlike the preceding nouns, the preposition necessitates a following complement without an intervening function word. This difference between the noun and preposition may be observed by comparing the use in the following examples. In example (120), the noun is the head of the predicate clause and followed by a prepositional adjunct, נֹכַח לְמַעֲלֵה אֵדֻמִּים *noḵaḥ ləmaʕᵘle ʔᵃḏummim* 'the point opposite to the ascent of Adummim', describing the place which is opposite Gilgal where Judah's northern border extended, whereas in example (121) נֹכַח מַעֲלֵה אֵדֻמִּים *noḵaḥ maʕᵃle ʔᵃḏummim* 'in front of the ascent of Adummim' expresses almost the exact same notion describing the northward extent of Benjamin's allotment using the grammaticalized preposition with the complement phrase.

(120) וְצָפוֹנָה פְּנֶה אֶל־הַגִּלְגָּל אֲשֶׁר־נֹכַח לְמַעֲלֵה אֲדֻמִּים

wəṣɔpōnɔ	*ponɛ*	*ʔɛl-haggilgɔl*
CJ+northward	turning-PTCP.M.SG.	TOWARD+the.GN
*ʔᵃšɛr-**noḵaḥ***	*ləmaʕᵃle*	*ʔᵃḏummim*
REL+**front**	TO+ascent.of	GN

[The border] turns northward toward Gilgal, which is the point opposite to the ascent of Adummim. (Josh 15:7)

96 Exod 14:2; 26:35; 40:24; Josh 18:17; Judg 18:6; 19:10; 20:43; 1 Kgs 20:29; 22:35; 2 Chr 18:34; Esth 5:1 (2x); Prov 5:21; Jer 17:16; Lam 2:19; Ezek 14:3, 4, 7; 46:9.

(121) וְתָאַר מִצָּפוֹן ... וְיָצָא אֶל־גְּלִילוֹת אֲשֶׁר־נֹכַח מַעֲלֵה אֲדֻמִּים

wəʦɔʔar	*miṣṣɔpōn*	... *wəyɔṣɔʔ*	
CJ+turn-SC.3M.SG.	FROM+north	… CJ+go.out-SC.3M.SG.	
ʔɛl-gəliloʦ	*ʔᵃšɛr-**noḵaḥ***	*maʕᵘle*	*ʔᵃḏummim*
TOWARD+GN	REL+**BEFORE**	ascent.of	GN

[The border] turns north … going toward Geliloth [a.k.a. Gilgal] which is in front of the ascent of Adummim. (Josh 18:17)

3.9.4. Grammaticalization of noḵaḥ

The grammaticalization change witnessed by Hebrew *noḵaḥ* from an original noun to the locative function BEFORE may be tracked using similar cross-linguistic examples and ambiguous contexts extant in the Hebrew corpus. Locative function words frequently originate from nouns with spatial connotations. Specifically, *noḵaḥ* would fit into Svorou's category of "relational object parts" that give rise to similar grammatical notions across languages (1994, 70, 83–86). Others have recognized this extension as a general change found with many spatial notions cross-linguistically (Hopper and Traugott 2003, 66–67, Heine and Kuteva 2004, 44–45). Examples are attested with several Semitic prepositions having the locative function BEFORE: Ugaritic *qdm* 'before', Aramaic *qbl* 'opposite to', *qdm* 'before', Arabic *ʔamāma* 'before, in front of', Geʕez *fəṣma* 'before, in opposition (to)', and Akkadian *maḫra* 'before'.

(122) וְלָקַח אֶלְעָזָר הַכֹּהֵן מִדָּמָהּ בְּאֶצְבָּעוֹ וְהִזָּה אֶל־נֹכַח פְּנֵי אֹהֶל־מוֹעֵד מִדָּמָהּ שֶׁבַע פְּעָמִים

wəlɔqaḥ	*ʔɛlʕɔzɔr*	*hakkohen*	*middɔmɔh*
take-WCSC.3M.SG.	PN	the.priest	PART+blood+her
bəʔɛṣbɔʕo	*wəhizzɔ*	*ʔɛl-**noḵaḥ***	
ON+finger+his	sprinkle-WCSC.3M.SG.	TOWARD+**front.of/BEFORE**	
pəne	*ʔohɛl-moʕeḏ*	*middɔmɔh*	*šɛḇaʕ* *pəʕɔmim*
front.of	tent.of+meeting	PART+blood+her	seven times

Eleazar the priest shall take some of its [the red heifer's] blood on his finger and sprinkle it seven times in front of the entrance to the tent of meeting. (Num 19:4)

One example in the Hebrew corpus provides a probable context of change. In the purification rite of Num 19, the priest is commanded to slaughter a red heifer (vv. 1–3). The drained blood is applied to the entrance of the tent of meeting. The verbal idiom (הִזָּה אֶל- *hizzɔ ʔɛl*-NP 'sprinkle towards', see also Lev 14:51) designates the action of spraying something in the direction of an entity. In example (122), the spattering is the described as נֹכַח פְּנֵי אֹהֶל־מוֹעֵד *noḵaḥ pəne ʔohɛl-moʕeḏ* 'before the front of the tent of meeting'. The use of *noḵaḥ* and *pəne* appear to be

redundant as both refer to the front of the tent; however, such a context in which one or more elements may be seen as superfluous could have plausibly led to the reinterpretation of the initial lexeme as denoting the locative function BEFORE. The resulting rite requires the priest to splatter the blood of the sacrificed פָּרָה אֲדֻמָּה *pɔrɔ ʔᵃdummɔ* 'red heifer' in the direction of the entrance to the tent of meeting.

3.9.5. Mapping the Grammaticalization Trajectories of noḵaḥ

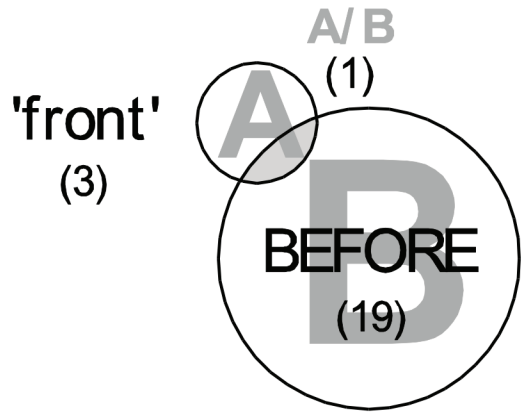
In sum, the function word derives from the original noun meaning 'front' as an expansion from the locative use. This development is represented below in a simple development chart as figure 3.16, or it may alternatively be outlined in the Overlap Model of figure 3.17. The Biblical Hebrew situation is represented as stage II with the coexisting functions of the relation noun 'front' and the locative function BEFORE. The synchronic semantic map is rendered in figure 3.18 with two meanings and a single overlapping token.

Figure 3.16. Functional Developments of *noḵaḥ*
Noun ('front') > PREP (BEFORE)

Figure 3.17. Overlap Model for *noḵaḥ*

Stage:	I	II
Noun	'front'	'front'
PREP		BEFORE

Figure 3.18. Semantic Map of *noḵaḥ*



3.10. סְבִיב *səḇiḇ*

3.10.1. Morphosyntax of səḇiḇ

The basic morphological form of סְבִיב *səḇiḇ* is unremarkable; however, some variance in its derived forms should be noted. The verbal root is *SBB* meaning 'to surround; turn around'. The widely-attested Semitic nominal pattern **qatīl* accounts for the morphological structure (Fox 2003, 187–96). In Biblical Hebrew this pattern is realized as *səḇiḇ* with an irreducible /i/ vowel (Bauer and Leander 1922, 470–71).

Both feminine and masculine plural morphemes are found with the construct form (fem. סְבִיבֹת *səḇiḇo͑t*; masc. סְבִיבֵי *səḇiḇe*) and with suffixes (fem. סְבִיבֹתָיו *səḇiḇo͑tɔw*, סְבִיבֹתֶיהָ *səḇiḇo͑tɛhɔ*; masc. סְבִיבָיו *səḇiḇɔw*, סְבִיבֶיהָ *səḇiḇɛhɔ*). The feminine type is more common, making up 86 percent of the differentiable forms. The diversity of morphological forms appears to be dialectal or stylistic and does not coincide with any detectable semantic, syntactic, or pragmatic difference. Some books witness a clear preference for one type over the other (see table 3.3). For instance, in Jeremiah a disproportionally high percentage is of the masculine-type (78 percent), whereas the feminine-type form is used exclusively in Ezekiel. Both forms are used in poetry to avoid homophony in parallel lines, as found with סְבִיבָיו *səḇiḇɔw* and סְבִיבוֹתֶיךָ *səḇiḇo͑tɛḵɔ* in Ps 89:8–9.

Table 3.3. Comparison of Feminine- and Masculine-type plurals of *səḇiḇ*

	Feminine-type	Masculine-type
Torah	14	
Joshua–Kings	10	
Chronicles	5	
Ezra-Nehemiah	5	
Job	3	
Psalms	6	4
Ecclesiastes	1	
Jeremiah	2	7
Lamentations	0	1
Ezekiel	23	
Daniel	1	
Zechariah	1	
Totals:	71 (86 %)	12 (14 %)

3.10.2. Usage of səb̲ib̲

The lexeme *səb̲ib̲* functions as a noun, adverb, and function word in Biblical Hebrew. Each of these usages is examined below.

3.10.2.1. Noun (‘environs’)

The geographic noun meaning ‘environs; vicinity; circumference’ is evident from several examples in the biblical corpus.[97] In conjunction with several other localities, the environs around Jerusalem are referred to in example (123). This sense may be extended to the individuals who live in proximity to a place as with example (124).

(123) שָׂדוֹת בַּכֶּסֶף יִקְנוּ ... בְּאֶרֶץ בִּנְיָמִן וּבִסְבִיבֵי יְרוּשָׁלַםִ וּבְעָרֵי יְהוּדָה וּבְעָרֵי הָהָר וּבְעָרֵי הַשְּׁפֵלָה וּבְעָרֵי הַנֶּגֶב

śɔd̲ot̲		*bakkɛsɛp̄*	*yiqnu*	...
fields		EXCHANGE+the.silver	buy-PC.3M.PL.	…
bəʔɛrɛṣ	*binyɔmin*	***ub̲isəb̲ib̲e***	*yərušɔlayim*	*ub̲əʕɔre*
IN.land.of	PN	**CJ+environs.of**	GN	CJ+cities.of
yəhud̲ɔ	*ub̲əʕɔre*	*hɔhɔr*	*ub̲əʕɔre*	*haššəp̄elɔ*
GN	CJ+cities.of	the.hill(land)	CJ+cities.of	the.GN
ub̲əʕɔre		*hannɛḡɛd̲*		
CJ+cities.of		the.GN		

They will purchase fields for money … in the land of Benjamin, in the environs of Jerusalem, in the cities of Judah, the highlands, the Shephelah, and the Negev. (Jer 32:44)

(124) תְּשִׂימֵנוּ חֶרְפָּה לִשְׁכֵנֵינוּ לַעַג וָקֶלֶס לִסְבִיבוֹתֵינוּ

təśimenu	*hɛrpɔ*	*lišk̲enenu*
make-PC.2M.SG.+us	reproach	TO+neighbors+our
laʕaḡ	*wɔqɛlɛs*	***lisəb̲ib̲ot̲enu***
scorn	CJ+derision	**TO+vicinity.dwellers+our**

You have made us the disgrace of our neighbors,
The derision and mockery of those around us. (Ps 44:14)

97 Exod 7:24; 1 Chr 11:8; Pss 44:14; 79:4; Qoh 1:6; Jer 17:26; 32:44; 33:13; Ezek 16:57; 28:26; 34:26; 48:35; Amos 3:11.

3.10.2.2. Adverb ('around')

The most frequent use of the lexeme is to denote the adverbial idea of 'on all sides' or 'surrounding', similar to the English adverb *around* but rarely with its *Aktionsart* connotations (O'Dowd 1998, 118–21, 160).[98]

3.10.2.3. PREP (AROUND)

Used as a function word, *səḇiḇ* expresses the spatiodirectional relation AROUND (O'Dowd 1998, 91–92).[99] The grammatical status of the lexeme may be observed most clearly in example (125) where it is used to modify the nominal כִּכָּר *kikkɔr* with a similar original meaning of 'environs, vicinity'.

(125) וַיֵּאָסְפוּ בְּנֵי הַמְשֹׁרְרִים וּמִן־הַכִּכָּר סְבִיבוֹת יְרוּשָׁלָ͏ִם וּמִן־חַצְרֵי נְטֹפָתִי

wayyeʔɔsəp̄u	*bəne*	*haməšorərim*
gather-WCPC.3M.PL.	sons.of	the.singers
umin-hakkikkɔr	***səḇiḇoṯ***	*yərušɔlayim*
CJ+FROM+the.environs	**AROUND**	GN
umin-haṣre	*nəṭop̄ɔṯi*	
CJ+FROM+villages.of	GN	

The singers—those both from the vicinity around Jerusalem and from the villages of the Netophoth—gathered. (Neh 12:28)

In example (126), the PP headed by *səḇiḇ* serves as the predicate of a verbless clause.

98 Gen 23:17; Exod 19:12; 25:11, 24, 25 (2x); 27:17; 28:32, 33 (2x), 34; 29:16, 20; 30:3 (2x); 37:2, 11,12 (2x), 26 (2x); 38:16, 20, 31 (2x); 39:23, 25, 26; 40:8; Lev 1:5, 11; 3:2, 8, 13; 7:2; 8:15, 19, 24; 9:12, 18; 14:41; 16:18; 25:31; Num 3:26, 37; 4:26, 32; 16:27; 32:33; 34:12; 35:4; Deut 12:10; 25:19; Josh 21:44; 23:1; Judg 2:14; 8:34; 20:29; 1 Sam 12:11; 14:21, 47; 31:9; 2 Sam 5:9; 7:1; 24:6; 1 Kgs 3:1; 5:4, 11, 18; 6:5 (2x); 7:12, 18, 20, 23 (2x), 24, 35, 36; 2 Kgs 11:8, 11; 25:1, 4, 10, 17; 1 Chr 10:9; 11:8; 22:9, 18; 2 Chr 4:2 (2x), 3 (3x); 14:6; 15:15; 20:30; 23:7, 10, 22; 34:6; Job 1:10; 10:8; 18:11; 19:10; Pss 3:7; 12:9; 31:14; 97:3; Isa 42:25; 49:18; 60:4; Jer 1:15; 4:17; 6:3, 25; 12:9; 20:3, 10; 25:9; 46:5; 49:29; 50:14, 15, 29; 51:2; 52:4, 7, 14, 22, 23; Lam 2:3, 22; Ezek 1:4, 27 (2x), 28; 4:2; 8:10 (2x); 16:33, 57 (2x); 19:8; 23:22, 24; 27:11 (2x); 28:23; 36:3, 4, 7; 37:2 (2x), 21; 39:17; 40:5 (2x), 14 (2x), 16 (4x), 17 (2x), 25 (2x), 29 (2x), 30 (2x), 33 (2x), 36 (2x), 43 (2x); 41:5 (3x), 6 (2x), 7 (2x), 8 (2x), 10 (2x), 11 (2x), 12 (2x), 16 (2x), 17 (2x), 19 (2x); 42:15 (2x), 16, 17, 20 (2x); 43:12, 12 (2x), 13, 17, 20; 45:1, 2 (2x); 46:23; Joel 4:11, 12; Zech 2:9; 12:2, 6; 14:14.

99 Gen 35:5; 41:48; Lev 25:44; Num 16:34; Deut 6:14; 13:8; 17:14; 21:2; Josh 19:8; Judg 2:12; 1 Kgs 6:6; 7:24; 2 Kgs 17:15; 1 Chr 4:33; 6:40; 2 Chr 17:10; Neh 5:17; 6:16; 12:28; Job 41:6; Pss 27:6; 50:3; 89:9; 97:2; Ezek 5:5, 6, 7 (2x), 14, 15; 11:12; 12:14; 32:22, 25, 26; 43:17; Zech 7:7.

(126) בִּהְיוֹת יְרוּשָׁלַ͏ִם יֹשֶׁבֶת וּשְׁלָוָה וְעָרֶיהָ סְבִיבֹתֶיהָ וְהַנֶּגֶב וְהַשְּׁפֵלָה יֹשֵׁב

bihəyo͟t	*yərušɔlayim*	*yošɛb̲ɛ͟t*	*ušəlewɔ*
when+be-INF.	GN	inhabiting-PTCP.F.SG.	CJ+quiet-F.
wəʕɔrɛhɔ	***səb̲i͟b̲o͟tɛhɔ***	*wəhannɛḡɛb̲*	*wəhaššəp̄elɔ*
CJ+cities +her	**AROUND+her**	CJ+the.GN	CJ+the.GN
yošeb̲			
dwelling-PTCP			

When Jerusalem was inhabited and tranquil, her cities were [still] around her, and the Negev and the Shephelah were occupied. (Zech 7:7)

3.10.2.4. Grammaticalization of səb̲i͟b̲

The grammaticalization from an original noun to the function word is outlined in this section with special attention to similar cross-linguistic examples and potential contexts of the change. According to Stolz (1991), Icelandic and Lithuanian witness the change from a noun meaning 'environs' to the spatial relation AROUND. Additionally, the English preposition *around* originates from the related meaning 'circumference' (O'Dowd 1998, 160). Heine and Kuteva (2004, 122–23) group this change together with other spatial expressions which evolve from "concrete nouns" such as BOUNDARY, EDGE, SIDE, and HOME. In Semitic, similar grammatical outputs are found with the Akkadian nominal *itâtum* 'circumference, vicinity; all around' and Geʕez *ʕawd* 'circle; environs; around'.

Several contexts of change may be posited for the Hebrew lexeme, but example (127) provides possibly one of the more probable grammaticalization situations.

(127) כִּי חֲצֵרִים בָּנוּ לָהֶם הַמְשֹׁרְרִים סְבִיבוֹת יְרוּשָׁלָ͏ִם

ki	*ḥ^{a}ṣerim*	*bɔnu*	*lɔhɛm*
CAUS	villages	build-SC.M.PL.	FOR+them
haməšor^{a}rim	***səb̲i͟b̲o͟t***		*yərušɔlɔyim*
the.singers	**environs.of/AROUND**		GN

For the singers had built villages for themselves around Jerusalem. (Neh 12:29)

Following upon a list of localities near Jerusalem from which singers came to help dedicate the reconstructed city wall, a note is inserted which indicates that the singers had built villages in the geographic area described by the NP סְבִיבוֹת יְרוּשָׁלָ͏ִם *səb̲i͟b̲o͟t yərušɔlɔyim* 'the environs of Jerusalem' which could have been reinterpreted as indicating the spatial location 'around Jerusalem'.

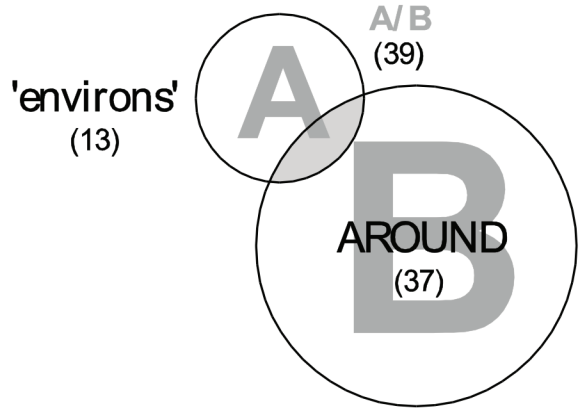
The grammaticalization of *səb̲i͟b̲* is represented by the functional development chart of figure 3.19 and the overlap model of figure 3.20. The primary grammaticalization with the ambiguous tokens is represented in figure 3.21.

Figure 3.19. Functional Developments of *səḇiḇ*
Noun (‘environs’) > PREP (AROUND)

Figure 3.20. Overlap Model for *səḇiḇ*

Stage:	I	II
Noun	‘environs’	‘environs’
PREP		AROUND

Figure 3.21. Semantic Map of *səḇiḇ*



3.11. עֵקֶב ʕeqɛḇ

3.11.1. Morphosyntax of ʕeqɛḇ

The form of עֵקֶב *ʕeqɛḇ* coincides with the nominal **qitl* pattern of a root *ʕQB* meaning ‘end; consequence; reward’. Additionally, a cognate lexeme referring to ‘heel’ is known from multiple Semitic languages including Hebrew, Arabic, and several Aramaic dialects. Biblical Hebrew *ʕeqɛḇ* ‘end’ may ultimately be a semantic derivative of the body part *ʕɔqeḇ* ‘heel’ (Waltke and O’Connor 1990, §38.4.a); however, this metaphorical correlation remains speculative.

3.11.2. Usage of ʕeqɛḇ

The lexeme *ʕeqɛḇ* is found in several contexts as a noun denoting ‘end’ and a causal function as both a preposition and an adverbializer. The uses of each are outlined and exemplified in the following subsections.

3.11.2.1. Noun ('end')

The noun may mean 'end' or 'reward' as in example (128). This usage is limited to six contexts in the Psalter and Proverbs.[100]

(128) עֵקֶב עֲנָוָה יִרְאַת יְהוָה עֹשֶׁר וְכָבוֹד וְחַיִּים

ʕeqɛb	*ʕ^{a}nɔwɔ*	*yirʔat*	*YHWH*	*ʕošɛr*	*wəkɔboḏ*	*wəḥayyim*
end.of	humility	fear.of	PN	wealth	CJ+glory	CJ+life

The end/reward of humility [and] the fear of Yahweh are riches, honor and life. (Prov 22:4)

3.11.2.2. PREP/ADVZ (CAUSE)

The grammatical function *ʕeqɛb* designates a causal relationship either heading a NP as a preposition[101] or with a following verb as an adverbializer.[102] Example (129) demonstrates that the preposition may be followed by a noun.

(129) מַצְדִּיקֵי רָשָׁע עֵקֶב שֹׁחַד

maṣddiqe	*rɔšɔʕ*	***ʕeqɛb***	*šoḥaḏ*
acquitting-PTCP.M.PL.	evil	**CAUS**	bribe

[Woe to] those exonerating the wicked as a consequence of a bribe. (Isa 5:23)

In the majority of the cases, however, the function word is construed with an embedded clause with the relative *ʔ^{a}šɛr* as in example (130).

(130) וְהִתְבָּרֲכוּ בְזַרְעֲךָ כֹּל גּוֹיֵי הָאָרֶץ עֵקֶב אֲשֶׁר שָׁמַעְתָּ בְּקֹלִי

wəhiṯbɔr^{a}ḵu	*bəzarʕ^{a}ḵɔ*	*kol*	*goye*	*hɔʔɔrɛṣ*
be.blessed-WCSC.3C.PL.	IN+seed+your	all.of	nations.of	the earth

ʕeqɛb	*ʔ^{a}šɛr*	*šɔmaʕtɔ*	*bəqoli*
CAUS	REL	listen-SC.2M.SG.	TO+voice+my

Every nation on earth will be blessed in your seed because you heeded my voice. (Gen 22:18)

In three instances the causal function word takes a verbal complement without *ʔ^{a}šɛr*. The categorization of this construction as a coordinating conjunction instead of an adverbializer is found in some traditional grammars (Gesenius, Kautzsch, and Cowley 1910, §158.b, Joüon and Muraoka 1991, §104b) but should be disregarded

100 Pss 19:12; 40:16; 70:4; 119:33, 112; Prov 22:4.
101 Gen 22:18; 26:5; 2 Sam 12:6, 10; Amos 4:12; Isa 5:23.
102 Num 14:24; Deut 7:12; 8:20.

as the following clauses serve clear subordinating functions. Each expresses a causal relation to the main verb. One instance is provided in example (131).

(131) כֵּן תֹּאבֵדוּן עֵקֶב לֹא תִשְׁמְעוּן בְּקוֹל יְהוָה אֱלֹהֵיכֶם

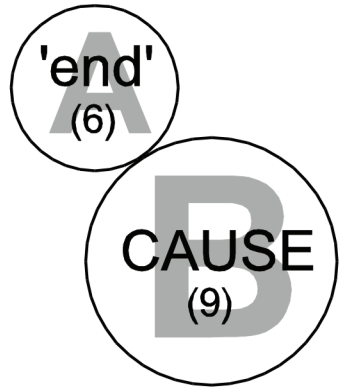
ken	*tobedun*	***ʕeqeb***	*loʔ*	*tišməʕun*
thus	perish-PC.2M.PL.	**CAUS**	NEG	listen-PC.2M.PL.
bəqol		*YHWH*		*ʔᵉlohekem*
to+voice.of		PN		god-your

Thus, you will perish because you did not heed the voice of Yahweh your God. (Deut 8:20)

3.11.3. Grammaticalization of ʕeqeb

No clear context for the shift of *ʕeqeb* from a noun to CAUSE is attested in Biblical Hebrew. Nevertheless, nouns connoting CAUSE, AIM, or the idea of *telo*s are well known cross-linguistically to grammaticalize into causal markers. Further, the syntagmatic use of *ʕeqeb* with the relatives likely led to the intra-clausal subordinating function as found with the adverbializer usage of *ʔaḥᵃre* (§3.2.3.2). The lack of internal data prevents a clearer mapping of its uses than what is found with figure 3.22.

Figure 3.22. Semantic Map of *ʕeqeb*



3.12. תַּחַת taḥat

3.12.1. Morphosyntax of taḥat

The basic pattern of תַּחַת *taḥat* is **qatl* from the root *TḤT*. Some have suggested that the originating form was **qitl* (Brønno 1943, 139–40) and shifted to the

extant form because of the middle laryngeal (Bauer and Leander 1922, §72l), but this is difficult to maintain in the absence of clear supporting evidence.

Multiple cognate lexemes are known throughout the West Semitic languages and establish the presence of the underlying root denoting a spatial depression. Phoenician and Punic *tḥt* 'under' is prepositional. In Amarna Canaanite, a form with suffix is found as *ta-aḫ-ta-mu* 'under them' (EA 252:26). Ugaritic demonstrates a locative preposition *tḥt* denoting 'under' and an adjective *tḥty* 'lower'. Along with an anatomical noun *tḥt* meaning 'lower parts' (KAI 222:C.23) and possibly by extension 'place' (KAI 224:7), a locative preposition of the same form is also found in the Sefire Treaty (KAI 222:A.6) and most Aramaic dialects. Built upon this root, Syriac has prepositions *ṯḥet* (with nouns) and *ṯḥut* (with suffixes) 'below, under', an adverb *taḥt* 'downward', adjectives *taḥtɔyɔ* 'lower', and various nouns (*taḥtɔyutɔ* 'descent' and *mtaḥtɔyutɔ* 'humiliation') as well as a denominal verb *taḥti* 'to abase, bring low'. Arabic *taḥta* is a locative preposition but is used as an adverbial phrase *min taḥtu* 'beneath', and *taḥtāniyyun* is an adjective 'lower; inferior'. The verb *təḥta* 'be humble' is found in Geʕez as well as nouns, prepositions, adverbs, and adjectives built from the same root. Finally, Sabaic *tḥt* 'below' is a function word, and *tḥtyn* 'lower part(s)' is a noun.

The Biblical Hebrew forms with pronominal suffixes, like several of the related Semitic function words, evidence some morphological variation. For the most part, the suffixed forms pattern after the plural nouns (table 3.4), similar to those with *ʔaḥ^{a}re* (§3.2.1).

Table 3.4. Nominal and Verbal Suffixed Forms of *taḥaṯ*

Suffix	Plural Noun-type (instances)	Verbal-type (instances)
1C.SG.	תַּחְתַּי *taḥtay* (1) תַּחְתָּי *taḥtɔy* [pausal] (8)	תַּחְתֵּנִי *taḥteni* (3)
1C.PL.	תַּחְתֵּינוּ *taḥtenu* (2)	
2M.SG.	תַּחְתֵּיךְ *taḥtɛ̱kɔ* (9)	
2M.PL.	תַּחְתֵּיכֶם *taḥtɛ̱kɛm* (2)	
3M.SG.	תַּחְתָּיו *taḥtɔw* (93)	תַּחְתּוֹ *taḥto* (4)
3M.PL.	תַּחְתֵּיהֶם *taḥtehɛm* (5)	תַּחְתָּם *taḥtɔm* (11)
3F.SG.	תַּחְתֶּיהָ *taḥtehɔ* (16)	תַּחְתֵּנָּה *taḥtɛnnɔ* (1)
3F.PL.	תַּחְתֵּיהֶן *taḥtehɛn* (1)	
Totals:	137 (88%)	19 (12%)

Unlike *ʔaḥ^{a}re*, however, there is no witnessed independent form with *-e*, which according to G. R. Driver (1937, 346) "ought … to be *t^{e}ḥāṯay*." Moreover, four suffix variants have been described as following the verbal paradigm (Gesenius, Kautzsch, and Cowley 1910, §103d) as previously seen with בַּעֲדֵנִי *baʕ^{a}ḏeni*

(§3.5.1).[103] For the analogous Ugaritic prepositions with the enclitic particle *-n*, a development from the energic verbal form has elsewhere been suggested (Tropper 2000, 781, 823). Pardee (2003–2004, 386) queries whether the expanded forms of Ugaritic function words, such as *ʕmn* 'with' (an alloform of *ʕm*), *hln* 'here', and *åpn* 'then', demonstrate a productive enclitic particle or merely a vestigial suffix. Further, the third-person feminine singular suffix is formally analogous to the Hebrew verb with the *nun energicum* (e.g., תֹּאכְלֶנָּה *toʔkᵃlɛnnɔ*), the negative existence particle אֵינֶנָּה *ʔenɛnnɔ*, and the durative adverb עוֹדֶנָּה *ʕoḏɛnnɔ* (Gesenius, Kautzsch, and Cowley 1910, §100o). Brockelmann (1899, 347, n. 1) suggests that this suffix-type with a connecting **-ann-* is to be explained as an internal Hebrew analogy, that is, from the reanalysis of the reduplicated preposition מִמֶּנָּה *mimmɛnnɔ* 'from her' (< **minmin*PREP + *-hă*3F.SG.) to *mimm*PREP + *-ɛnnɔ*3F.SG. on analogy to מִמְּךָ *mimməḵɔ* 'from you' (i.e., *mimm*PREP + *-ḵɔ*2M.SG.). Although this internal analogy may be explanative for some forms, it does not account for the non-duplicated *nun* forms, like תַּחְתֵּנִי *taḥteni* and בַּעֲדֵנִי *baʕᵃḏeni*, which may better be explained as preserving a frozen expansion particle as in Ugaritic.

3.12.2. Usage of taḥaṯ

The majority of the instances of *taḥaṯ* in Biblical Hebrew are function words, denoting spatial, substitutive, causal, or subjugative relations. A handful of usages, however, betray the originating noun and an adverb denoting a low place. Each of these six types of expressions are discussed and exemplified in the following sections.

3.12.3. Noun ('place')

The noun *taḥaṯ* is used to mean 'place', that is, a physical location or an abstract position, may be assessed in several contexts.[104] In example (132), *taḥaṯ* denotes the locality where the diseased stones were previously dislodged from the walls of a house and new stones were inserted. The replacement stones are said to be brought אֶל־תַּחַת הָאֲבָנִים *ʔɛl-taḥaṯ hɔʔᵃbɔnim* 'to the place of the stones'. This string is best analyzed as the directional preposition *ʔɛl* 'to(ward)' heading the noun phrase, *taḥaṯ hɔʔᵃbɔnim* 'the location of the stones'.

103 The third-person masculine singular and plural forms could alternatively be explained as patterning after the singular nouns with pronominal suffixes.

104 Exod 16:29; 29:30; Lev 6:15; 13:23, 28; 14:42; 16:32; Deut 2:12, 21, 22, 23; Josh 5:8; Judg 7:21; 1 Sam 14:9; 2 Sam 2:23; 3:12; 7:10; 1 Chr 17:9; Prov 11:8; Isa 46:7; Jer 38:9; Zech 12:6; 14:10.

(132) וְלָקְחוּ אֲבָנִים אֲחֵרוֹת וְהֵבִיאוּ אֶל־תַּחַת הָאֲבָנִים

wəlɔqəḥu	*ʔªbɔnim*	*ʔªheroṯ*
take-WCSC.3C.PL.	stones-F.	other-F.PL.
wəheḇiʔu	*ʔɛl-**taḥaṯ***	*hɔʔªbɔnim*
bring-WCSC.3C.PL.	TOWARD+**place.of**	the.stones

They shall take other stones and put [them] in the place of the [diseased] stones. (Lev 14:42)

3.12.4. Adverb ('below')

While the usual adverbial expression for BELOW is מִתַּחַת ל *mittaḥaṯ l-* (see Exod 20:4), in two poetic lines the independent form *taḥaṯ* is used equivalently.[105] This adverbial usage of *taḥaṯ* is seen in example (133) where the phrase תְּהוֹם רֹבֶצֶת תָּחַת *təhom roḇeṣeṯ tɔḥaṯ* 'the deep lying down below' is in parallel to שָׁמַיִם מֵעָל *šɔmayim meʕɔl* 'the heavens above'.

(133) וּיבָרֲכֶךָּ בִּרְכֹת שָׁמַיִם מֵעָל בִּרְכֹת תְּהוֹם רֹבֶצֶת תָּחַת

wiḇɔrəḵɛkkɔ		*birəḵoṯ*	*šɔmayim*	*meʕɔl*
CJ+bless-PC.3M.SG.+you-M.SG.		blessings.of	sky	above
birəḵoṯ	*təhom*	*roḇeṣeṯ*		***tɔḥaṯ***
blessings.of	depths	lying.down		**below**

He will bless you with the blessings of the heavens above,
With the blessings of the deep lying below. (Gen 49:25)

3.12.5. PREP (UNDER)

The locative relation designating that the trajector is located spatially subordinate to the landmark is expressed by the preposition *taḥaṯ*.[106] This expression is the

105 Gen 49:25; Deut 33:13.

106 Gen 7:19; 18:4, 8; 21:15; 24:2, 9; 35:4, 8; 47:29; Exod 17:12; 23:5; 24:4; 25:35 (3x); 26:19 (3x), 21 (2x), 25 (2x), 33; 27:5; 32:19; 36:24 (3x), 26 (2x), 30; 37:21 (3x); 38:4; Lev 15:10; 22:27; Num 6:18; 16:31; 22:27; Deut 2:25; 3:17; 4:11, 19, 49; 12:2; 28:23; Josh 4:9; 7:21; 7:22; 11:3; 11:17; 12:3; 13:5; 24:26; Judg 1:7; 4:5; 6:11; Ruth 2:12; 1 Sam 14:2; 22:6; 31:13; 2 Sam 18:9 (2x); 22:10, 37, 39; 1 Kgs 5:5 (2x); 7:44; 13:14; 14:23; 19:4, 5; 2 Kgs 9:13; 16:4, 17; 17:10; 1 Chr 10:12; 17:1; 29:24; 2 Chr 4:15; 28:4; Neh 2:14; Job 20:12; 26:8; 28:5, 24; 30:7, 14, 16, 20; 37:3; 40:12, 21; 41:3, 22; Pss 10:7; 18:10, 37, 39; 66:17; 91:4; 140:4; Qoh 1:3, 9, 13, 14; 2:3, 11, 17, 18, 19, 20, 22, 3:1, 16; 4:1, 3, 7, 15 (2x); 5:12, 17; 6:1, 12; 7:6; 8:9, 15 (2x), 17; 9:3, 6, 9 (2x), 11, 13; 10:5; Song 4:11; 8:3, 5; Isa 14:11; 25:10; 57:5 (2x); Jer 2:20; 3:13; 38:12; 52:20; Lam 3:34; Ezek 1:23; 6:13 (2x); 10:8, 20, 21; 17:6, 23; 24:5; 31:6; 32:27; Dan 9:12; Hos 4:13; Joel 1:17; Amos 2:13; Obad 7; Jonah 4:5; Mic 1:4; 4:4 (2x); Hab 3:7, 16; Mal 3:21.

usual idiom for locating an entity below another as with example (134). The function is further differentiated from the spatial noun where it is conjoined with a following noun phrase specifying a location, מַצַּב רַגְלֵי הַכֹּהֲנִים *maṣṣaḇ ragle hakkoh^{a}nim* 'the place of the feet of the priests' in example (135). The term may also denote the locative expression 'down a declivity' or 'at the base of [a mountain]' as in example (136).

(134) וַיִּקַּח אֶבֶן גְּדוֹלָה וַיְקִימֶהָ שָׁם תַּחַת הָאַלָּה
wayyiqqaḥ *ʔɛḇɛn* *gəḏolɔ*
take-WCPC.3M.SG. stone-F. large-F.
wayəqimɛhɔ *šɔm* ***taḥaṯ*** *hɔʔallɔ*
erect-WCPC.3M.SG.+her there **UNDER** the.oak-tree
He brought a large stone and erected it there under the oak. (Josh 24:26)

(135) וּשְׁתֵּים עֶשְׂרֵה אֲבָנִים הֵקִים יְהוֹשֻׁעַ בְּתוֹךְ הַיַּרְדֵּן תַּחַת מַצַּב רַגְלֵי הַכֹּהֲנִים
uštem *ʕɛśre* *ʔ^{a}ḇɔnim* *heqim* *yəhošu^{a}ʕ*
CJ+two ten stones set.up-SC.3M.SG. PN
bəṯoḵ *hayyarden* ***taḥaṯ*** *maṣṣaḇ* *ragle* *hakkoh^{a}nim*
IN+midst.of the.GN **UNDER** place.of feet.of the.priests
Joshua erected twelve stones in the middle of the Jordan River where the priests stood. (Josh 4:9)

(136) וְהַחִוִּי תַּחַת חֶרְמוֹן בְּאֶרֶץ הַמִּצְפָּה
wəhaḥiwwi ***taḥaṯ*** *hɛrmon* *bəʔɛrɛṣ* *hammiṣpɔ*
CJ+PN **UNDER** GN IN+land.of the.GN
The Hivites were [dwelling] at the foot of Mount Hermon in the land of Mizpah. (Josh 11:3)

3.12.6. PREP (INSTEAD)

The function word *taḥaṯ* expresses the substitutive relation similar to English *instead* or French *au lieu de*.[107] The landmarks include a succeeded priest (e.g., Deut

107 Gen 4:25; 22:13; 36:33, 34, 35, 36, 37, 38, 39; 44:4, 33; Exod 21:23, 24 (4x), 25 (3x), 26, 27, 36, 37 (2x); Lev 24:18, 20 (3x); Num 3:12, 41 (2x), 45 (2x); 8:16, 18; 32:14; Deut 10:6; 28:62; Josh 2:14; 4:9; Judg 15:2; 1 Sam 2:20; 25:21; 2 Sam 10:1; 16:8, 12; 17:25; 19:1, 14; 1 Kgs 1:30, 35; 2:35 (2x); 3:7; 5:15, 19; 8:20; 11:43; 14:20, 27, 31; 15:8, 24, 28; 16:6, 10, 28; 19:16; 20:39, 42 (2x); 21:2, 6; 22:40, 51; 2 Kgs 1:17; 3:27; 8:15, 24; 10:24, 35; 12:22; 13:9, 24; 14:16, 21, 29; 15:7, 10, 14, 22, 25, 30, 38; 16:20; 17:24; 19:37; 20:21; 21:18, 24, 26; 23:30, 34; 24:6, 17; 1 Chr 1:44, 45, 46, 47, 48, 49, 50; 19:1; 29:23, 28; 2 Chr 1:8; 6:10; 9:31; 12:10, 16; 13:23; 17:1; 21:1; 22:1; 24:27; 26:1, 23; 27:9; 28:27; 32:33; 33:20, 25; 36:1, 8; Esth 2:4, 17; Job 16:4; 28:15; 31:40 (2x); 34:24; Pss 35:12; 38:21; 45:17; 109:5 (2x); Prov 17:13; 21:18; Isa 3:24 (5x); 37:38; 43:3, 4 (2x); 55:13 (2x); 60:15, 17 (4x); 61:3 (3x), 7; Jer 18:20; 22:11; 28:13; 29:26; 37:1; Ezek 4:15; 16:32; 23:5; Dan 8:8, 22; Zeph 2:10.

10:6), king (e.g., 2 Sam 10:1), progeny (e.g., Gen 4:25), or substitutionary sacrifice (e.g., Gen 22:13). It is also used with an inanimate to explicate the replaced entity—most famously in the so-called law of retaliation or *lex talionis* (137).

(137) וְנָתַתָּה נֶפֶשׁ תַּחַת נָפֶשׁ עַיִן תַּחַת עַיִן שֵׁן תַּחַת שֵׁן

wənɔ̄ṯattɔ		*nɛp̄ɛš*	***taḥaṯ***		*nɔp̄ɛš*
give-WCSC.2M.SG.		life	**INSTEAD**		life
ʕayin	***taḥaṯ***	*ʕayin*	*šen*	***taḥaṯ***	*šen*
eye	**INSTEAD**	eye	tooth	**INSTEAD**	tooth

He shall give life for life, eye for eye, and tooth for tooth. (Exod 21:23–24)

3.12.7. PREP (CAUSE)

A causal function is differentiated with several usages of *taḥaṯ* + NP.[108] In example (138), the ground for the blessing of Yahweh's pleasure is portrayed as the day that David spared Saul's life. This idiom, according to example (139), is used clause-initially in parallel with a כִּי *ki* clause further delimiting the CAUSE of the proposition.

(138) וַיהוָה יְשַׁלֶּמְךָ טוֹבָה תַּחַת הַיּוֹם הַזֶּה אֲשֶׁר עָשִׂיתָה לִי

wYHWH		*yəšallɛməḵɔ*			*ṭoḇɔ*
CJ+PN		reward-PC.3M.SG.+2M.SG.			goodness
taḥaṯ	*hayyom*	*hazzɛ*	*ʔᵃšɛr*	*ʕɔśiṯɔ*	*li*
CAUS	the.day	this-M.	REL	do-SC.2M.SG.	TO+me

May Yahweh repay you with good on account of what you have done for me this day. (1 Sam 24:20)

(139) הֲתַחַת זֹאת לֹא יוּמַת שִׁמְעִי כִּי קִלֵּל אֶת־מְשִׁיחַ יְהוָה

hᵃṯaḥaṯ	*zoṯ*	*loʔ*	*yumaṯ*	*šimʕi*
Q+CAUS	this-F.	NEG	be.killed-PC.3M.SG.	PN
ki	*qillel*		*ʔɛṯ-məšiʰḥ*	*YHWH*
CAUS	curse-SC.3M.SG.		DOM+anointed.one.of	PN

Should not Shimei be executed for this, because he cursed Yahweh's anointed? (2 Sam 19:22)

108 Num 25:13; Deut 4:37; 21:14; 22:29; 28:47; 1 Sam 24:20; 26:21; 2 Sam 19:22; 2 Kgs 22:17; 2 Chr 21:12; 34:25; Job 34:26; Pss 38:21; 109:4; Prov 1:29; Isa 53:12; Jer 5:19; 29:19; 50:7; Ezek 36:34.

3.12.8. Grammaticalization of taḥaṯ

The grammaticalizations of *taḥaṯ* designate the changes from original noun to function words. These are traced with the potential contexts of change and similar cross-linguistic shifts of meaning in the following sections.

3.12.8.1. Noun ('place') > PREP (UNDER)

The change from a noun for location to a preposition denoting UNDER is attested in the world's languages (Heine and Kuteva 2004, 121-122). This particular resulting function is further characterized using Svorou's (1994, 79–83, 254) "surface under object" type of environmental landmark, which is identified in several languages including Bihari, Basque, and Yagaria. A similar change is elucidated in Akkadian where the regular expression of UNDER is expressed by the term *šaplānu* which is derived from a noun meaning 'the lower or underneath part' (von Soden 1995, §115g). And Leslau (1956, 244) outlines a parallel change with cognates of the term *taḥaṯ* in several Ethiopic dialects including Geʕez, Tigre, Tigrinya, Harari, and Amharic.

The potential situation of change may be observed in extant Hebrew contexts where ambiguous cases are understood to take on either the functional meaning. The theophoric vision of the elders of Israel upon Mount Sinai found in Exodus 24 provides such a situation. In example (140), the expression תַּחַת רַגְלָיו *ṯaḥaṯ raglɔw* refers to what is underneath God's feet either as a noun indicating the place/area or as a locative function for UNDER.

(140) וַיִּרְאוּ אֵת אֱלֹהֵי יִשְׂרָאֵל וְתַחַת רַגְלָיו כְּמַעֲשֵׂה לִבְנַת הַסַּפִּיר

wayyirʔu	*ʔeṯ*	*ʔˁlohe*	*yiśrɔʔel*
see-WCPC.3M.PL.	DOM	God.of	PN
wəṯaḥaṯ	*raglɔw*		
CJ+**place.of/UNDER**	feet+his		
kəmaʕᵘśe	*liḇnaṯ*	*hassappir*	
LIKE+work.of	stone.of	the.lapis-lazuli	

[The elders] saw the God of Israel—something like sapphire pavement was beneath his feet. (Exod 24:10)

Additionally, the term is used in conjunction with several entities to denote subordination or control.[109] A similar extension is found with Akkadian *šaplum* 'underside' being understood as UNDER or 'under the charge of'. In Hebrew, this

109 Gen 16:9, 41:35; Lev 27:32; Num 5:19, 20, 29; Judg 3:30; 1 Sam 21:4, 9; 2 Sam 22:40, 48; 1 Kgs 5:17; Job 9:13; Pss 8:7; 18:40, 48; 45:6; 47:4 (2x); 106:42; 144:2; Isa 3:6; 10:4 (2x), 16; Ezek 20:37.

supervisory function may have evolved from the idiom תַּחַת יָד *taḥaṯ yɔḏ* ‘under the hand of X [= person]’. This usage is exemplified by example (141). Here David queries the priest directly to see if a weapon was תַּחַת־יָדְךָ *ṯaḥaṯ yɔḏəḵɔ* ‘under your hand’ meaning ‘in the priest’s supervision’. Subsequently, this function was likely extended to situations with a person or object other than a ‘hand’. Accordingly, it is found with animate complements, in particular persons (e.g., Isa 10:4) or manifestations of the divine (e.g., Isa 10:16), or the personification of power, such as a staff. Example (142), then, demonstrates the extension of the supervisory idiom to persons portrayed metonymically as הַשֶּׁבֶט *haššɔḇəṭ* ‘the staff’. Whether this usage is indeed a separate function from UNDER or simply a metaphorical extension is difficult to ascertain; however, it is included herewith until further study may help determine whether or not it has an independent status.

(141) וְאֵין יֶשׁ־פֹּה תַּחַת־יָדְךָ חֲנִית אוֹ־חֶרֶב כִּי גַם־חַרְבִּי וְגַם־כֵּלַי לֹא־לָקַחְתִּי בְיָדִי

wəʔin	*yeš-po*	***ṯaḥaṯ***	*yɔḏəḵɔ*	*hᵃniṯ*
CJ+INTR	EXIST+here	**UNDER**	hand+your	spear
ʔo-hɔrɛḇ	*ki*	*gām-ḥarbi*	*wəḡam-kelay*	
OR+sword	CAUS	also+sword+my	CJ+also+weapons +my	
loʔ-lɔqaḥti		*ḇəyɔḏi*		
NEG+take-SC.1C.SG.		IN+hand+my		

Is there not here a spear or sword in your possession? For I have not brought along with me either my sword or weapons. (1 Sam 21:9)

(142) וְכָל־מַעְשַׂר בָּקָר וָצֹאן כֹּל אֲשֶׁר־יַעֲבֹר תַּחַת הַשָּׁבֶט הָעֲשִׂירִי יִהְיֶה־קֹדֶשׁ לַיהוָה

wəḵɔl-maʕśar	*bɔqɔr*		*wɔṣoʔn*
CJ+all.of+tithe	bovine		CJ+ovine
kol	*ʔᵃšɛr-yaʕᵃḇor*	***taḥaṯ***	*haššɔḇɛṭ*
all	REL+pass.over-PC.3M.SG.	**UNDER**	the.staff
hɔʕᵃśiri	*yihyɛ-qoḏɛš*		*lYHWH*
the.tenth	be-PC.3M.SG.+holy		TO+PN

As for every tithe of cattle or flock which should enter the care of shepherds, every tenth animal is to be dedicated to Yahweh. (Lev 27:32)

3.12.9. Noun (‘place’) > PREP (INSTEAD)

The original noun meaning ‘place’ is still detectable in the grammatical relation INSTEAD as in the English expression *in his stead* or *in the stead of*. This change is similar to German *anstelle von* and is designated as ‘place’ > INSTEAD by Heine and Kuteva (2004, 239–40). In Semitic, Akkadian *pittu(m)* ‘region, area’ comes to mean ‘instead of’ in Neo-Assyrian texts. A proposed context of change in Hebrew may be suggested in Gen 2:21 describing the divine creation of woman from a rib of the man. In this passage, presented as example (143), the verbal

clause ends with the phrase תַּחְתֶּנָּה *taḥtɛnnɔ* either designating the locality of the sealed wound or marking the substitutive relation of flesh for rib.

(143) וַיִּקַּח אַחַת מִצַּלְעֹתָיו וַיִּסְגֹּר בָּשָׂר תַּחְתֶּנָּה

wayyiqqaḥ	*ʔaḥaṯ*	*miṣṣalʕoṯɔw*
take-WCPC.3M.SG.	one-F.	FROM+ribs+his
wayyisgor	*bɔśɔr*	***taḥtɛnnɔ***
shut-WCPC.3M.SG.	flesh	**place.of/INSTEAD+her**

[God] took one of his ribs and closed up flesh in place of the rib. (Gen 2:21)

An additional shift is further delimited as the grammatical function EXCHANGE.[110] In example (144), Rachel offers Leah, her rival wife, a sexual encounter with their husband in exchange for a philter.

(144) לָכֵן יִשְׁכַּב עִמָּךְ הַלַּיְלָה תַּחַת דּוּדָאֵי בְנֵךְ

lɔ̱ken	*yiškaḇ*	*ʕimmɔ̱k*	*hallaylɔ*
therefore	lie.down-PC.3M.SG.	WITH+you-F.	tonight
taḥaṯ	*duḏɔʔe*		*ḇəneḵ*
EXCHANGE	mandrakes.of		son+your

Therefore, he may sleep with you tonight for your son's mandrakes. (Gen 30:15)

3.12.9.1. PREP (UNDER) > PREP (CAUSE)

The changes, 'place' to CAUSE and LOCATIVE to CAUSE, are witnessed cross-linguistically. The former may possibly include an additional locative step according to Heine and Kuteva (2004, 239). Two Semitic examples of causal relations, Geʕez *həyyanta* 'instead of; because of' and Akkadian *kīma* 'in place of; because', may be related, but the originating terms of each are obscured.

In Biblical Hebrew, the ambiguity between the locative preposition (UNDER) and the causal functions may well have provided the situation of change. An examination of example (145) affords such a context. On the one hand, the land may be said to be spatially located *taḥaṯ* 'under' its inhabitants. It is made clear by the following threefold merismus, on the other hand, that these dwellers are not passive witnesses to the defilement, but they are those causing the circumstances.

110 Examples of EXCHANGE are rare in the biblical corpus (elsewhere only at 1 Kgs 21:2) and are not known in later dialects of Hebrew.

(145) וְהָאָרֶץ חָנְפָה תַּחַת יֹשְׁבֶיהָ כִּי־עָבְרוּ תוֹרֹת חָלְפוּ חֹק הֵפֵרוּ בְּרִית עוֹלָם

wəhɔʔɔrɛṣ	*ḥɔnpɔ*	***taḥaṯ***	*yošəḇɛhɔ*
CJ+the.land-F.	be.defiled-SC.3F.SG.	**UNDER/CAUS**	inhabitants+her
ki-ʕɔḇəru	*ṯoroṯ*	*ḥɔləpū*	*ḥoq*
CAUS+transgress-SC.3C.PL.	laws	pass.by-SC.3C.PL.	statute
hepēru	*bəriṯ*		*ʕolɔm*
break-SC.3C.PL.	covenant.of		duration

The earth is defiled under/because of its inhabitants, for they contravene instructions, transgress statutes, and break enduring covenants. (Isa 24:5)

3.12.10. Mapping the Grammaticalization Trajectories of taḥaṯ

The grammaticalization changes are mapped using three methods. Figure 3.23 shows the successive shifts from the original noun to the functional usages. Both UNDER and INSTEAD are derived from the nominal, whereas CAUSE is a secondary grammaticalization from UNDER.

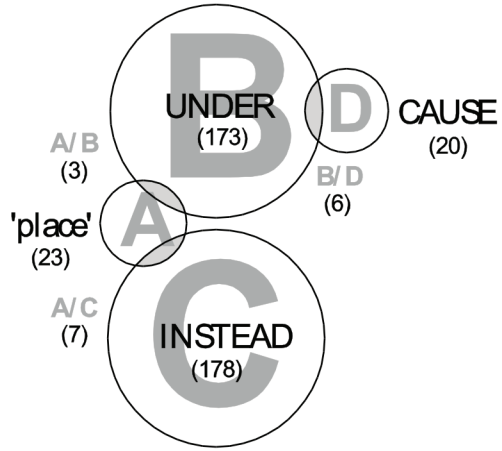
Figure 3.23. Functional Developments of *taḥaṯ*
Noun ('place') > PREP (UNDER) > PREP (CAUSE)
> PREP (INSTEAD)

The second model (fig. 3.24) illustrates the proposed expansion through relative time. No evidence is available to differentiate temporally between the developments of UNDER and INSTEAD, so both are placed in stage II with the CAUSAL deriving from the latter function. Last, figure 3.25 graphs the semantically overlapping meanings with their number of tokens.

Figure 3.24. Overlap Model for *taḥaṯ*

Stage:	I	II	III
Noun	'place'	'place'	'place'
PREP		UNDER	UNDER
PREP		INSTEAD	INSTEAD
PREP			CAUSE

Figure 3.25. Semantic Map of *taḥaṯ*



3.13. Other Prepositions

Several other nouns have been suggested to express functional relations in Biblical Hebrew (Olshausen 1861, §223). Four of these expressions are briefly overviewed in this section, although their rarity prohibits a definitive analysis. Each section discusses the suggested grammaticalizations, typological parallels, and originating forms.

3.13.1. בַּיִת *beṯ*

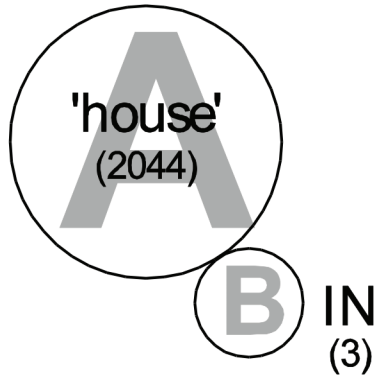
Three Biblical Hebrew examples suggest that the construct noun בֵּית *beṯ* 'house' may have functioned to mark a locative notion.[111] The eighth chapter of Proverbs provides the most evident example of the grammatical usage as a LOCATIVE. In a threefold sequence locating the place from which personified Wisdom beckons, the third adverbial modifier is בֵּית נְתִיבוֹת *beṯ nəṯiḇoṯ* 'along the paths' in example (146). Other locative functions with the noun *nəṯiḇoṯ* are expressed in Proverbs with *b-* (7:25), *bəʕok* (8:20) and ablative *min-* (1:15); elsewhere in Biblical Hebrew poetry *l-* (Ps 119:105) and *ʕal* (Job 19:8) are used.

111 Ezek 41:9, Job 8:17; Prov 8:2.

(146) בְּרֹאשׁ־מְרוֹמִים עַלֵּי־דָרֶךְ בֵּית נְתִיבוֹת נִצָּבָה
bəroš-məromim *ʕᵊle-ḏərɛḵ* ***beṯ*** *nəṯīḇoṯ* *niṣṣɔḇɔ*
on+head.of+heights upon+way **LOC**[?] paths stand-SC.3F.SG.
[Wisdom] stands on top of the heights, upon the roadway, (and) along the paths. (Prov 8:2)

Such a shift ('house' > LOCATIVE) is well-known cross-linguistically (Heine and Kuteva 2004, 176–7). Alternatively, this usage has been explained away as a simple metaphor, as a textual corruption, or as an unrelated lexeme similar to Syriac *bet* 'between' (**baynt* < *bayn* + *-ɔt*). Figure 3.26 shows these two meanings with the number of tokens in parentheses.

Figure 3.26. Semantic Map of *bet*



3.13.2. מִסַּת *missaṯ*

Only a single instance of מִסַּת *missaṯ* is witnessed at Deut 16:10. From the context of the clause, example (147), it has been suggested to be functioning to mark the value of the offering to be given, that is, 'corresponding to' or 'in the amount of' (Olshausen 1861, 430). This lexeme may likely be related etymologically to Punic *mst* '(complete) amount', Official Aramaic *mst* 'amount', and Syriac *messat* 'sufficiency' (found in the construct state only). The paucity of Biblical Hebrew data does not allow for a reliable analysis of potential changes.

(147) וְעָשִׂיתָ חַג שָׁבֻעוֹת לַיהוָה אֱלֹהֶיךָ מִסַּת נִדְבַת יָדְךָ

wəʕɔśiṯɔ	*ḥagᵊ*	*šɔbuʕoṯ*	*lYHWH*	*ʔᵉlohe̲ḵɔ*
do-WCSC.2M.SG.	festival.of	weeks	FOR+PN	god+your
missaṯ		*niḏəḇaṯ*		*yɔḏə̲ḵɔ*
amount.of		freewill.offering.of		hand+your

You shall perform the Feast of Weeks to Yahweh your God with a freewill offering. (Deut 16:10)

3.13.2.1. פֶּתַח *pɛṯaḥ*

Lambdin (1971, 185) has suggested that the noun פֶּתַח *pɛṯaḥ* 'opening' may also be used as a preposition denoting "at the opening of." The usage of this noun phrase as a preposition, however, is difficult to separate from the adverbial usage of the locative phrase. No clear instance of prepositional extension is detectable in the Biblical Hebrew corpus. Yet it cannot be dismissed that such an expansion is in an early stage of change.

3.13.2.2. קָבֶל *qɔḇɔl*

A lone attestation of קָבֶל *qɔḇɔl* may designate a locative expression. The context of the clause relays the conspiracy and killing of King Zechariah of Israel led by Shallum. The phrase קָבֶל־עָם *qɔḇɔl-ʕɔm* in example (148) could be understood as an adverbial modifier designating the location where Shallum struck down the king.

(148) וַיַּכֵּהוּ קָבֶל־עָם

wayyakkehu	***qɔḇɔl-ʕɔm***
strike-WCPC.3M.SG.+him	**BEFORE**+people

He struck him before the people. (2 Kgs 15:10)

Alternatively, this usage may well have been influenced by or borrowed from the Aramaic preposition *qbl* 'opposite, before'. One other example of a related noun with suffix, קָבְלוֹ *qɔḇɔllo* 'his battering ram' (Ezek 26:9), is also attested; however, the precise etymological relationship is uncertain (Bauer and Leander 1922, 582).[112]

3.14. Overview of Simple Prepositions

This chapter presented the examples of Biblical Hebrew nouns being grammaticalized into various functions. In each case, the usages of the noun and grammatical relations are outlined along with a detailed accounting of the

112 Some commentators follow a Greek tradition in which this expression is reread as the toponym *yblʕm* 'Ibleam' (Gray 1977, 620).

semantic layering and proposed contexts of change. The morphosyntactic environments consist of a noun in a genitive construction with a following NP which expanded its semantic meaning into a grammatical function. Similar trajectories of cross-linguistic change are noted with particular attention given to analogous Semitic examples.

The grammaticalized outcomes are outlined in table 3.5 organized according to the functional outcome and original nominal source. Reconstructed sources are marked with an asterisk. The resulting locative functions and logical relations account for the largest group of grammatical outcomes. The temporal and directional functions follow with the third- and fourth-most outcomes. The final group includes the development of a particle-verb construction.

Table 3.5. Grammatical Outcomes from Nouns

	Function	Outcome	Source
LOCATIVES:			
	AROUND	סְבִיב *səḇiḇ*	< *səḇiḇ* ‘environs (of)’
	BEFORE	נֶגֶד *nɛ̄ɛḏ*	< **nigd* ‘opposite (of)’
	BEFORE	נֹכַח *noḵaḥ*	< *noḵaḥ* ‘front (of object)’
	BEHIND	אַחַר *ʔaḥar*	< *ʔaḥar* ‘back (of)’
	BEHIND	אַחֲרֵי *ʔaḥare*	< *ʔaḥare* ‘back of’
	BEHIND	בַּעַד *baʕaḏ*	< **baʕḏ* ‘distance (of)’
	BESIDE	אֵצֶל *ʔeṣɛl*	< **ʔiṣl* ‘side (of)’
	BETWEEN	בֵּין *ben*	< **bayn* ‘space between’
	*IN	בֵּית *beṯ*	< *bayiṯ* ‘house’
	NEAR	אֵצֶל *ʔeṣɛl*	< *ʔeṣɛl* BESIDE
	UNDER	תַּחַת *taḥaṯ*	< *taḥaṯ* ‘place’
DIRECTIONALS:			
	THROUGH	בַּעַד *baʕaḏ*	< **baʕḏ* ‘distance’
	TOWARD	אֵצֶל *ʔeṣɛl*	< *ʔeṣɛl* BESIDE
TEMPORALS:			
	AFTER	אַחַר *ʔaḥar*	< *ʔaḥar* BEHIND
	AFTER	אַחֲרֵי *ʔaḥ^{a}re*	< *ʔaḥ^{a}re* BEHIND
	BETWEEN	בֵּין *ben*	< *ben* BETWEEN (LOC)
	THEN	אַחַר *ʔaḥar*	< *ʔaḥar* AFTER
LOGICAL-RELATIONS:			
	ACCORDING TO	אַחַר *ʔaḥar*	< *ʔaḥar* BEHIND
	*COMITATIVE	אַחַר *ʔaḥar*	< *ʔaḥar* AFTER
	CAUSE	אַחֲרֵי *ʔaḥ^{a}re*	< *ʔaḥ^{a}re* AFTER
	CAUSE	עֵקֶב *ʕeqɛḇ*	< *ʕeqɛḇ* ‘end (of)’
	CAUSE	תַּחַת *taḥaṯ*	< *taḥaṯ* UNDER

Table 3.5. Grammatical Outcomes from Nouns (cont.)

Function	Outcome	Source	
	EXCHANGE	חֵלֶף *ḥelɛp̄*	< **ḫilp* ‘change’
	FOR	בַּעַד *baʕaḏ*	< *baʕaḏ* BEHIND
	INSTEAD	תַּחַת *taḥaṯ*	< *taḥaṯ* ‘place’
	SEPARATIVE	בֵּין *ben*	< *ben* BETWEEN (LOC)
	RECIPROCATIVE	בֵּין *ben*	< *ben* BETWEEN (LOC)
OTHERS:			
	PTCL	אַחֲרֵי *ʔaḥ^{a}re*	< *ʔaḥ^{a}re* BEHIND

In the following chapter, the changes to polymorphic expressions, that is, multi-word prepositions, are examined. As in the present chapter, the focus is on the originating constructions and the changes that yield grammatical functions. The grammaticalization trajectories are likewise presented along with typologically similar changes.

4.
MULTI-WORD PREPOSITIONS

A multi-word preposition is defined as a combination of more than one discrete sequential morpheme that functions together as a unit. This third category of prepositions consists of six basic composite types which are attested in Biblical Hebrew. These include a combination of multiple PREPs and/or NPs (Lambdin 1971, 109–10). The polymorphic expressions are commonly described as compound, complex, and compound-complex prepositions. Compound prepositions, including category III.1 (מֵאֵת *meʔeṯ* 'out of, from') and III.2 (מֵעַל ל- *meʕal l-* 'above'), consist of the combination of two or more prepositions. The semantics of compound prepositions is characteristically an aggregate of the functions of the constituent units. An example is English *into* (< *in* + *to*), which combines the LOCATIVE and DIRECTIONAL functional relations. The blending of a preposition and noun phrase is designated as a complex preposition (category III.3 בִּגְלַל *biḡəlal* 'because of' and III.4 מִבֵּית ל- *mibbeṯ l-* 'within'). These sequences do not allow the string to be broken, are typically interpreted as having a single grammatical meaning, and may be near semantic equivalents of other function words. An example is found with English *in front of*. The sequence is uninterruptable: *she saw the man in* (***big*/*green*/*eastern*) *front of the house*. As a chuck, it expresses a locative relation denoting the FRONT-REGION. And *in front of* may be compared semantically to the locative function of *before*. The final two categories (III.5 מִלְּמַטָּה *milləmaṭṭɔ* 'from below' and III.6 אֶל מִחוּץ ל- *ʔel miḥuṣ l-* 'to the outside of') are designated as compound-complex prepositions. These consist of a composite of multiple consecutive prepositions and noun phrases (e.g., English *from in front of*). This last type serves to denote several prepositional functions in a single string as an aggregate, similar to compound prepositions, but where one component itself is a complex preposition.

4.1. Multi-Word Prepositions and Grammaticalization

Of these multi-word expressions, complex prepositions provide the clearest examples of grammaticalization as an outcome resulting in a single function. These strings undergo gradual change to their semantics and the fossilizing of their

constituent structure resulting in emergent grammatical functions (Bybee and Scheibman 1999). This dynamic transformation of their linguistic properties provides for the layering of multiple functions through their use in various environments. As such, "the same word sequence may be characterized by multiple constituent structures … [that] have gradient strengths rather than discrete boundaries" (Beckner and Bybee 2009, 29).

Contexts where ambiguity is possible provide the conditions where an extension of the linguistic sign may be prompted. Such contexts occasion both innovative grammatical functions (i.e., grammaticalization) and rebracketing of the sequence (i.e., syntactic reanalysis).[113] An example is observable with English *in front of*. The multi-word preposition originated as a preposition phrase, [*in*$_{\text{PREP}}$ [*front of the house*]$_{\text{NP}}$]$_{\text{PP}}$. In Modern English, the sequence has become a complex preposition which may be used in certain contexts to indicate a locative function akin to *before*. The structure has also undergone reanalysis: [[*in front of*]$_{\text{PREP}}$ [*the house*]$_{\text{NP}}$]$_{\text{PP}}$. This syntactic rebracketing is observable because the string, *in front of*, cannot be interrupted without the loss of the grammatical relationship.[114]

In addition to the resulting prepositional interpretation of these sequences, the grammaticalized changes coincide with the transformation of the mental lexicon where the polymorphic string is stored not merely as a sequence of independent lexemes but as a chunk. According to Newell (1990, 7), "A chunk is a unit of memory organization, formed by bringing together a set of already formed chunks in memory and welding them together into a larger unit." Thus, the recurrent usage of the discrete parts of a sequence may lead to the reorganization of the linguistic structure to a conjoined unit. What's more, Bybee (2010, 34) proposes that chunking is triggered by repetition and high frequency of use:

> If two or more smaller chunks occur together with some degree of frequency, a larger chunk containing the smaller ones is formed. Chunking is of course a property of both production and perception and contributes significantly to fluency and ease in both modes.

113 See above (§1.5.1) for a more thorough explanation of the interplay between these two changes.

114 This lexical and grammatical difference may be seen in comparing the following clauses: (a) *Bob walked in front of the building*, and (b) *Sally walked in the eastern front of the building*. The compound preposition *in front of* in clause (a) designates the locative relationship of the action, walking, to the LM, *the building*. So, the verb-preposition combination indicates that Bob traversed a path near a particular part of the building but did not enter the structure. In clause (b), the preposition phrase *in the eastern front of the building* denotes the NP, *the eastern front*, as the place of walking and the locative relationship is indicated by the locative preposition *in*. This sequence implies that Sally entered the building from a particular direction.

This connection to repetition may provide the evidential link between high frequency words and evolutionary extension of polymorphic expressions. At bottom, the syntagmatic change to complex prepositions may be best explained as chunking and provides an integral component for the grammaticalization of multi-word strings. The transformation is likely activated by the increased use of the grammaticalized tokens as compared to the lexicalized components.

In early studies of complex prepositions, constituency was established based exclusively on the invariability of certain syntactic characteristics without reference to other linguistic properties (Quirk and Mulholland 1964). This outmoded effort to establish constituent status purely using syntax has rightly been doubted by some critics (Seppänen, Bowen, and Trotta 1994, Pullum 2006), but the concept of multi-word prepositions need not be rejected entirely because the evidential grounds for such doubts have been exposed as dubious in various corpus studies (Hoffmann 2005). The syntactic characteristics, alternatively, designate the degree to which the original lexicalized usage may still be analyzable and does not indicate the actualization of grammaticalization. That is to say, the expansion of the construction acquiring innovative grammatical functions is independent of the depravation of the semantic value of the original string. Determining the constituency of a sequence type requires more than a consideration of the syntactic nature of individual examples, as found in these early studies. The model for analyzing this phenomenon should rather include an examination of the phonetic morphosyntactic, semantic, and pragmatic evidence placing it within a broader context of change (Beckner and Bybee 2009, 38–41).

4.2. Grammaticalization of Biblical Hebrew Multi-Word Prepositions

Of all the types of multi-word prepositions in Biblical Hebrew, only the third group of complex prepositions (PREP + NP) evidence semantic changes and the needed functional expansion to new contexts that provide for the clear assessment of innovative grammatical functions. One cannot absolutely determine that the other types did not undergo similar semantic shifts, but none may be differentiated with certainty from their equivalent lexicalized phrases. A conservative approach is taken in the present study for the sake of providing a network of the most definitive examples available.

4.3. The Development of Multi-Word Prepositions

The following sections discuss the discernable examples of grammaticalization with Biblical Hebrew multi-word prepositions. Each preposition is examined according to the morphology of its segments, its lexical and grammatical usage, and the proposed functional changes. The possible contexts of the extended and

acquired functions are given particular attention. Finally, the proposed grammaticalization trajectories are mapped.

Twenty-one Biblical Hebrew examples of category III prepositions demonstrate grammatical usages which may be separated from their original lexical meanings. These morphemes are listed in table 4.1.

Table 4.1. Complex Prepositions

		Form	Base	Root
III.3	1.	בִּגְלַל *bigəlal* ‘because of’	**bV+galal-*	PREP+NP
	2.	בְּיוֹם *bəyom* ‘when’	**bV+yawm*	PREP+NP
	3.	בַּעֲבוּר *baʕᵃbur* ‘because of’	**bV+ʕabūr*	PREP+NP
	4.	בְּקֶרֶב *bəqɛrɛb* ‘within’	**bV+qirb*	PREP+NP
	5.	בְּתוֹךְ *bətoḵ* ‘inside’	**bV+tawk*	PREP+NP
	6.	כְּפִי *kəpī* ‘according to’	**kV+pī*	PREP+NP
	7.	לְבַד *ləbaḏ* ‘by oneself’	**lV+badd*	PREP+NP
	8.	לְיַד *ləyaḏ* ‘near’	**lV+yad*	PREP+NP
	9.	לְמַעַן *ləmaʕan* ‘so that’	**lV+maʕn*	PREP+NP
	10.	לְנֹכַח *lənoḵaḥ* ‘before’	**l+qutl*	PREP+NP
	11.	לְפִי *ləpī* ‘according to’	**lV+pī*	PREP+NP
	12.	לִפְנֵי *lipne* ‘before’	**lV+panay*	PREP+NP
	13.	לִקְרַאת *liqraʔt* ‘toward’	**lV+qaraʔ+t*	PREP+INF
	14.	מִיּוֹם *miyyom* ‘since’	**min+yawm*	PREP+NP
	15.	מִפְּנֵי *mippəne* ‘because of’	**min+panay*	PREP+NP
	16.	עַל יֶרֶךְ *ʕal yɛrɛḵ* ‘beside’	**ʕal+yark*	PREP+NP
	17.	עַל פִּי *ʕal pi* ‘according to’	**ʕal+pī*	PREP+NP
	18.	בְּאֶפֶס *bəʔɛpɛs* ‘without’	**bV+ʔaps*	PREP+NP
	19.	בְּעֵת *bəʕet* ‘when’	**bV+ʕint*	PREP+NP
	20.	לְעֻמַּת *ləʕummaṯ* ‘beside’	**lV+ʕumm+at*	PREP+NP[?]
	21.	מִצַּד *miṣṣaḏ* ‘beside’	**min+ṣad*	PREP+NP

The first seventeen examples provide ample evidence for a change resulting in a grammatical function. The last four cases, however, provide some characteristics indicative of grammaticalization, but each is underspecified in some way—either on account of the limited number of tokens and/or indeterminate etymology. As such, these final examples are treated in a separate section at the end of this chapter (§4.21).

4.4. בִּגְלַל bigəlal

4.4.1. Morphosyntax of bigəlal

The compositional morphology of בִּגְלַל *bigəlal* includes the preposition *b-* 'in, on', the noun **galal* 'matter' in the construct state. A noun *גָּלָל *gəlal* is not extant in Biblical or post-Biblical Hebrew; however, the Arabic cognate *galal* meaning 'a great or momentous thing, affair, matter' likely is suggestive of its original semantics.

Several Semitic complex prepositions—such as Arabic *min galal-* 'because of' (< *min* 'from' + *galal* 'the matter of'), Syriac and Christian Palestinian Aramaic *lgll* 'on account of', and *bgll* 'because of' (< **gll* 'matter') in various other Aramaic dialects—are functionally and etymologically related. In later Hebrew, the complex preposition is witnessed in Ben Sira (10:8) and is well-known in Mishnaic literature. The Dead Sea Scroll collocation *bgll š-* 'because' has been suggested to be an Aramaic loan (Qimron 1986, 106) but is more likely a clause linker derived from the frequently attested sequencing of a preposition and a relative (cf. כַּאֲשֶׁר *kaʔᵃšɛr* 'as, according to; when', תַּחַת אֲשֶׁר *taḥaṯ ʔᵃšɛr* 'because', -עַד שֶׁ *ʕaḏ šɛ-* 'until', etc.).

4.4.2. Usage of bigəlal

Only the prepositional usage of the causative function is evident from the ten Biblical Hebrew occurrences of the string *bigəlal*.[115] Example (149) exemplifies the usage with an inanimate complement, בִּגְלַל הַדָּבָר הַזֶּה *bigəlal haddəḇɔr hazzɛ* 'because of this matter', which serves as the grounds of the divine blessing. The clause-initial conjunction, כִּי *ki* 'for', operates as marking an intra-clause causal relationship with the previous material.

(149) נָתוֹן תִּתֵּן לוֹ ... כִּי בִּגְלַל הַדָּבָר הַזֶּה יְבָרֶכְךָ יְהוָה אֱלֹהֶיךָ בְּכָל־מַעֲשֶׂךָ

nɔṯ̲on		*titten*	*lo*	...
give-INF.		give-PC.2M.SG.	TO+him	…
ki	***bigəlal***	*haddəḇ̲ɔr*	*hazzɛ*	
for-CJ	**CAUS+PREP**	the.matter	this	
yəḇ̲ɔrɛḵ̲ɔḵɔ	*YHWH*	*ʔᵉlohɛḵ̲ɔ*	*bəḵ̲ɔl-maʕᵃśɛḵ̲ɔ*	
bless-PC.3M.SG.+you	PN	god+your	IN+all+work+your	

You should surely give to him … for, because of this matter, Yahweh your God will bless you in all your work. (Deut 15:10)

115 Gen 12:13; 30:27; 39:5; Deut 1:37; 15:10; 18:12; 1 Kgs 14:16; Jer 11:17; 15:4; Mic 3:12.

4.4.3. Grammaticalization of biḡəlal

Assuming that the meaning of the Arabic cognate may be reconstructed in Proto-Hebrew, the originating construction would have shifted from a preposition phrase, [*b*-PREP [**gll* + NP]NP]PP 'on (the) matter (of)', to a complex preposition, [*bgll*PREP + NP]PP 'because of', with the causative function. Similar grammaticalization changes are witnessed in the world's languages and Semitic in particular. Heine and Kuteva (2004, 210–11) provide several cross-linguistic examples of nouns with the semantic range, 'matter', 'thing', 'case', or 'affair', which grammaticalize into causative prepositions. In Semitic, Syriac provides two examples of multi-word prepositions—*men ʕellat* 'because of' and *kʕellaṯ* 'because of'. Both of these causative complex prepositions likely derived from the noun *ʕelləṯɔ* 'cause; affair, thing', which was combined together with a preposition.

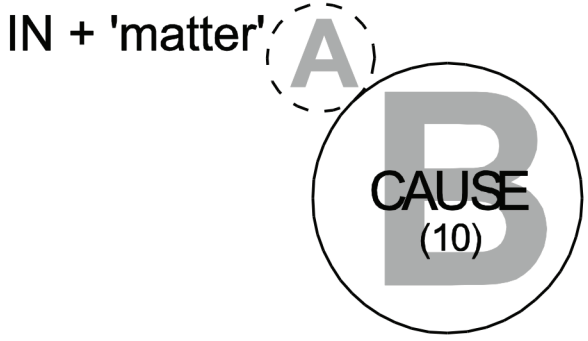
4.4.3.1. Mapping the Grammaticalization Trajectories of biḡəlal

The reconstructed grammaticalization to the causative complex preposition includes the syntactic reanalysis: [INPREP + 'matter'N]PP > PREP. The situation leading up to the earliest Hebrew examples would be represented by figure 4.1. Stage III represents Biblical Hebrew where only the causative function is extant. The tokens of this function are graphed with the suggested etymological source in figure 4.2.

Figure 4.1. Overlap Model for *biḡəlal*

Stage:	I	II	III
*PREP+N	IN+'matter'	IN+'matter'	
PREP		CAUSE	CAUSE

Figure 4.2. Semantic Map of *biḡəlal*



4.5. בְּיוֹם bəyom

4.5.1. Morphosyntax of bəyom

The compound בְּיוֹם *bəyom* is a composite of the preposition *b-* 'in, on' and the singular noun *yom* 'day (light)' in the construct state. In Biblical Hebrew, this primary noun follows two basic morphological patterns: the singular/dual is **yawm* (e.g., יוֹם *yom* 'day' and יוֹמַיִם *yomayim* 'two days') and the plural **yam* (e.g., יָמִים *yɔmim* 'days') (Garr 1985, 39).[116]

4.5.2. Usages of bəyom

Biblical Hebrew *bəyom* is followed by nominals, infinitives construct, and clauses. With nominal complements, the P-NP string consists of a simple preposition phrase where the noun *yom* is in the construct state with the following word, that is, [*b*-PREP [*yom*N.CSTR + NP]NP]PP. The situation with some infinitives and finite clauses, on the other hand, evidences the grammaticalization to a complex preposition with the structure, *bəyom*PREP + INF/S.

4.5.2.1. PREP (IN) + N ('day')

The most typical usage of *bəyom* in Biblical Hebrew is as the head element of an adjunct phrase preceding a definite or indefinite NP.[117] In these cases, the nominal meaning of *yom* 'day' remains. Example (150) demonstrates the construction where the meaning of *bəyom* may undoubtedly be assessed as 'on the day of', on account of its placement in juxtaposition with מִמָּחֳרָת *mimmɔḥˀrɔṯ* 'from the day after' and יוֹם הַשְּׁלִישִׁי *yom haššəliši* 'the third day'.

116 In the extrabiblical Siloam Tunnel Inscription dating from the eighth-century BCE, however, the form *ym* is evidenced. It may be suggestive of a regional dialect (Rendsburg and Schniedewind 2010), which leveled the plural nominal form **yam*, or alternatively analyzed as coming from the original form **yām* (Cross and Freedman 1952, 50).

117 Gen 35:3; Exod 31:15; 35:3; Lev 5:24; 7:15; 14:2,57 (2x); 19:6; 24:8 (2x); 25:9; Num 6:9; 10:10; 15:32; 25:18; 28:9, 26; Deut 9:10; 10:4; 18:16; 1 Sam 20:19; 2 Sam 22:19; 23:20; Neh 10:32; 13:19; Job 20:28; Pss 18:19; 77:3; 86:7; 110:3, 5; Prov 27:10; Qoh 8:8; Song 3:11 (2x); Isa 13:13; 17:11; 58:3, 13; Jer 17:21, 22, 24, 27; 18:17; Lam 1:12; 2:1; 21, 22; Ezek 1:28; 7:19; 13:5; 16:56; 27:27; 30:9; 32:10; 33:12; 46:1 (2x), 4, 6, 12; Obad 12 (2x), 13 (3x); Zeph 1:8, 18; 2:3; 1 Sam 13:22; Neh 10:32; Pss 20:2; 27:5; 41:2; 50:15; 78:9; 140:8; Prov 6:34; 11:4; 24:10; 25:13, 19, 20; 27:15; Qoh 7:14 (2x); Isa 27:8; 30:25; 49:8; Jer 16:19; 17:17; 36:6; 51:2; Ezek 22:24; 34:12; Hos 5:9; 10:14; Amos 1:14 (2x); 8:9; Obad 12, 14; Nah 1:7; 3:17; Zech 14:3.

(150) בְּיוֹם זִבְחֲכֶם יֵאָכֵל וּמִמָּחֳרָת וְהַנּוֹתָר עַד־יוֹם הַשְּׁלִישִׁי בָּאֵשׁ יִשָּׂרֵף

bəyom		*ziḇḥ^{a}ḵem*	*yeʔɔḵel*
IN+day.of		sacrifice+your-PL.	be.eaten-PC.3M.SG.
umimmɔḥ^{ɔ}rɔṯ		*wəhannoṯɔr*	
CJ+TEMP+following.day		CJ+the.remainder	
ʕaḏ-yom	*haššəliši*	*bɔʔeš*	*yiśśɔrep̄*
UNTIL+day	the.third	INST+fire	be.burned-PC.3M.SG.

[The sacrifice] shall be eaten on the day of your sacrifice or on the day after; but then on the third day whatever remains must be completely consumed in fire. (Lev 19:6)

4.5.2.2. PREP/ADVZ (WHEN)

Sixty-five instances of *bəyom* are followed by an infinitive.[118] Two of these examples (Lev 7:16; Obad 12), are best analyzed as the ungrammaticalized preposition phrases, 'in the day of', analogous to the usage with a NP complement. This usage is seen in example (151), where it is part of a sequence designating other distinct days. The preponderance of the instances with infinitive phrases, however, suggests the grammaticalization from the preposition phrase to a complex preposition functioning temporally. In example (152), the preposition phrase בַּיּוֹם הַהוּא *bayyom hahuʔ* 'in that day' designates the future day in which the prophecy will be fulfilled. It is followed immediately by the sequence *bəyom* 'when', demonstrating further what will transpire in that temporal setting.

(151) וְאִם־נֶדֶר אוֹ נְדָבָה זֶבַח קָרְבָּנוֹ בְּיוֹם הַקְרִיבוֹ אֶת־זִבְחוֹ יֵאָכֵל וּמִמָּחֳרָת וְהַנּוֹתָר מִמֶּנּוּ יֵאָכֵל

wəʔim-nɛḏɛr	*ʔo*	*nəḏəɔḇɔ*	*zɛḇaḥ*	*qɔrbɔno*
CJ+IF+vow	OR	freewill.offering	sacrifice.of	offering+his
bəyom	*haqriḇo*	*ʔɛṯ-zibḥo*	*yeʔɔḵel*	
IN+day.of	offer-INF+his	DOM+sacrifice+his	be.eaten-PC.3M.SG.	
umimmɔḥ^{ɔ}rɔṯ		*wəhannoṯɔr*	*mimmɛnnu*	
CJ+TEMP+following.day		CJ+the.remainder	FROM+it	
yeʔɔḵel				
be.eaten-PC.3M.SG.				

118 Gen 2:4, 17; 3:5; 5:1, 2; 21:8; Exod 10:28; 32:34; Lev 6:13; 7:16, 36, 38; 13:14; 23:12; Num 3:13; 6:13; 7:1, 10, 84; 8:17; 9:15; 30:6, 8, 9, 13, 15; Deut 21:16; Josh 9:12; 10:12; 14:11; Ruth 4:5; 1 Sam 21:7; 2 Sam 21:12; 1 Kgs 2:8, 37, 42; 2 Chr 26:5; Neh 13:15; Ps 20:10; Isa 11:16; 14:3; 30:26; Jer 7:22; 11:4, 7; 31:32; 34:13; Ezek 16:4, 5; 20:5; 24:25; 28:13; 31:15; 33:12 (2x); 34:12; 36:33; 38:18; 43:18; 44:27; Amos 3:14; Obad 11 (2x), 12; Nah 2:4.

If his offering is a vow or freewill-offering: his sacrifice should be eaten in the day of sacrificing and the remainder of it should be eaten the following day. (Lev 7:16)

(152) וְהָיָה בַּיּוֹם הַהוּא בְּיוֹם בּוֹא גּוֹג עַל־אַדְמַת יִשְׂרָאֵל נְאֻם אֲדֹנָי יְהוִה תַּעֲלֶה חֲמָתִי בְּאַפִּי

whɔyɔ		***bayyom***		*hahuʔ*
CJ+be-SC.3M.SG.		**IN+the.day**		that
bəyom		*boʔ*		*ḡoḡ*
WHEN		enter-SC.3M.SG.		GN
ʕal-ʔaḏmaṯ	*yiśrɔʔel*	*nəʔum*	*ʔᵃḏonɔy*	*YHWH*
INTO+land.of	PN	declaration.of	the.Lord	PN
taʕᵘlɛ		*ḥᵃmɔṯi*		*bəʔappi*
ascend-PC.3F.SG.		wrath-F.+my		IN+nose+my

On that day, when Gog enters into Israel, declares the Lord Yahweh, my fury will be aroused with my anger. (Ezek 38:18)

The string *bəyom* may also be used as a subordinated clause linker or adverbializer, immediately preceding a clause. The semantics of this clause linker is identical to that of the complex preposition. All thirteen examples with clausal complements have this usage.[119] Example (153) contains two usages with verbal and nonverbal complement clauses. The second and third cola begin with the repeated sequence of *bəyom* as an adverbializer signaling the temporal setting of the following main clause. The first instance is combined with the nominal clause, צַר לִי *ṣar li* 'I am distressed', the second instance by the verb, אֶקְרָא *ʔɛqrɔʔ* 'I call out'. In each case, the main clauses consist of an imperative verb, countering positively what the initial colon suggests in the negative.

(153) אַל־תַּסְתֵּר פָּנֶיךָ מִמֶּנִּי
בְּיוֹם צַר לִי הַטֵּה־אֵלַי אָזְנֶךָ
בְּיוֹם אֶקְרָא מַהֵר עֲנֵנִי

ʔal-taster		*pɔnɛḵɔ*		*mimmɛnni*
NEG+hide-PC.2M.SG.		face+your		FROM+me
bəyom *ṣar*	*li*	*haṭṭe-ʔelay*		*ʔɔznɛḵɔ*
WHEN distress	FOR+me	incline-IMP.M.SG.+TO+me		ear+your
bəyom *ʔɛqrɔʔ*	*maher*	*ʕᵘneni*		
WHEN call-PC.1C.SG.	hasten-IMP.M.SG.	answer-IMP.M.SG.+me		

Do not hide your face from me:
When I am troubled, bend your ear to me;
When I cry out, answer me quickly. (Ps 102:3)

119 Exod 6:28; Lev 7:35; Num 3:1; Deut 4:15; 2 Sam 22:1; Pss 18:1; 56:10; 59:17; 102:3 (2x); 138:3; Lam 3:57; Zech 8:9.

4.5.3. Grammaticalization of bəyom

The grammaticalization to the complex preposition may be traced to contexts where the meaning of *bəyom* is generalized beyond a specific day, that is, where the meaning necessitates an unspecified length of time. One plausible context may be found in example (154). The altar-dedication sacrifices are specified as having occurred over a twelve-day time period, but they are summarized as being given בְּיוֹם הִמָּשַׁח אֹתוֹ *bəyom ḥimməšaḥ ʔoṯo* 'in the day (i.e., time) of its dedication'. Subsequent to the semantic generalization of the noun, the grammaticalization to a complex preposition meaning 'when' occurred, evidenced by contexts such as example (155). Here, the temporal situation is presented by the phrase beginning with *bəyom* even though multiple days are in view.

(154) זֹאת חֲנֻכַּת הַמִּזְבֵּחַ בְּיוֹם הִמָּשַׁח אֹתוֹ

zoṯ	*ḥ[a]nukkaṯ*	*hammizbe[a]ḥ*	***bəyom***	*ḥimməšaḥ*	*ʔoṯo*
this	the.dedication.of	the.altar	**IN+time.of**	be.anointed-INF	him

This is the summary of the altar dedication at the time of its anointing. (Num 7:84)

(155) וְזֹאת תּוֹרַת הַנָּזִיר בְּיוֹם מְלֹאת יְמֵי נִזְרוֹ יָבִיא אֹתוֹ אֶל־פֶּתַח אֹהֶל מוֹעֵד

wəzoʔṯ	*toraṯ*		*hannəzir*
CJ+this	law.of		the.Nazirite
bəyom	*məloʔṯ*	*yəme*	*nizro*
IN+time.of/WHEN	complete-INF	days.of	consecration+his
yəḇiʔ	*ʔoṯo*	*ʔɛl-pɛṯaḥ*	*ʔohɛl*	*moʕeḏ*
bring-PC.3M.SG.	DOM+him	TO+door.of	tent.of	meeting

This is the law of the Nazirite: when the days of his consecration are complete, he shall be brought to the entrance to the tent of meeting. (Num 6:13)

Many cross-linguistic examples are proffered as deriving from an idiom for time that was expanded to a temporal preposition (Heine and Kuteva 2004). Semitic and other Hebrew cases are known with Biblical Hebrew *ʕaḏ* and Ugaritic *ʕd* originating from a noun for '(future) time', Targumic Aramaic *bzmn d-* 'when' from the noun *zmn* 'appointed time', and Ethiopic *gize* 'when' from the noun for 'time, hour; season'. Other Semitic examples, Akkadian *inūma* 'when', Ethiopic *ʔama* 'when', and Sabaic *y(w)m* 'when', are derived from nouns cognate to **yawm* 'day; time' and are used as prepositions and clause linkers with a variety of temporal functions.

As for the adverbializer, the identical form and function of the complex preposition indicate an analogy between the temporal preposition to the clause linker. The context for the change, however, is not altogether apparent. Previously (§3.1.3.2), three contexts were posited for the prepositional origin of an adverbializer: the preposition with a clausal complement (PREP + S), the shorting of the

preposition and the relative (PREP + REL + S), or the temporal preposition with an infinitive which is homophonous with a finite verb (PREP + INF/VP). As discussed in the context of similar changes, the first explanation appears to be most plausible.

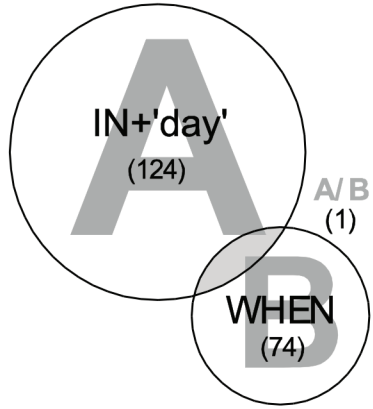
4.5.3.1. Mapping the Grammaticalization Trajectories of bəyom

The mapping of the grammaticalization of *bəyom* is a simple linear development. The IN + 'day' meaning expanded to the temporal function. In figure 4.3, the overlap model for *bəyom* suggests the expansion of the functions. The second stage represents the situation in Biblical Hebrew where both the complex preposition and the preposition phrase are found. Figure 4.4 presents the tokens of each meaning and the overlapping use.

Figure 4.3. Overlap Model for *bəyom*

Stage:	I	II
PREP+N	IN+'day'	IN+'day'
PREP/ADVZ		WHEN

Figure 4.4. Semantic Map of *bəyom*



4.6. בַּעֲבוּר *baʕᵃbur*

4.6.1. Morphosyntax of baʕᵃbur

The string בַּעֲבוּר *baʕᵃbur* consists of the simple preposition *b-* and the construct state noun עֲבוּר *ʕᵃbur* 'produce, yield, gain'. The noun is connected to the root *ʕBR* with the nominal pattern **qutūl* (Bauer and Leander 1922, 473). The verbal semantics of

the root denotes the action of traversing, that is, 'passing by' someone or 'crossing over' someplace. Several nouns with the related root include: עֵבֶר *ʕeḇɛr* 'region beyond; side', עֲבָרָה *ʕᵘḇɔrɔ* 'ford', and מַעְבָּרָה *maʕbɔrɔ* 'passage (way)'.[120]

The morphological pattern **qutūl* is a broken plural pattern in Arabic (Fox 2003, 209–10). Some have suggested that this pattern may be classed as having a collective sense in Biblical Hebrew (Gordon 1991). Examples of this collective sense include: גְּבוּל *gəḇul* 'boundary, border' (a group of mountains), גְּדוּד *gəḏuḏ* 'troop, band', גְּמוּל *gəmul* 'benefit, recompense', זְבוּב *zəḇuḇ* 'flies', זְבֻל *zəḇul* 'high place' (elevated dwelling places), זְכוּר *zəḵur* 'male populous', יְבוּל *yəḇul* 'harvest yield', לְבוּשׁ *ləḇuš* 'clothing', and רְכוּשׁ *rəḵuš* 'property, goods'. To this list may be added עֲבוּר *ʕᵘḇur* 'produce, yield' (< **ʕubūr*) which is plausibly the originating lexeme found with this complex preposition.

4.6.2. Usage of baʕᵘḇur

4.6.2.1. Noun ('produce')

Two occurrences of the noun *ʕᵘḇur* 'produce' are found in consecutive verses of Joshua chapter five (vv. 11–12). Both designate the product of harvesting crops after the Israelites entered the land of Canaan. In example (156) the NP *ʕᵘḇur hɔʔɔrɛṣ* 'the land's produce' is preceded by the SOURCE preposition מִן *min* 'from'. Even though the preposition is different from the string *baʕᵘḇur*, the meaning of the noun is apparent.

(156) וַיִּשְׁבֹּת הַמָּן מִמָּחֳרָת בְּאָכְלָם מֵעֲבוּר הָאָרֶץ

wayyišboṯ	*hammən*	*mimmɔḥʾrɔṯ*
cease-SC.3M.SG.	the.manna	FROM+next.day
bəʔɔḵlɔm	***meʕᵘḇur***	*hɔʔɔrɛṣ*
TEMP+eat-INF.+them	**FROM+produce.of**	the.land

The manna ceased on the following day when they ate from the harvest of the land. (Josh 5:12)

4.6.2.2. PREP (CAUSE)

The most common usage of *baʕᵘḇur*, occurring twenty-five times in Biblical Hebrew, is as a preposition with the causative function.[121] The construction is found

120 The word עֶבְרָה *ʕɛḇrɔ* 'outburst, rage' may plausibly be derived from the same root or may suggest the existence of a second homonymous root meaning 'to be angry'.

121 Gen 3:17; 8:21; 12:13, 16; 18:26, 29, 31, 32; 26:24; Exod 9:16; 13:8; 1 Sam 1:6; 12:22; 23:10; 2 Sam 5:12; 6:12; 7:21; 9:1, 7; 12:25; 13:2; 1 Chr 14:2; 17:19; 2 Chr 28:19; Pss 106:32; 132:10.

with both pronominal and nominal complements. This use is seen in example (157). The preposition phrase, בַּעֲבוּר שְׁמוֹ הַגָּדוֹל *baʕᵘ͗bur šəmo haggɔdol* ‘because of his great name’, serves to designate the basis or grounds for God’s fidelity to his chosen nation.

(157) לֹא־יִטֹּשׁ יְהוָה אֶת־עַמּוֹ בַּעֲבוּר שְׁמוֹ הַגָּדוֹל

loʔ-yiṭṭoš	*YHWH*	*ʔɛ̱t-ʕammo*
NEG+abandon-PC.3M.SG.	PN	DOM+people+his
baʕᵘ͗bur	*šəmo*	*haggɔdol*
CAUS	name+his	the.great

Yahweh will not forsake his people because of his great name. (1 Sam 12:22)

4.6.2.3. PREP (EXCHANGE)

The function of the complex preposition appears twice in the context of pecuniary exchange.[122] They are both evidenced in Amos. These bartering contexts are part of the prophet’s inventory of the fiduciary injustice and servitude taking place amongst the people. Each is found with either a verb of selling or buying. Sharing the verbal idea ‘to purchase’ with the first clause, the second clause in example (158) demonstrates that בַּעֲבוּר נַעֲלָיִם *baʕᵘ͗bur naʕᵘlɔyim* ‘for a pair of sandals’ is parallel to בַּכֶּסֶף *bakkɛsɛp̄* ‘in exchange for money’.

(158) לִקְנוֹת בַּכֶּסֶף דַּלִּים וְאֶבְיוֹן בַּעֲבוּר נַעֲלָיִם

liqnoṯ	***bakkɛsɛp̄***	*dallim*
TO+purchase-INF	**EXCHANGE+the.silver**	indigents
wəʔɛ̱byon	***baʕᵘ͗bur***	*naʕᵘlɔyim*
CJ+poor	**EXCHANGE**	pair.of.sandals

so that [we may] purchase the poor for money, and [we may purchase] the destitute in exchange for a pair of sandals. (Amos 8:6)

Thus, a functional equivalence between these two verbal modifiers—*baʕᵘ͗bur* and the *b-* of exchange—is obligatory.

4.6.2.4. PREP (PURPOSE)

Lastly, the complex preposition functions to designate purpose or result. Each of the four examples is found with an infinitive-construct complement.[123] Example (159) demonstrates this usage, בַּעֲבוּר הַזְכִּיר שְׁמִי *baʕᵘ͗bur hazkir šəmi* ‘for (the

122 Amos 2:6; 8:6

123 Exod 9:16; 2 Sam 10:3; 18:18; 1 Chr 19:3.

purpose of) commemorating my name'. This phrase modifies the initial main clause, אֵין־לִי בֵּן *ʔen-li bˤen* 'I do not have a son'.

(159) אֵין־לִי בֵן בַּעֲבוּר הַזְכִּיר שְׁמִי

ʔen-li	*bˤen*	***baʕᵃbˤur***	*hazkir*	*šəmi*
NOT.EXIST+TO+me	son	**PURP**	commemorate-INF	name+my

I do not have a son for remembering my name. (2 Sam 18:18)

4.6.3. Grammaticalization of baʕᵃbˤur

Assessing the trajectory of change for the grammaticalization of this complex preposition is difficult on several accounts. First, although the noun *ʕɔbˤur* 'produce' is a plausible candidate for an originating lexeme, it is impossible to establish it as the nominal source with certainty. Second, no clear examples of ambiguous semantics allow for the connection of one function to another. Third, the relative infrequency of the particle provides a limited picture of its extension.

In spite of these limitations, several cross-linguistic correlations may be provided to suggest origin of the preposition and its functional expansion. The Akkadian synonym *nēmelum* 'profit' may be connected to the causative function of *nēmel* 'because' suggesting, at a minimum, the possibility of an analogous development of Hebrew *ʕɔbˤur* 'produce' to a causative preposition. A similar cluster of meanings (CAUSE, PURPOSE, EXCHANGE) has been attributed to the Medieval Welsh preposition *ER* 'front' (Jones 2003, 133–4), which allows for a potential cross-linguistic pathway among these functions.

As for the link between the causative and purpose functions, the precise development remains obscured and the paucity of Biblical Hebrew data does not allow for a more conclusive assessment. Even within comparative studies of well-attested grammatical changes, the details of these functional shifts are tentative. Heine and Kuteva (2004, 247) posit that PURPOSE precedes CAUSE, but also, they admit that "there is no conclusive historical evidence to support this hypothesis." Thus, the development remains suggestive in the absence of more conclusive internal or external evidence of this change.

4.7. בְּקֶרֶב *bəqɛrɛb̲*

4.7.1. Morphosyntax of bəqɛrɛb̲

The string בְּקֶרֶב *bəqɛrɛb̲* is composed of the preposition *b-* 'in, on' and a noun קֶרֶב *qɛrɛb̲* 'innards, entrails; inward part(s)' in the construct state. The absolute form of the noun, *qɛrɛb̲* 'entrails', may be found at Exod 29:13, and the suffixed form קִרְבּוֹ *qirbo* 'its innards' at Exod 12:9. The latter suggests that the Biblical Hebrew nominal pattern is **qitl* (Revell 1985). The originating meaning of the noun refers

to the internal organs found in an animal or human abdomen as at Lev 1:13. Cognate nouns are known from Akkadian *qerbu* 'intestines; womb' and Arabic *qurb* 'abdomen'. The verbal root, *QRB* 'be near, close', is found in nearly all well-attested Semitic languages—Akkadian, Ethiopic, Old South Arabian, Arabic, Aramaic, Ugaritic, and various dialects of Canaanite.

4.7.2. Usage of bəqɛrɛḇ

Three main uses of *bəqɛrɛḇ* are distinguished in Biblical Hebrew. The string may be interpreted as (1) PREP + N, where the preposition is an interior-region locative and the noun is a body part of a person or animal, (2) a complex preposition, indicating a medial-region spatial gram, or (3) a complex preposition with a temporal function.

4.7.3. PREP (IN) + N ('inward part[s]')

The construction where the noun *qɛrɛḇ* means 'inward part(s)' is attested twenty-nine times.[124] The nominal component may refer to various internal anatomic elements from the vicinity of the abdomen to the chest: 'belly' (Mic 6:14), 'innards' as the place of emotions/thinking (equivalent to the לֵב *leḇ* 'heart/mind'; 1 Sam 25:37), and the interior container of the רוּחַ *ruᵃḥ* 'spirit' (Zech 12:1).

4.7.4. PREP (WITHIN)

The most commonly occurring use of *bəqɛrɛḇ* in Biblical Hebrew is as a locative preposition indicating the MEDIAL-REGION of an entity, that is, 'within'.[125] The landmark may be a location (e.g., 'a house', 'city', 'nation', 'battle', or 'camp'), a group of individuals (e.g., 'gods' or 'brothers'), or even an emotion (e.g., צָרָה *ṣɔrɔ* 'trouble, distress'; Ps 138:7). In example (160), the fifty righteous individuals

124 Gen 18:12; 25:22; 1 Sam 25:37; 1 Kgs 3:28; Job 20:14; Pss 39:4; 51:12; 55:5; 62:5; 94:19; 109:18, 22; Prov 26:24; Isa 19:1, 3, 14; 26:9; Jer 4:14; 9:7; 23:9; 31:33; Lam 1:20; Ezek 11:19; 36:26, 27; Hos 5:4; Mic 6:14; Hab 2:19; Zech 12:1.

125 Gen 18:24; 24:3; 45:6; 48:16; Exod 3:20; 8:18; 10:1; 17:7; 23:21; 33:3, 5; 34:9, 10, 12; Num 5:27; 11:4, 20, 21; 14:11, 14, 42; Deut 1:42; 4:5; 6:15; 7:21; 11:6; 13:2, 12, 15; 16:11; 17:2, 20; 18:2; 19:10, 20; 21:8; 23:15, 17; 26:11; 28:43; 29:10, 15; 31:16, 17; Josh 1:11; 3:2, 5, 10; 4:6; 6:25; 7:13; 8:35; 9:7, 16, 22; 10:1; 13:13; 16:10; 18:7; 24:5, 17, 23; Judg 1:29, 30, 32, 33; 3:5; 18:7, 20; 1 Sam 4:3; 16:13; 1 Kgs 20:39; Pss 36:2; 46:6; 48:10; 55:11, 12, 16; 74:4, 12; 78:28; 82:1; 101:2, 7; 110:2; 138:7; 147:13; Prov 14:33; 15:31; Isa 5:8, 25; 6:12; 7:22; 10:23; 12:6; 19:24; 24:13; 25:11; 29:23; 63:11; Jer 6:6; 14:9; 29:8; 46:21; Lam 1:15; 3:45; 4:13; Ezek 22:27; Hos 11:9; Joel 2:27; Amos 3:9; 5:17; 7:8, 10; Mic 3:11; 5:6, 7; Nah 3:13; Zeph 3:3, 5, 12, 15, 17; Zech 14:1.

are viewed as being located בְּקִרְבָּהּ *bəqirbɔh* ‘within [the city]’. This meaning is likewise specified by the functionally parallel phrase in the previous clause, בְּתוֹךְ עִיר *bətoḵ ʕir* ‘inside of the city’ (Gen 18:24).

(160) וְלֹא־תִשָּׂא לַמָּקוֹם לְמַעַן חֲמִשִּׁים הַצַּדִּיקִם אֲשֶׁר בְּקִרְבָּהּ

wəloʔ-ṯiśśɔʔ		*lammɔqom*		
CJ+NEG+carry-PC.2M.SG.		TO+the.place-F.		
ləmaʕan	*ḥᵃmiššim*	*haṣṣaddiqim*	*ʔᵃšer*	***bəqirbɔh***
ON+account.of	the.fifty	the.righteous-PL.	REL	**WITHIN+her**

Will you not be favorably disposed towards this place for the sake of fifty righteous within it? (Gen 18:24)

4.7.4.1. PREP (THROUGHOUT)

Two instances of the phrase בְּקֶרֶב שָׁנִים *bəqɛrɛḇ šɔnim* ‘in the midst of years’ are found in example (161). These examples demonstrate a grammaticalized temporal expression. Some commentators suggest various corrections to the text arguing for a litany of errors that may have led to the present reading (Barré 1988). Others have educed a figurative meaning, ‘in the midst of years’, without textual modification (Eaton 1964). Following Hiebert (1987), the construction is best understood as ‘through the years’, reflecting an expression of chronological duration without resorting to an emendation or an unevidenced metaphorical interpretation.

(161) בְּקֶרֶב שָׁנִים חַיֵּהוּ
בְּקֶרֶב שָׁנִים תּוֹדִיעַ

bəqɛrɛḇ	*šɔnim*	*ḥayyehu*
THROUGHOUT	years	revive-IMP.M.SG.+him
bəqɛrɛḇ	*šɔnim*	*toḏiᵃʕ*
THROUGHOUT	years	make.known-PC.2M.SG.

Throughout the years, revive it.
Throughout the years, make it known. (Hab 3:2)

4.7.5. Grammaticalization of bəqɛrɛḇ

The grammaticalization of *bəqɛrɛḇ* consists of a well-established pathway of change from an anatomic expression to locative and temporal prepositions. Categorizing these changes as INTERIOR to IN (SPATIAL) and INTERIOR to TEMPORAL, Heine and Kuteva (2004, 182–83) recognize this cross-linguistic development as “another instance of a more general process whereby relational nouns, including nouns for body parts, give rise to relational (typically spatial or temporal) grammatical markers.” Examples of this “general process” are manifold in Semitic and have been discussed in previous sections. Two cognate exemplars

will suffice for our purposes. In East Semitic, the Akkadian collocation *ina qerbu* designates the locative function 'inside'. Likewise, Moabite demonstrates the use of *bqrb* 'in the midst of' on the Mesha Stele (ll. 23–24) to designate the location of an entity trapped within a city.

The precise context of change in Hebrew is difficult to prove, but it plausibly stems from the semantic extension of the anatomic meaning 'inward parts' to a generalized interior-spatial designation. This change may be observed in example (162). The expression בְּקֶרֶב לִבִּי *bəqɛrɛḇ libbi* may denote either the inside of the object which is viewed as a container, 'in the interior of my heart', or a simple locative relation, 'within my heart'.

(162) נְאֻם־פֶּשַׁע לָרָשָׁע בְּקֶרֶב לִבִּי

nəʔum-pɛšaʕ	*lərɔšɔʕ*
declaration.of+transgression	FOR+the.wicked
bəqɛrɛḇ	*libbi*
IN+interior.of/WITHIN	heart+my

The revelation of wrongdoing is for the wickedness within my heart. (Ps 36:2)

On account of the paucity of examples with the temporal usage and no examples providing an ambiguous situation of change, the change to the TEMPORAL cannot be further specified except to note that temporal functions commonly originate from the expansion of spatial concepts as has been discussed with *ʔaḥar* (§3.1.3.2), *ʔaḥ^{a}re* (§3.2.4.2), and *ben* (§3.4.4.4).

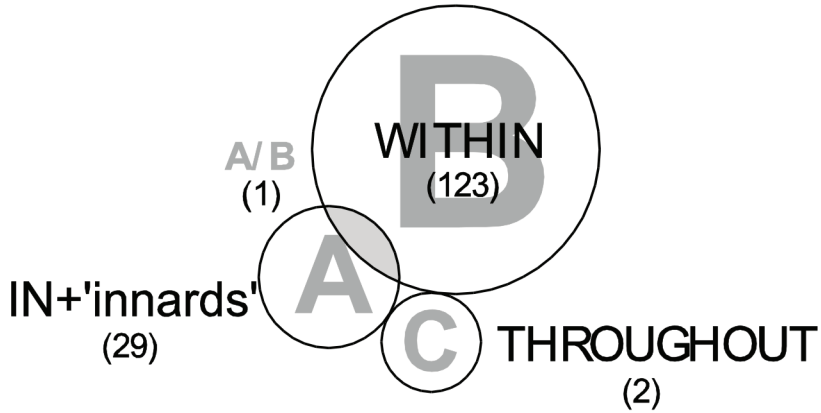
4.7.6. Mapping the Grammaticalization Trajectories of bəqɛrɛḇ

The grammaticalization pathways for *bəqɛrɛḇ* cannot be mapped any more precisely than using three stages in an Overlap Model (fig. 4.5). The locative complex preposition originates from the nominal usage with the structure of PREP + N. The temporal function, however, has an uncertain origin either having arisen similarly from the nominal structure or as a subsequent development from the locative function. The Biblical Hebrew situation is represented by stage III. A similar semantic mapping is presented in figure 4.6 with the addition of the tokens of each meaning in parentheses.

Figure 4.5. Overlap Model for *bəqɛrɛḇ*

Stage:	I	II	III
PREP+N	IN+'innards'	IN+'innards'	IN+'innards'
PREP		WITHIN	WITHIN
PREP		(THROUGHOUT)	THROUGHOUT

Figure 4.6. Semantic Map of *bəqɛrɛḇ*



4.8. בְּתוֹךְ *bəṯoḵ*

4.8.1. Morphosyntax of bəṯoḵ

The locative preposition *b-* 'in, on' and noun **tawk* 'half; middle' make up the constituent parts of the string בְּתוֹךְ *bəṯoḵ*. The absolute state of the noun תָּוֶךְ *tɔwɛḵ* 'middle' is attested twice (Judg 16:29 and Jer 39:3) with the expected Masoretic phonological realization of the **qatl* base including the epenthetic vowel. When unaccented, the noun exhibits monothongization (**aw* > *o*) to תּוֹךְ *toḵ-* both with the construct state and the suffixed forms.[126]

The etymology is obscured by the scarcity of related Semitic cognate terms which include only function words and derivatives thereof. In Ugaritic, *tk* marks a locative relation with or without the preceding preposition *b-* (Tropper 2000, 772, 775–76). The Phoenician dialects evince *btkt* (*KAI* 10:5) and *bmtkt* (*KAI* 24:5), used as the locative preposition 'in the midst of' (Friedrich and Röllig 1999, §252). In Biblical and Qumran Hebrew, תִּיכוֹן *tiḵon* 'middle, center' (in later Hebrew, תִּיכוֹנָה *tiḵonɔ*) is likely derivative exhibiting regressive vowel dissimilation on account of the suffix *-on* (Bauer and Leander 1922, 215). No associated middle-weak verbal root **TWK* is attested in any Semitic language.

4.8.2. Usage of bəṯoḵ

The Biblical Hebrew string *bəṯoḵ* is used as a preposition phrase and as a complex preposition functioning to mark locative, temporal, and comitative relations. A

126 1 Kgs 8:64; Ezek 15:4

fourth prepositional function as PATH (THROUGH) has been suggested but remains nascent.

4.8.2.1. PREP (IN) + N ('midst, center')

Five examples demonstrate the preposition phrase PREP (IN) + N ('midst, center').[127] Each instance is found in situations where the nominal component is marked as definite, that is, בַּתָּוֶךְ *battɔwɛḵ* 'in the middle'. The noun indicates the middle of an animal (Gen 15:10), the location of a city respective of its surrounding farmland (Num 35:5), the interior of an army (Josh 8:22), and the place between two entities or individuals (Isa 66:17). The case below, example (163), which was previously discussed with the locative function בֵּין *ben* 'between' as example (77), illustrates this usage. In this context, the hero Sampson affixes the torch between the tails of a pair of foxes, which is further specified as בַּתָּוֶךְ *battɔwɛḵ* 'at the middle'.

(163) וַיִּפֶן זָנָב אֶל־זָנָב וַיָּשֶׂם לַפִּיד אֶחָד בֵּין־שְׁנֵי הַזְּנָבוֹת בַּתָּוֶךְ

wayyɛp̄en	*zɔnɔḇ*	*ʔɛl-zɔnɔḇ*	*wayyɔśɛm*	
turn-WCPC.3M.SG.	tail	TOWARD+tail	put-WCPC.3M.SG.	
lappiḏ	*ʔɛḥɔḏ*	*ben-šəne*	*hazzənɔḇoṯ*	***battɔwɛḵ***
torch-M.	one-M.SG.	BTWN+two	tails	**IN+the.middle**

[Samson] put [two foxes] tail-to-tail and tied a torch between the (two) tails at the middle. (Judg 15:4)

4.8.2.2. PREP (INSIDE)

The locative preposition marking an INTERIOR- or INSIDE-REGION is found three hundred times.[128] It serves to designate the location 'within; inside' an entity,

127 Gen 15:10; Num 35:5; Josh 8:22; Judg 15:4; Isa 66:17.

128 Gen 3:3, 8; 9:21; 18:24, 26; 23:6, 9, 10; 35:2; 37:7; 40:20; 41:48; 42:5; Exod 2:5; 9:24; 11:4; 12:49; 14:16, 22, 27, 29; 15:19; 24:18; 25:8; 26:28; 28:32, 33; 29:45, 46; 36:33; 39:3 (4x), 23, 25 (2x); Lev 11:33; 15:31; 16:16, 29; 17:8, 10, 12, 13; 18:26; 20:14; 22:32; 24:10; 25:33; 26:11, 12, 25; Num 1:47, 49; 2:17, 33; 5:3, 21; 9:7; 13:32; 15:14, 26, 29; 16:3; 17:21; 18:20 (2x), 23, 24; 19:10; 25:11; 26:62 (2x); 27:3, 4, 7; 32:30; 33:8; 35:15, 34 (2x); Deut 11:3; 19:2; 32:51 (2x); Josh 3:17; 4:9, 10; 7:21; 8:9, 13; 13:9, 16; 14:3; 15:13; 16:9; 17:4 (2x), 6, 9; 19:1, 9, 49; 20:9; 21:41; 22:19, 31; Judg 7:16; 9:51; 12:4 (2x); 18:1; 20:42; 1 Sam 9:14, 18; 10:23; 11:11; 18:10; 25:29; 2 Sam 1:25; 6:17; 7:2; 20:12; 23:12, 20; 24:5; 1 Kgs 3:8; 6:13, 19, 27; 11:20 (2x); 2 Kgs 4:13; 6:20; 23:9; 1 Chr 11:14, 22; 16:1; 21:6; 2 Chr 6:13; 20:14; 32:4; Neh 4:16; 7:4; 9:11; Esth 4:1; Job 1:6; 2:1, 8; 15:19; 20:13; 42:15; Pss 22:15, 23; 40:9, 11; 57:5, 7; 68:26; 109:30; 116:19; 135:9; 136:14; 137:2; 143:4; Prov

location, or group. In example (164), the location of a structure is designated as being בְּתוֹךְ־הָעִיר *bə̲ṯo̲k̲-hɔʕîr* ‘inside the city’. Even though the exact location of Thebez is debated, the location of the strong tower would have been interior to the walls of the city or a part of the defensive structure itself (see, for instance, 2 Chr 32:5).

(164) וּמִגְדַּל־עֹז הָיָה בְּתוֹךְ־הָעִיר

umiḡdal-ʕoz	*hɔyɔ*	***bə̲ṯo̲k̲-hɔʕîr***
CJ+tower.of+strength	be-SC.3M.SG.	**INSIDE**+the.city

A strong tower was inside the city [of Thebez]. (Judg 9:51)

An abstract locative function is demonstrated in example (165) without reference to a corporeal situation. The emblematic location of the settlement is described metaphorically as בְּתוֹךְ מִרְמָה *bə̲ṯo̲k̲ mirmɔ* ‘inside lies’, locating it in opposition to the knowledge of God.

(165) שִׁבְתְּךָ בְּתוֹךְ מִרְמָה בְּמִרְמָה מֵאֲנוּ דַעַת־אוֹתִי

šiḇtḵɔ	***bə̲ṯo̲k̲***	*mirmɔ*	*bəmirmɔ*
dwelling-INF+your	**INSIDE**	lie	IN+lie
meʔᵃnu	*daʕa̲ṯ-ʔo̲ṯi*		
refuse-SC.3C.PL.	knowing-INF+DOM+me		

As your dwelling is amid lies within lies, they have refused any knowledge of me. (Jer 9:5)

4.8.2.3. PREP (DURING)

Two examples demonstrate the use of the complex preposition *bə̲ṯo̲k̲* as a temporal marker.[129] In example (166), this function marks time corresponding to Svorou’s (1994, 239) INTERIOR-TEMPORAL relation. The expression, בְּתוֹךְ הַלַּיְלָה *bə̲ṯo̲k̲ hallaylɔ* ‘in the midst of the night’, situates the time of the verbal activity within the hours of darkness.

1:14; 4:21; 5:14; 8:20; 17:2; 22:13; Isa 5:2; 6:5; 7:6; 19:19; 24:13; 41:18; 61:9; Jer 9:5; 29:32; 37:4, 12; 39:14; 40:5, 6; 50:37; 51:47; 52:25; Ezek 1:1, 16; 2:5; 3:15, 24, 25; 5:2, 5, 8, 10, 12; 6:7, 13; 7:4, 9; 8:11; 9:2, 4; 10:10; 11:1, 7, 11; 12:2, 10, 12, 24; 13:14; 14:14, 16, 18, 20; 16:53; 17:16; 18:18; 19:2, 6; 20:8, 9; 21:37; 22:3, 7, 9, 13, 18, 21, 22 (2x), 25 (2x), 26; 23:39; 24:5, 7, 11; 26:5, 12, 15; 27:27, 32, 34; 28:14, 22, 23; 29:3, 12 (2x), 21; 30:7 (2x); 31:14, 17, 18; 32:20, 25 (2x), 28, 32; 33:33; 34:12, 24; 36:23; 37:1, 26, 28; 39:7; 43:7, 9; 44:9; 46:10; 47:22 (3x); 48:8, 10, 15, 21, 22; Amos 3:9; Mic 2:12; 3:3; 7:14; Zeph 2:14; Hag 2:5; Zech 2:8, 9, 14, 15; 5:4, 7; 8:3, 8.

129 1 Kgs 3:20; Isa 16:3.

(166) וַתָּקָם בְּתוֹךְ הַלַּיְלָה

wattɔqɔm	***bəṯoḵ***	*hallaylɔ*
arise-WCPC.3F.SG.	**DURING**	the.night

She got up in the middle of the night. (1 Kgs 3:20)

4.8.2.4. PREP (COMITATIVE)

There are numerous difficulties with both defining the comitative function in Semitic (Goldenberg 1998) and categorizing it cross-linguistically (Stassen 2000, Lehmann and Shin 2005, Stolz, Stroh, and Urdze 2006, Nedjalkov 2007). The present study follows Arkhipov (2009, 224) in designating the comitative as "a morpho-syntactic construction used to express a non-obligatory participant set" in order to pluralize a clause participant. He suggests further that these constructions must conform to three grammatical restrictions of usage: the predicate cannot be repeated more than once, the pluralized participants are separately expressed, and the structural rank of the participants must be different.

In example (167), the complex preposition *bəṯoḵ* functions as a comitative function according to Arkhipov's definition. The comitative construction, בְּתוֹךְ אֲחֵיהֶם *bəṯoḵ ʔᵃḥehɛm* 'with their brothers', introduces an additional object participant. All three restrictions are accounted for. The plural pronominal suffix, that is, the verbal complement, is the pluralized participant without a repeated VP and with a separate expression. Third, it is designated by a different structural rank (i.e., as an adjunct rather than a complement).

(167) וַיֶּחְדַּל וְלֹא הֱמִיתָם בְּתוֹךְ אֲחֵיהֶם

wayyɛḥdal	*wəloʔ*	*hᶜmiṯɔm*
refrain-WCPC.3M.SG.	CJ+NEG	kill-SC.3M.SG.+them
bəṯoḵ	*ʔᵃḥehɛm*	
COM	brothers+their	

He desisted and did not kill them with their brothers. (Jer 41:8)

4.8.2.5. PREP (THROUGH)

In Biblical Hebrew three examples of *bəṯoḵ* suggest a shift from a locative function to the movement relation THROUGH.[130] This PATH function denotes a transversal of a two-dimensional space (city or gateway) along a linear axis. Directionality, however, appears to be unmarked by this expression (Svorou 1994, 24–31).

In example (168), the initial verbal action *ʕBR* 'cross over' is followed by two parallel phrases each headed by *bəṯoḵ*. These two adjuncts mark the

130 Ezek 9:4 (2x); 2 Chr 23:20.

movement through the location where the messenger is commanded to pass. What's more, the PATH function stands in clear contrast with the LOCATIVE, or INTERIOR-REGION relation, found at the end of the clause with בְּתוֹכָהּ *bəṯoḵ-ɔh* 'within it [the city]'.

(168) עֲבֹר בְּתוֹךְ הָעִיר בְּתוֹךְ יְרוּשָׁלִַם וְהִתְוִיתָ תָּו עַל־מִצְחוֹת הָאֲנָשִׁים הַנֶּאֱנָחִים וְהַנֶּאֱנָקִים עַל כָּל־הַתּוֹעֵבוֹת הַנַּעֲשׂוֹת בְּתוֹכָהּ

ʕ[a]ḇor	***bəṯoḵ***	*hɔʕir*	***bəṯoḵ***	*yərušɔlɔ(y)im*
cross.over-IMP.M.SG.	**PATH**	the.city	**PATH**	GN
wəhiṯwiṯɔ	*tɔw*	*ʕal-miṣəḥoṯ*		*hɔʔ[a]nšim*
mark-WCSC.2M.SG.	mark	ON+foreheads.of		the.men
hannɛʔ[ɛ]nɔḥim		*wəhannɛʔ[ɛ]nɔqim*		
groan-PTCP.M.PL.		CJ+sigh-PTCP.M.PL.		
ʕal	*kɔl-hattoʕeḇoṯ*	*hannaʕ[a]śoṯ*		***bəṯoḵɔh***
CONCERN	all.of+the.abominations-F.	done-PTCP.F.PL.		**INSIDE+her**

Pass through the city, Jerusalem, and place a mark on the foreheads of everyone who is groaning and bemoaning all of the atrocities being done in the city. (Ezek 9:4)

Example (169), also, provides an instance of *bəṯoḵ* as the PATH function. The royal investiture procession required movement from the temple to the palace. This pathway required one to enter the king's domicile בְּתוֹךְ־שַׁעַר הָעֶלְיוֹן *bəṯoḵ-šaʕar hɔʕɛlyon* 'through the upper gate'. Since the area within the gate-complex was not the telic goal of the action but the continuation of the movement through the gate to a terminus on the other side, the preposition is functioning to mark the PATH of the movement, not merely the location or destination.

(169) וַיּוֹרֶד אֶת־הַמֶּלֶךְ מִבֵּית יְהוָה וַיָּבֹאוּ בְּתוֹךְ־שַׁעַר הָעֶלְיוֹן בֵּית הַמֶּלֶךְ

wayyorɛḏ	*ʔɛṯ-hammɛlɛḵ*	*mibbeṯ*		*YHWH*
bring.down-WCPC.3M.SG.	DOM+the.king	FROM+house.of		PN
wayyɔḇoʔu	***bəṯoḵ****-šaʕar*	*hɔʕɛlyon*	*beṯ*	*hammɛlɛḵ*
enter-WCPC.3M.PL.	**PATH**+gate.of	the.height	house.of	the.king

He brought the king down from the Temple of Yahweh, and they went through the upper gateway to the king's palace. (2 Chr 23:20)

4.8.3. Grammaticalization of bəṯoḵ

The origin and functional changes to *bəṯoḵ* are outlined by examining semantic ambiguities and similar changes in other languages. The following subsection demonstrates the change from a preposition phrase into a complex preposition denoting a location. The subsequent grammaticalization from the locative function to the COMITATIVE is presented. Internal Hebrew evidence is lacking for

the origin of the temporal and PATH functions. Comparing the world's languages, though, temporal relations often originate from functions expressing the LOCATIVE or INTERIOR-REGION (Heine and Kuteva 2004, 183, 205–6). Heine and Kuteva (2004, 89–90) suggest alternatively that the comitative relation may provide the origin of temporal function. As for PATH, the cross-linguistic perspective suggests that it may derive from verbal origins (Svorou 1994, 112, 114, Heine and Kuteva 2004, 230).

4.8.3.1. PREP (IN) + N ('midst, center') > PREP (INSIDE)

The grammaticalization, a noun 'midst, center' to the locative preposition 'inside' or 'within', is attested in many of the world's languages. Heine and Kuteva (2004, 64) categorize this change as CENTER to IN (spatial). Further, they note that the concept of 'middle' oftentimes emanates from a body part as a "semantically complex [notion], and it remains unclear whether we are dealing with a distinct grammatical function" (57–58). Svorou (1994, 257–58) establishes several similar origins for this locative relation, which include body parts and environmental features.

In Semitic, this change is well attested. Syriac witnesses *mṣaʕtɔ* 'middle (part)' as the locative function with and without a preceding preposition, *(b)meṣʕat* 'inside, within'. Elsewhere in early Aramaic, the constructions *b-gw* and *l-gw* 'inside, within' function as locative complex prepositions composed of the nominal element, *gw* 'interior'. Ugaritic examples are known with *kbd* 'liver; innards; bosom' and the preposition *l-* 'to' designating the interior function. Several dialects of Akkadian demonstrate the grammaticalization to a locative expression from body part sources and other relational terms—*qablum* 'middle; hips, waist', *ṣurrum* 'interior, heart', *libbum* 'inner body; heart', and *qerbum* 'center; interior'. In Old South Arabian, *b-wsɪṭ* 'inside, within' is construed from the preposition *b-* 'in, on' and a noun meaning 'middle'. Geʕez *māʔəkal* 'center, middle' designates an analogous locative function sometimes with the added prepositional element *b-* 'in, on', and another noun meaning 'interior; middle part' may have provided the source of the common locative preposition *wəsta* 'on the inside; within'.

The context of change, as with many grammaticalization examples involving a positional noun acquiring a locative function, likely involves a situation in which the noun could be understood more generally as a relational term. Example (170) serves as one such environment. The passage could designate the location of the tree בְּתוֹךְ הַגָּן *bə̱to̱k̲ haggān* 'at the center-region of the garden', or it could indicate that the tree is positioned 'within' Eden. Example (171) likewise provides for the multiplicity of interpretations between the nominal and the functional meanings. In Biblical Hebrew cosmology, רָקִיעַ *rɔqi^{a}ʕ* 'dome' is said to be created as a

partition separating the waters of the heavens and that of the sea. As such, the term *bə̲to̲k̲* is indeterminate as to whether it refers to the location ('center') or the position (INTERIOR-REGION) of this sky-dome in relation to the heavens and the sea. Such ambiguities would provide for the context for grammaticalization yielding the locative preposition.

(170) וְעֵץ הַחַיִּים בְּתוֹךְ הַגָּן

wəʕeṣ	*haḥayyim*	***bə̲to̲k̲***	*haggān*
CJ+tree.of	the.living	**IN+center.of/INSIDE**	the.garden

The tree of life was in (the center of) the garden. (Gen 2:9)

(171) יְהִי רָקִיעַ בְּתוֹךְ הַמָּיִם

yəhi	*rɔqi*^{a}*ʕ*	***bə̲to̲k̲***	*hammɔyim*
be-PC.3M.SG.	dome	**IN.center.of/INSIDE**	the.waters

Let there be a dome in (the midst of) the waters. (Gen 1:6)

4.8.3.2. PREP (INSIDE) > PREP (COMITATIVE)

Diachronic typology demonstrates a link between the locative and the comitative functions. The cognitive basis for the extension of a locative relation to the COMITATIVE is found in "performing an action in front of a person [which] typically attracts the attention of that person and, consequently, his/her mental participation to the action" (Svorou 1994, 140). As such, Svorou continues, "The physical participation of the second person, then is only a step away" (140). Some evidence in Semitic appears to parallel this suggested connection. The locative relation Old South Arabian *b-sɪn* 'in front of' also denotes the comitative function 'with'.

One finds several Biblical Hebrew examples of *bə̲to̲k̲* which may be understood as having either locative or comitative functions.[131] In example (172), Saul meets a group of prophets. Enthused by the Spirit of God, the narrative states that Saul prophesied בְּתוֹכָם *bə̲to̲k̲ɔm* 'among (the group of) them'.

(172) וַיִּתְנַבֵּא בְּתוֹכָם

wayyiṯnabbeʔ	***bə̲to̲k̲ɔm***
prophesy-WCPC.3M.SG.	**INSIDE/COM+them**

[Saul] prophesied among them. (1 Sam 10:10)

This usage could be understood as a locative relation denoting Saul's location within the group of prophets. Alternatively, it may be read as the COMITATIVE designating the pluralization of the subjective participant, namely 'together with them'. Saul is among the group of prophets prophesying. This latter formation

131 1 Sam 10:10; Prov 27:22; Jer 12:16; 40:1.

appears to motivate the incredulous response and the proverbial saying: הֲגַם שָׁאוּל בַּנְּבִיאִים *hᵃgam šɔʔul bannəḇiʔim* 'Is Saul among the prophets?' (v. 12). This designation seems to suggest that the implicature was not just a location in the midst of a group but the identification with the primary characteristic of the prophets.

4.8.4. Mapping the Grammaticalization Trajectories of bəṯoḵ

The trajectories of change for *bəṯoḵ* are outlined in this section. The first diagram (fig. 4.7) demonstrates a developmental continuum starting with the reanalysis of the preposition phrase. The locative relation grammaticalized therefrom. Subsequent to the LOCATIVE, the comitative, temporal, and PATH functions obtained. The exact expansion may only be suggested.

Figure 4.7. Functional Developments of *bəṯoḵ*

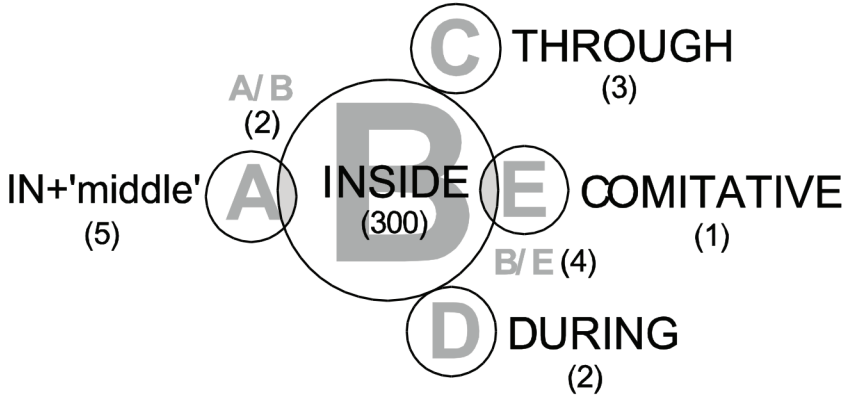
PREP (IN) + N ('middle, center') > PREP (INSIDE) > PREP (COMITATIVE)
> PREP (DURING)
> PREP (THROUGH)

The stages of this semantic multiplicity are also represented in the Overlap Model in figure 4.8. The originating nominal phrase expanded to the LOCATIVE in stage II. The third stage, then, represents the Biblical Hebrew situation. The semantic map is represented with the number of tokens in figure 4.9.

Figure 4.8. Overlap Model for *bəṯoḵ*

Stage:	I	II	III
PREP+N	IN+'middle'	IN+'middle'	IN+'middle'
PREP		INSIDE	INSIDE
PREP			COMITATIVE
PREP			DURING
PREP			(THROUGH)

Figure 4.9. Semantic Map for *bəṯoḵ*



4.9. כְּפִי kəpī

4.9.1. Morphosyntax of kəpī

The string כְּפִי *kəpī* combines the preposition *k-* 'like, as' and an anatomic noun. The noun, *pɛ* 'mouth; opening', is found in the construct state with a succeeding noun in all but one instance where a pronominal suffix follows. It is widely recognized that this construct noun likely originated from the original genitive form of the monosyllabic term **pī* (Bauer and Leander 1922, 620; von Soden 1995, §65i).

4.9.2. Usage of kəpī

In Biblical Hebrew, *kəpī* is used as a preposition phrase, a complex preposition, and an adverbializer.

4.9.2.1. PREP (LIKE) + N ('mouth')

The original semantics of *kəpī* denotes a preposition phrase, 'like the mouth (of)'. Five times this usage is found in Biblical Hebrew.[132] The metaphorical meaning of the noun *pi* 'mouth' as 'opening' may be seen in example (173). The phrase כְּפִי כֻּתָּנְתִּי *kəpī ḵuttɔnti* 'as my tunic collar' designates how the anguish of suffering is constrained around one's neck. Elsewhere, the phrase may be accompanied by a pronominal suffix. In example (174), *kəpī* 'my mouth(piece)' serves as an adverbial phrase designating the positive status of being God's spokesperson as a result of faithful obedience.

132 Exod 28:32; 39:23; Job 30:18; 33:6; Jer 15:19.

(173) כְּפִי כֻּתָּנְתִּי יַאְזְרֵנִי

kəpī	*k̲uttɔnti*	*yaʔazreni*
LIKE+opening.of	tunic+my	gird-PC.3M.SG.+me

It restrains me as my tunic collar. (Job 30:18)

(174) כְּפִי תִהְיֶה

kəpī	*t̲ihyɛ*
LIKE+mouth+my	be-PC.2M.SG.

You will be like my mouth(piece). (Jer 15:19)

4.9.2.2. PREP (ACCORDING TO)

As a complex preposition, the logical relation of *kəpī* 'according to' is found ten times in Biblical Hebrew.[133] The complement is a noun in eight of these instances. Once it is an infinitive (Exod 16:21) and once a relative (Mal 2:9). The use with a noun is observed in example (175). The phrase, כְּפִי שָׁנָיו *kəpī šɔnɔw* 'in accordance with his years', designates the standard by which he should be paid, that is, in proportion to the number of years of his service.

(175) כְּפִי שָׁנָיו יָשִׁיב אֶת־גְּאֻלָּתוֹ

kəpī	*šɔnɔw*	*yɔšiḇ*	*ʔɛt̲-gəʔullɔt̲o*
ACCRD	years+his	requit-PC.3M.SG.	DOM+redemption.price+his

He should pay for his manumission according to his years (of labor). (Lev 25:52)

4.9.2.3. ADVZ (CONSEQUENTLY)

In a lone example, *kəpī* is used as an adverbializer designating a consequential relation.[134] In example (176), the adverbializer *kəpī* marks the result or consequence of the initial main clause. The presentation of the conquering ones—הַקְּרָנוֹת *haqqərɔnot̲* 'the horns' or the powerful rulers—results in Judah's trepidation and fear not wanting to be seen.

(176) אֵלֶּה הַקְּרָנוֹת אֲשֶׁר־זֵרוּ אֶת־יְהוּדָה כְּפִי־אִישׁ לֹא־נָשָׂא רֹאשׁוֹ

ʔellɛ	*haqqərɔnot̲*	*ʔᵃšɛr-zeru*	*ʔɛt̲-yhuḏɔ*
these	the.horns-F.	REL+scatter-SC.3C.PL.	DOM+PN
kəpī-*ʔiš*		*loʔ-nɔśɔʔ*	*roʔšo*
CONSEQUENT+man		NEG+lift.up	head+his

These are the horns that scattered Judah; consequently, none has raised his head. (Zech 2:4)

133 Exod 16:21; Lev 25:52; Num 6:21; 7:5, 7, 8; 35:8; 1 Chr 12:24; 2 Chr 31:2; Mal 2:9.
134 Zech 2:4.

4.9.3. Grammaticalization of kəp̄i

The trajectory of change is outlined for each meaning presented in the previous section. For the most part, this exposition is restricted to cross-linguistic data, as Biblical Hebrew examples of situations where the changes may have arisen are infrequent.

4.9.3.1. PREP (LIKE) + N ('mouth') > PREP (ACCORDING TO)

Instances of grammaticalization from body part sources to logical relations are widespread in many of the world's languages. For example, the Mextecan language family demonstrates a large number of grammatical relations which originated in the words for 'face' and 'foot'. These include locative and temporal relations as well as other logical relations, such as INSTEAD, COMPARATIVE, CONDITIONAL, BENEFACTIVE, EXCHANGE, CAUSE, 'basis for', 'on behalf of', and 'about' (Hollenbach 1995).

In several Semitic languages, polymorphic syntagms (i.e., PREP + N) are known to develop the meaning 'according to'. This function is commonly attested for complex prepositions composed of the cognate noun 'mouth': *lpy* 'according to' in Punic (Friedrich and Röllig 1999, §252), *l p* 'according to' in Ugaritic (Tropper 2000, 777–78), *kî* (or *kima*) *pî* 'according to' in addition to *ana pî* 'according to' in Akkadian (von Soden 1995, §115t), and possibly *ina pî* 'according to' at Amarna (EA 81:18).

4.9.3.2. PREP (ACCORDING TO) > ADVZ (CONSEQUENTLY)

In the world's languages, clause linkers oftentimes grammaticalize from prepositions (Hopper and Traugott 2003, 184–90). This general change was suggested previously in the example of *ʔaḥar* (§3.1). The proposed context of change for *kəp̄i*, unfortunately, is opaque. Example (177) demonstrates that reduction from the usage with the relative is, at least, one plausible syntactic solution (PREP + REL + S > ADVZ + S). The combination of *kəp̄i*$_{\text{PREP}}$ *ʔᵃšɛr*$_{REL}$ 'according to which' serves as a subordinating conjunction to mark the basis on which the curse in the main clause is leveled against Israel by the prophet Malachi. The deletion of the relative could have led to the innovative syntagmic function of *kəp̄i* as an adverbializer.

(177) וְגַם־אֲנִי נָתַתִּי אֶתְכֶם נִבְזִים וּשְׁפָלִים לְכָל־הָעָם כְּפִי אֲשֶׁר אֵינְכֶם שֹׁמְרִים אֶת־דְּרָכָי

wəgām-ʔ^{a}ni		*nɔ̲tatti*	*ʔɛ̲tə̲kɛm*
CJ+also+I		give-SC.1C.SG.	DOM+you-M.PL.
nib̲zim		*ušəp̄lim*	*lə̲kɔl-hɔʕɔm*
be.despised-PTCP.M.PL.		CJ+humbled-M.PL.	TO+all+the.people
kəp̄i	*ʔ^{a}šɛr*	*ʔenə̲kɛm*	*šomərim*
ACCRD	REL	NOT.EXIST+you-M.PL.	guard-PTCP.M.PL.
ʔɛ̲t-dərɔ̲kay			
DOM+ways+my			

Thus, I have made you despicable and humbled before all people, inasmuch as you have not kept my ways. (Mal 2:9)

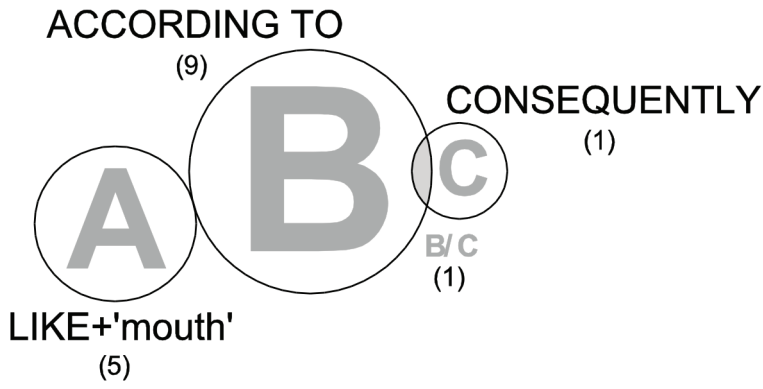
4.9.4. Mapping the Grammaticalization Trajectories of kəp̄i

Based on typology, internal data, and analogical changes found in Biblical Hebrew, the grammaticalization of *kəp̄i* developed to the complex preposition functioning as 'according to'. The adverbializer 'consequently' was likely subsequent to the 'according to' usage. These changes are detailed in figure 4.10 via the Overlap Model. Figure 4.11 details the meanings and the tokens of each.

Figure 4.10. Overlap Model for *kəp̄i*

Stage:	I	II	III
PREP+N	LIKE+'mouth'	LIKE+'mouth'	LIKE+'mouth'
PREP		ACCORDING TO	ACCORDING TO
ADVZ			CONSEQUENTLY

Figure 4.11. Semantic Map of *kəp̄i*



4.10. לְבַד ləḇaḏ

4.10.1. Morphosyntax of ləḇaḏ

The string לְבַד *ləḇaḏ* consists of the preposition *l-* 'to, for' combined with the construct noun *baḏ* 'part, portion' (< **badd*). The independent form of the noun is found solely in the idiom בַּד בְּבַד *baḏ bəḇaḏ* 'part by part' (Exod 30:34; see also 1QS IV, 16, 25). The verbal root *BDD* is attested in several Semitic languages—Arabic *baddada* 'withdraw, separate, apportion', Old South Arabian *bdd* 'distribute', Ethiopic *badada, badda* 'separate, detach', and post-Biblical Hebrew *bɔdad* 'scatter; be lonely'. Related nouns are found in Ugaritic *bd* 'separation, isolation', *bddy* 'alone, disconnected', and Arabic *budd* 'separation'. Adverbial expressions are found with the Ugaritic expression *l bdm* 'alone' (*KTU* 1.2.iii.20) and post-Biblical Hebrew *bɔdɔd* 'loneliness', *ləbad* 'alone', and *bilbad* 'only'.

4.10.2. Usage of ləḇaḏ

In Biblical Hebrew, the string *ləḇaḏ* functions as a preposition phrase, an adverb 'alone', and a complex preposition with pronominal suffixes 'by oneself'. Each of these is reviewed in the sections below.

Other constructions with *ləḇaḏ* having related meanings of isolation or exclusion are evidenced with the preposition מִן *min* 'from' either before or after. Without a complement, the polymorphic expression, מִלְּבַד *milləḇaḏ* (< *min* + *ləḇaḏ*), functions as an adverb 'alone'. It is a compound-complex preposition meaning 'besides, apart from' with a following NP or REL. A similar meaning is found with the combination of *ləḇaḏ* + PP where the following phrase is headed in all but one instance by *min*.[135]

4.10.2.1. PREP (FOR) + N ('part, portion')

The preposition phrase, PREP (FOR) + N ('part, portion'), is identifiable in a single usage in example (178).[136] The context presents a situation in which Jacob acquires a share of Laban's flocks for his return to his homeland. Per their agreement, Jacob separates the animals which were striped, speckled, and spotted for his portion (לְבַדּוֹ *ləḇaddo*), whereas the remainder stayed with the flock of Laban (עַל־צֹאן לָבָן *ʕal-ṣoʔn ləḇɔn*). The Authorized Version translates *ləḇaddo* as "by themselves" (i.e., the flocks) confusing the plural entity with the clearest referent of the singular suffix, namely 'Jacob'. The PP does not signal the separateness of

135 Exod 12:37; Num 29:39; Deut 3:5; Josh 17:5; Judg 8:26 (2x); 20:15, 17; 1 Kgs 5:3, 30; 10:15; 2 Kgs 21:16; Esth 4:11; Ezra 1:6 (*ləḇaḏ ʕal*); 2 Chr 9:14.
136 Gen 30:40.

the flock, but it reassesses the flock into the care of Jacob. The ensuing clause confirms this interpretation using the plural suffix to reference to 'the herds'. It further clarifies that these animals were part of a new group and not added to Laban's flock.

(178) וַיָּשֶׁת־לוֹ עֲדָרִים לְבַדּוֹ וְלֹא שָׁתָם עַל־צֹאן לָבָן

wayyɔšɛt-lo		*ʕ[a]ḏɔrim*	***ləḇaddo***
set-WCPC.3M.SG.+TO+him		herds-M.	**FOR+part+his**-M.SG.
wəloʔ	*šɔṯɔm*		*ʕal-ṣoʔn*	*ləḇɔn*
CJ+NEG	set-SC.3M.SG.+them-M.		INTO+flock.of	PN

[Jacob] put aside the herds for his portion, and he did not put them with the flock of Laban. (Gen 30:40)

4.10.2.2. Adverb ('alone')

The adverbial לְבָד *ləḇɔḏ* 'alone, apart' is found without a following complement. Eighteen instances of this independent string are known in Biblical Hebrew.[137] Example (179) from Judges exemplifies this usage. God commanded Gideon to divide his forces according to how each warrior would drink from a spring. The one who lapped up water like a dog was supposed to be set apart as part of the attacking force, while the one kneeling down to drink cupping his hand was excluded. The idea of setting an entity apart from a larger group is inherent within this and the previous use. It designates more than creating a group of one ('alone') but the inclusion in a new group. Possibly better rendering is 'aside' or 'apart' in the adverbial usage.

(179) תַּצִּיג אוֹתוֹ לְבָד

taṣṣiḡ	*ʔoṯo*	***ləḇɔḏ***
set-PC.2M.SG.	DOM+him	**alone**

You shall put him apart. (Judg 7:5)

4.10.2.3. PREP (BY -SELF)

The string *ləḇaḏ* with a pronominal suffix is used eighty-eight times as a complex preposition with the function BY -SELF.[138] The referent of the suffix may be

137 Exod 26:9 (2x); 36:16 (2x); Judg 7:5; Qoh 7:29; Isa 26:13; Zech 12:12 (5x), 13 (4x), 14 (2x).

138 Gen 2:18; 21:28, 29; 32:17, 25; 42:38; 43:32 (3x); 44:20; 47:26; Exod 12:16; 18:14, 18; 22:19, 26; 24:2; Num 11:14, 17; Deut 1:9, 12; 8:3; 22:25; 29:13; Josh 11:13; Judg 3:20;

reflexive as in example (180) or designate a nonsubject constituent as in example (181).

(180) וַיִּוָּתֵר יַעֲקֹב לְבַדּוֹ

wayyiwwɔ̱ter	*yaʕᵅqoḇ*	***ləḇaddo***
stay-WCPC.3M.SG.	PN	**BY+himself**

Jacob remained by himself. (Gen 32:25)

(181) וַיַּצֵּב אַבְרָהָם אֶת־שֶׁבַע כִּבְשֹׂת הַצֹּאן לְבַדְּהֶן

wayyaṣṣeḇ	*ʔaḇrɔhɔm*	*ʔɛṯ-šɛḇaʕ*	*kiḇśoṯ*
set.up-WCPC.3M.SG.PN		DOM+seven	ewes.of-F.
haṣṣoʔn		***ləḇaddəhɛn***	
the.flock		**BY**+**themselves**-F.	

Abraham set aside seven ewe-lambs from the flock by themselves. (Gen 21:28)

In the first example, the string designates that Jacob is 'by himself' (*ləḇaddo*) or separate from his travelling group. In the second example, Abraham takes from his flocks seven ewe-lambs לְבַדְּהֶן *ləḇaddəhɛn* 'by themselves' to be given to Abimelech as a symbol of the covenant between the two men.

4.10.3. Grammaticalization of ləḇaḏ

Example (178) above demonstrates the nominal origins of the string which has grammaticalized as a unit into the preposition *ləḇaḏ* with pronominal suffixes. The originating structure of the string [*l*-PREP [*badd* + PRO]NP]PP has given way to the complex preposition [*l*-*badd*PREP + PRO]PP. Moreover, the semantic shift from 'for his part' to 'by himself' is nearly complete by the time of Biblical Hebrew, where the independent idiom *ləḇaḏ* 'alone' is known only as an adverb and within stock phrases. Similar Semitic extensions are known with Aramaic *lgrm-* 'by -self' (< *l-* 'for' + *grm* 'bone, self') and Akkadian *ina ramni-* 'by -self' (< *ina* 'in' + *ramānu* 'self').

4.10.4. Mapping the Grammaticalization Trajectories of ləḇaḏ

It may be reasonably assumed that the complex preposition arose from an original PP. Without further evidence of transitional examples, however, the exact context

6:37, 39, 40; 1 Sam 7:3, 4; 21:2; 2 Sam 10:8; 13:32, 33; 17:2; 18:24, 25, 26; 20:21; 1 Kgs 8:39; 11:29; 12:20; 14:13; 18:6 (2x), 22; 19:10, 14; 22:31; 2 Kgs 10:23; 17:18; 19:15, 19; 1 Chr 19:9; 2 Chr 6:30; 18:30; Neh 9:6; Esth 1:16; 3:6; Job 1:15, 16, 17, 19; 9:8; 15:19; 31:17; Pss 51:6; 71:16; 72:18; 83:19; 86:10; 136:4; 148:13; Prov 5:17; 9:12; Isa 2:11, 17; 5:8; 37:16, 20; 44:24; 49:21; 63:3; Ezek 14:16, 18; Dan 10:7, 8.

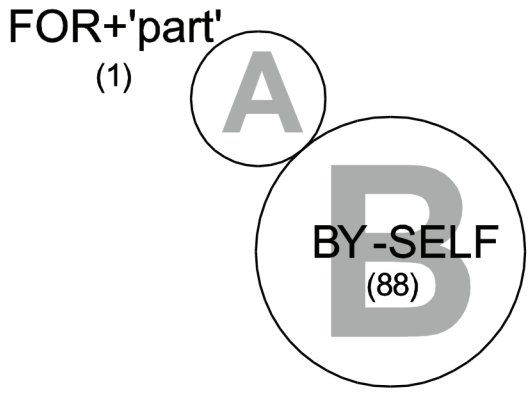
of change is inaccessible. Figure 4.12, however, presents a probable expansion of the PP to the complex preposition (BY -SELF).

Figure 4.12. Overlap Model for *ləḇaḏ*

Stage:	I	II
PREP+N	FOR+'part'	FOR+'part'
PREP		BY -SELF

The Biblical Hebrew situation would be represented by stage II of this Overlap Model. The meanings and tokens are graphed on figure 4.13.

Figure 4.13. Semantic Map of *ləḇaḏ*



4.11. לְיַד ləyaḏ

4.11.1. Morphosyntax of ləyaḏ

There is evidence in Biblical Hebrew that the string לְיַד *ləyaḏ* 'to (the) hand of' has been grammaticalized as a locative complex preposition. The form *ləyaḏ* consists of the locative preposition *l-* 'to; at' affixed to the construct state of the standard body-part noun for 'hand' יָד *yɔḏ* (< **yad*).

4.11.2. Usage of ləyaḏ

There are eight occurrences of this construction in Biblical Hebrew—six times it is followed by a noun and twice by a pronominal suffix. The usages of the expression may be grouped together either as a preposition phrase with the noun or as a complex preposition designating a locative relation.

4.11.2.1. PREP (TO) + N ('hand; side')

Four examples in Biblical Hebrew exhibit the usage of *ləyaḏ* as a preposition phrase (*l*-PREP + [*yaḏ* + NP]NP).[139] The expression with a pronominal suffix and a following NP are both found twice with this meaning. In example (182), someone falling לְיָדוֹ *ləyɔḏo* 'into his hand' is euphemistic for manslaughter.

(182) וְהָאֱלֹהִים אִנָּה לְיָדוֹ

wəhɔʔᵉlohim	*ʔinnɔ*	***ləyɔḏo***
CJ+the.god	cause.to.fall-SC.3M.SG.	**INTO+hand.of+him**

God allowed [him] to fall into his hand. (Exod 21:13)

The noun *yaḏ* can also denote a more general anatomic feature such as the 'flank' or 'side'. An example of this is found with the expression, לְיַד הַמֶּלֶךְ *ləyaḏ hammɛlɛḵ* 'at the side of the king' in example (183), which is understood as an idiom for holding a position of status.

(183) וּבְנֵי־דָוִיד הָרִאשֹׁנִים לְיַד הַמֶּלֶךְ

uḇəne-ḏɔwiḏ	*hɔriʔšonim*	***ləyaḏ***	*hammɛleḵ*
CJ+sons.of+PN	the.heads	**AT+side.of**	the.king

David's sons were chief officials serving the king. (1 Chr 18:17)

4.11.2.2. PREP (NEAR)

The complex preposition designates a NEAR or contiguous locative function three times in Biblical Hebrew.[140] The phrase לְיַד־אָבִי *ləyaḏ-ʔɔḇi* 'near my father', found in example (184), indicates the relative locality at which the speaker will stand and not necessarily the immediate side-orientation suggested by the composite meaning of the preposition phrase.

(184) וְעָמַדְתִּי לְיַד־אָבִי בַּשָּׂדֶה

wəʕɔmaḏti	***ləyaḏ-ʔɔḇi***	*baśśɔḏɛ*
stand-WCSC.1C.SG.	**NEAR**+father+my	IN+the.field

I will stand near my father in the field. (1 Sam 19:3)

In example (185), the city gates are the setting where wisdom metaphorically calls out. This proximate locality, לְיַד־שְׁעָרִים *ləyaḏ-šəʕɔrim* 'near the gates', is further specified by other relational expressions—לְפִי־קֶרֶת *ləp̄i-qɔrɛṯ* 'at the mouth of the

139 Exod 21:13; 1 Chr 18:17; Neh 11:24; Job 17:3.
140 1 Sam 19:3; Ps 140:6; Prov 8:3.

city' and מְבוֹא פְּתָחִים *məḇoʔ pətɔḥim* 'the entrance of the doorways'—that do not designate the SIDE-REGION, but more general notions of proximity.

(185) לְיַד־שְׁעָרִים לְפִי־קָרֶת מְבוֹא פְּתָחִים תְּרוֹנָּה

ləyaḏ-*šəʕɔrim*	*ləp̄i-qɔrɛṯ*	*məḇoʔ*	*p̄ətɔḥim*
NEAR+gates	at.entry.of+city	entrance.of	the doorways
tɔronnɔ			
cry-PC.3F.PL.			

[Wisdom] calls out near the gates, at the entrance to the city, [and] near the doors. (Prov 8:3)

4.11.3. Grammaticalization of ləyaḏ

This section explores external and internal evidence for the change of *ləyaḏ* from a preposition phrase to the locative complex preposition. Examples from the world's languages in which a similar change took place will provide external support for the conceptual extension. Internal ambiguity demonstrates the context of change within Biblical Hebrew.

The cross-linguistic evidence for the change from a term designating 'side' or 'flank' to the locative expression BESIDE or NEAR is well witnessed. Heine and Kuteva (2004, 139, 271–72) point out that body part terms such as 'side' and 'flank' are grammaticalized "on account of their relative location [and] are used as structural templates to express deictic location." Svorou (1994, 72) provides additional support for this change noting that locative relations often "have their source in body-parts terms such as flank, ribs, abdomen, but also heart and ear."

The grammaticalization context is exemplified in example (186). The phrase לְיַד־בְּנֵי אַהֲרֹן *ləyaḏ-bəne ʔahᵃron* 'at the hand of Aaron's sons' could be used either to locate the position of the work or idiomatically to designate the authority under which the employment was to be conducted. The former would indicate the grammaticalized complex preposition, whereas the latter interpretation would assume the lexical meaning.

(186) כִּי מַעֲמָדָם לְיַד־בְּנֵי אַהֲרֹן לַעֲבֹדַת בֵּית יְהוָה

ki	*maʕᵃməḏɔm*	***ləyaḏ***-*bəne*	*ʔahᵃron*
CAUS	office+their-M.	**AT+hand.of/NEAR**+sons.of	PN
laʕᵃḇoḏaṯ		*beṯ*	*YHWH*
TO+labor.of		house.of	PN

For their posting was at the hand of (*or:* near) the sons of Aaron (i.e., the priests) to work in the temple of Yahweh. (1 Chr 23:28)

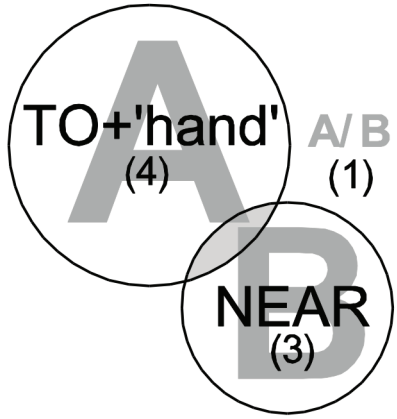
4.11.4. Mapping the Grammaticalization Trajectories of ləyaḏ

The trajectory of grammaticalization for *ləyaḏ* may be mapped using the Overlap Model as in figure 4.14. The preposition phrase of stage I was extended to the complex preposition structure denoting the locative function of stage II. Additionally, the string would have rebracketed from [*l*-PREP [*yaḏ* + NP]NP]PP to [*ləyaḏ*PREP + NP]PP. This second stage represents the usage patterns found in Biblical Hebrew. Figure 4.15 provides the meanings with their corresponding total number of tokens.

Figure 4.14. Overlap Model for *ləyaḏ*

Stage:	I	II
PREP+N	TO+'hand'	TO+'hand'
PREP		NEAR

Figure 4.15. Semantic Map of *ləyaḏ*



4.12. לְמַעַן *ləmaʕan*

4.12.1. Morphosyntax of ləmaʕan

The string לְמַעַן *ləmaʕan* is composed of the preposition *l*- 'to, for' and the lexeme *maʕan* (< **maʕn*). This second element is not found as an independent word in Biblical Hebrew and has been analyzed in various ways. It may be a **qatl* noun of the root *MʕN*; however, a root *MʕN* is not known in Biblical Hebrew. Bauer and Leander (1922, 491–2) suggest that it is a *mem*-preformative noun of the well-known third-weak root *ʕNY* 'to answer'. Since **maqt*-type noun-patterns are not productive in Biblical Hebrew and clipping is commonly evidenced in

grammaticalized lexemes, it is better to suggest that the current form is a shortened form of the noun מַעֲנֶה *maʕᵃnɛ* ‘purpose’ (see Prov 16:4, *lmʕnhw* ‘for his purpose’).

4.12.2. Usage of ləmaʕan

Two functions are found in Biblical Hebrew for *ləmaʕan*. One denotes a purpose or resultative function, the other CAUSE.

4.12.2.1. PREP/ADVZ (PURPOSE/RESULT)

There are seventy-seven Biblical Hebrew examples of the purpose/resultative function of *ləmaʕan* heading a noun phrase or clause.[141] The complex preposition may head a noun phrase, an infinitive phrase, or a relative clause. In these contexts, the string designates the logical relation modifying the main clause. Example (187) demonstrates the use of the string with a following infinitive phrase.

(187) הֶעֱמַדְתִּיךָ בַּעֲבוּר הַרְאֹתְךָ אֶת־כֹּחִי וּלְמַעַן סַפֵּר שְׁמִי בְּכָל־הָאָרֶץ

hɛʕᵉmaḏtiḵɔ	*baʕᵘḇur*	*harʔoṯəḵɔ*
raise.up-SC.1C.SG.+you	PURPOSE	show-INF.+you
ʔɛṯ-koḥi	***uləmaʕan***	*sapper*
DOM+power+my	**CJ+PURPOSE**	tell-INF.
šəmi	*bəḵɔl-hɔʔɔrɛṣ*	
name+my	IN+all+the.land	

I have raised you up in order to show you my strength and so that my name might be proclaimed in every land. (Exod 9:16)

Two phrases present the purpose behind Yahweh’s action of elevating Pharaoh to Egypt’s throne. The first phrase is headed by *baʕᵘḇur* with a similar notion of PURPOSE (§4.6.2.4). The second, וּלְמַעַן סַפֵּר שְׁמִי בְּכָל־הָאָרֶץ *uləmaʕan sapper šəmi bəḵɔl hɔʔɔrɛṣ* ‘so that my name might be proclaimed in every land’, is conjoined with a conjunction and designates a parallel semantic notion.

141 Gen 18:19; 50:20; Exod 1:11; 9:16; 10:1; 11:7, 9; Lev 17:5; 20:3; Num 17:5; Deut 2:30; 8:3, 16 (2x), 18; 9:5; 17:16; 20:18; 27:3; 29:12, 18; 30:6; Josh 3:4; 4:24 (2x); 11:20 (2x); Judg 2:22; 3:2; 1 Sam 15:15; 17:28; 2 Sam 13:5; 1 Kgs 8:60; 11:36; 12:15; 2 Kgs 10:19; 22:17; 23:24; 2 Chr 10:15; 25:20; 34:25; Prov 15:24; Isa 30:1; Jer 7:10, 18, 19; 11:5; 27:10, 15; 32:29, 35; 42:6; 43:3; 44:8 (2x); Ezek 14:5; 20:26; 21:15, 20, 33; 22:6, 9, 12, 27; 31:14; 36:30; 38:16; 39:12; 40:4; 46:18; Joel 4:6; Amos 1:13; 2:7; Mic 6:5, 16; Hab 2:15; Zech 13:4.

As seen elsewhere in Biblical Hebrew, prepositions may be expanded to contexts where they serve as the head of a subordinate clause. This development is found with complex as well as simple prepositions. Such an extension of *ləmaʕan* is evidenced 128 times heading verbal clauses[142] and twice with non-verbal clauses.[143] In example (188), the result or purpose of the giving of a new heart is marked by a verbal clause headed with this string, לְמַעַן בְּחֻקֹּתַי יֵלֵכוּ *ləmaʕan bəḥuqqoṯay yeleḵu* 'so that they will walk according to my statutes'.

(188) וְנָתַתִּי לָהֶם לֵב בָּשָׂר לְמַעַן בְּחֻקֹּתַי יֵלֵכוּ

wənoṯatti	*lɔhɛm*	*leḇ*	*bɔśɔr*
CJ+give-WCSC.1C.SG.	TO+them-M.	heart.of	flesh
ləmaʕan	*bəḥuqqoṯay*	*yeleḵu*	
PURPOSE	IN+statutes+my	walk-PC.3M.PL.	

I will give them a heart of flesh, so that they might walk according to my statutes. (Ezek 11:19–20)

Example (189) designates that the loss of the land proprietorship will result in the destruction. This result is marked with the adverbializer and verbless clause, לְמַעַן מִגְרְשָׁהּ לָבַז *ləmaʕan miḡrɔšɔh lɔḇaz* 'so that her pasturelands might be plundered'.

(189) נָתְנוּ־אֶת־אַרְצִי לָהֶם לְמוֹרָשָׁה ... לְמַעַן מִגְרְשָׁהּ לָבַז

nɔṯənu-ʔɛṯ-ʔarṣi	*lɔhɛm*	*ləmorɔšɔ*	...
give-SC.3C.PL.+DOM+land+my	FOR+them-M.	FOR+possession	…
ləmaʕan	*miḡrɔšɔh*	*lɔḇaz*	
PURPOSE	open.land+her	FOR+spoil	

They gave my land for a possession … so that her pasturelands might be plundered. (Ezek 36:5)

142 Gen 12:13; 18:19; 27:25; 37:22; Exod 4:5; 8:6, 18; 9:29; 10:2; 13:9; 16:4, 32; 20:12; 23:12; 33:13; Lev 23:43; Num 15:40; 27:20; 36:8; Deut 4:1, 40; 5:14, 16 (2x), 29, 33; 6:2 (2x), 18, 23; 8:1, 2; 11:8, 9, 21; 12:25, 28; 13:18; 14:23, 29; 16:3, 20; 17:19, 20; 22:7; 23:21; 24:19; 25:15; 29:5, 8; 30:19; 31:12 (2x), 19; Josh 1:7, 8; 4:6; 1 Kgs 2:3, 4; 8:40, 43; 1 Chr 28:8; 2 Chr 6:31, 33; 31:4; 32:18; Ezra 9:12; Neh 6:13 (2x); Job 19:29; 40:8; Pss 9:15; 30:13; 48:14; 51:6; 60:7; 68:24; 78:6; 108:7; 119:11, 71, 80, 101; 125:3; 130:4; Prov 2:20; 19:20; Isa 5:19; 23:16; 28:13; 41:20; 43:10, 26; 44:9; 45:3, 6; 66:11 (2x); Jer 4:14; 7:23; 10:18; 25:7; 32:14; 35:7; 36:3; 44:29; 50:34; 51:39; Ezek 4:17; 6:6; 11:20; 12:16, 19; 14:11; 16:54, 63; 19:9; 20:26; 21:15; 24:11; 25:10; 26:20; Hos 8:4; Amos 5:14; 9:12; Obad 9; Hab 2:2; Zech 12:7.

143 Ezek 36:5; Neh 6:13.

4.12.2.2. PREP (CAUSE)

The use of *ləmaʕan* with an accompanying NP or pronominal suffix functions to designate a causal relation in sixty-five Biblical Hebrew examples.[144] In example (190), the preposition phrase לְמַעַנְכֶם *ləmaʕanəḵem* 'because of you' serves as the grounds or cause of the main clause—וַיִּתְעַבֵּר יְהוָה בִּי *wayyiṯʕabber YWHW bi* 'Yahweh was angry with me'.

(190) וַיִּתְעַבֵּר יְהוָה בִּי לְמַעַנְכֶם

wayyiṯʕabber	*YWHW*	*bi*	***ləmaʕanəḵem***
be.angry-WCPC.3M.SG.	PN	WITH+me	**CAUS+you**-M.PL.

Yahweh was angry with me because of you. (Deut 3:26)

4.12.3. Grammaticalization of ləmaʕan

The primary grammaticalization (FOR + 'purpose' > PURPOSE/RESULT) may be plausibly assumed based on the nominal reconstruction of the Biblical Hebrew polymorphic expression. On analogy to other prepositional examples, *ləmaʕan* would then have been extended to be used as an adverbializer. Heine and Kuteva (2004, 212) suggest that this change is indicative of a general group of grammatical changes where "certain generic nouns are pressed into service as markers of nominal or clausal participant." Examples of this change from African languages are cited in Nama *kaan* 'fact, matter' > *kaan-thîi-càʔ* 'in order to' and Susu *fe* 'matter, affair' > *-fe, -fera* PURPOSE.

Because of the lack of internal transitional examples in Biblical Hebrew, the second change to a causative function is uncertain but may have evolved from the original preposition phrase. Alternatively, the causative function could have developed from the resultative (Heine and Kuteva 2004, 246–7), but no Biblical Hebrew evidence suggests such a progression over the other.

4.12.4. Mapping the Grammaticalization Trajectories of ləmaʕan

The expansion of the functions from the original construction to the grammatical meaning is outlined by the figures below. In figure 4.16, the preposition phrase, FOR + 'purpose', obtains the grammatical functions PURPOSE and CAUSE as a

144 Gen 18:24; Deut 3:26; 1 Kgs 8:41; 11:12, 13 (2x), 32 (2x), 34, 39; 15:4; 2 Kgs 8:19; 13:23; 19:34 (2x); 20:6 (2x); 2 Chr 6:32; 21:7; Job 18:4; Pss 5:9; 6:5; 8:3; 23:3; 25:7, 11; 27:11; 31:4; 44:27; 48:12; 69:19; 79:9; 97:8; 106:8; 109:21; 122:8, 9; 143:11; Isa 37:35 (2x); 42:21; 43:14, 25; 45:4; 48:9, 11 (2x); 49:7; 55:5; 62:1 (2x); 63:17; 65:8; 66:5; Jer 14:7, 21; Ezek 20:9, 14, 22, 44; 23:21; 36:22, 32; Dan 9:17, 19.

complex preposition. Further, the preposition was extended to clausal contexts yielding an adverbializer.

Figure 4.16. Functional Developments of *ləmaʕan*
*PREP (FOR) + Noun (‘purpose’) > PREP/ADVZ (PURPOSE)
> PREP (CAUSE)

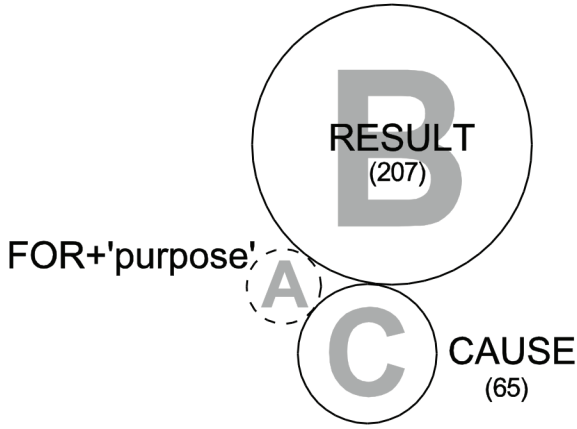
Figure 4.17 demonstrates this development with the Overlap Model. The expansion in stage II would include, at least, one grammatical function. As such, the string changes from a preposition phrase to a complex preposition denoting PURPOSE. The Biblical Hebrew situation, where only the derivative functions are evidenced, is represented in stage III.

Figure 4.17. Overlap Model for *ləmaʕan*

Stage:	I	II	III
PREP+N	*FOR+‘purpose’	*FOR+‘purpose’	
PREP/ADVZ		(PURPOSE)	PURPOSE
PREP		(CAUSE)	CAUSE

Figure 4.18 displays the proposed original meaning and the number of tokens for each function.

Figure 4.18. Semantic Map of *ləmaʕan*



4.13. לְנֹכַח lənoḵaḥ

4.13.1. Morphosyntax of lənoḵaḥ

As discussed in the previous chapter, the morphological form of לְנֹכַח *lənoḵaḥ* consists of the inseparable preposition *l-* and a **qutl* pattern noun of *NKḤ*. The nominal meaning 'front' and several morphological oddities are presented in the description of the grammaticalization of the noun (§3.9).

4.13.2. Usage of lənoḵaḥ

The three instances of *lənoḵaḥ* are found with two different meanings in Biblical Hebrew.[145] The first demonstrates the aggregate notion of the originating preposition phrase, 'to the front'. The second usage indicates a grammaticalized notion of the benefactive relation.

4.13.2.1. PREP (TO) + Noun ('front')

In example (191), the preposition phrase is used as part of an adverbial phrase describing the direction in which the son is to look to follow the sage advice of his father, *viz.* לְנֹכַח *lənoḵaḥ* 'to the front' or 'forward'. The meaning is reinforced by the following semantically parallel line. One's eyes are to look straight with the parallel adjunct phrase נֶגְדֶּךָ *nεḡdεḵɔ* 'before you' (§3.8) providing the direction.

(191) עֵינֶיךָ לְנֹכַח יַבִּיטוּ וְעַפְעַפֶּיךָ יְיַשְּׁרוּ נֶגְדֶּךָ

ʕenεḵɔ	***lənoḵaḥ***	*yabbiṭu*
eyes+your	**TO+front**	look-PC.3M.PL.
wəʕapʕappεḵɔ	*yayširu*	*nεḡdεḵɔ*
pupils+your	look.straight-PC.3M.PL.	LOC+you

May your eyes look forward, and your eyeballs gaze straight in front of you. (Prov 4:25)

4.13.2.2. PREP (BENEFACTIVE)

The sole usage in example (192) is described as designating the intended recipient or benefactive function. Similar to the use of *baʕaḏ* (§3.5.2.3), it designates the one for which supplication to a deity is made.

145 Gen 25:21; 30:38; Prov 4:25.

(192) וַיֶּעְתַּר יִצְחָק לַיהוָה לְנֹכַח אִשְׁתּוֹ כִּי עֲקָרָה הִוא

wayyɛʕtar	*yiṣḥɔq*	*lYHWH*	***lənoḵaḥ***	*ʔišto*
supplicate-WCPC.3M.SG.	PN	TO+PN	**BEN**	wife+his
ki		*ʕᵘqɔrɔ*		*hiʔ*
CAUS		infertile		she

Isaac prayed to Yahweh for his wife because she was barren. (Gen 25:21)

4.13.2.3. Grammaticalization of lənoḵaḥ

In addition to the previously mentioned shift of *baʕaḏ* (§3.5.2.4), *lənoḵaḥ* is the second case in Hebrew of grammaticalization resulting in an intended recipient or benefactive function. The typological evidence for such an extension, as discussed with this previous example, is lacking. A lone Hebrew context, nevertheless, provides a possible context for the grammaticalization.

Example (193) presents a quite elaborate clause structure with several adjunct phrases and embedded clauses. The final two words, לְנֹכַח הַצֹּאן *lənoḵaḥ haṣṣoʔn* 'to the front of/for the sheep', provide the ambiguity that could have motivated the change from the preposition phrase 'to the front of the sheep' to the benefactive function meaning 'intended for the sheep'. Two interpretive issues result from this ambiguity.

First, the string *lənoḵaḥ* includes the preposition *l-* and the noun *noḵaḥ* in the construct state with the following definite noun הַצֹּאן *haṣṣon* 'the sheep'. Two structural analyses are possible: [*l-*PREP [*noḵaḥ* + *haṣṣon*]NP]PP and [*lənoḵaḥ*PREP + *haṣṣon*NP]PP. The functional dissimilarity corresponds to the following semantic difference: the former structure indicates the location of the verbal action as a preposition phrase 'at/to the area opposite of the sheep' and the latter represents the intention of the action 'for the sake of the sheep'.

Second, the clause modified by *lənoḵaḥ haṣṣon* could be either the main clause, וַיִּצֵּג אֶת־הַמַּקְלוֹת *wayyaṣṣēg ʔɛṯ-hammaqəloṯ* 'he placed the branches', or the embedded clause, תָּבֹאנָה הַצֹּאן לִשְׁתּוֹת *tɔḇonɔ haṣṣoʔn lištoṯ* 'the sheep would go to drink'. While the latter clause is the nearer syntactic option, its meaning would be nonsensical: ***the sheep would go to drink (at the opposite/for the sake of) the sheep*. With the main clause, both analyses suggested above for the modifying phrase are meaningful and could be plausible. As a result, this usage exemplifies the ambiguity required for the emergence of such functional extensions.

(193) וַיַּצֵּג אֶת־הַמַּקְלוֹת אֲשֶׁר פִּצֵּל בָּרָהָטִים בְּשִׁקַּתוֹת הַמַּיִם אֲשֶׁר תָּבֹאנָה הַצֹּאן לִשְׁתּוֹת לְנֹכַח הַצֹּאן

wayyaṣṣeḡ	*ʔeṯ-hammaqəloṯ*	*ʔᵃšɛr*	*piṣṣel*
put-WCPC.3M.SG.	DOM+the.branches	REL	strip-SC.3M.SG.
bɔrʾhɔṭim	*bəšiqᵃṯoṯ*	*hammɔyim*	*ʔašɛr*
IN+the.troughs	WITH+drinking.of	the.water	REL
tɔḇonɔ	*haṣṣoʔn*	*lištoṯ*	
enter-PC.3F.SG.	the.sheep-F.	TO+drink-INF	
lənoḵaḥ	*haṣṣon*		
TO+front.of/BEN	the.sheep		

In the watering troughs from which the sheep would go to drink, [Jacob] placed the rods which he had stripped in front of/for the sheep. (Gen 30:38)

4.13.3. Mapping the Grammaticalization Trajectories of lənoḵaḥ

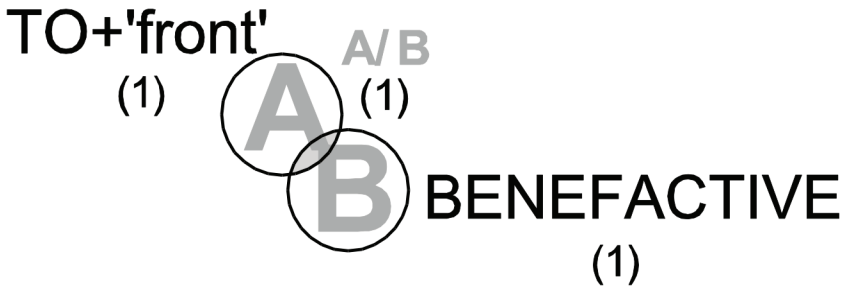
The grammaticalization trajectory of *lənoḵaḥ* demonstrates a linear development from TO + 'front' to a benefactive function. As with previous examples, it may be mapped according to figure 4.19, using the Overlap Model of figure 4.20, or with the token numbers in figure 4.21.

Figure 4.19. Functional Developments of *lənoḵaḥ*
PREP (TO) + Noun ('front') > PREP (BENEFACTIVE)

Figure 4.20. Overlap Model for *lənoḵaḥ*

Stage:	I	II
PREP+N	TO+'front'	TO+'front'
PREP		BENEFACTIVE

Figure 4.21. Semantic Map of *lənoḵaḥ*



4.14. לְפִי lәpī

4.14.1. Morphosyntax of lәpī

The string לְפִי *lәpī* combines the inseparable preposition *l-* ‘to, for’ together with the anatomic noun *pi* ‘mouth’ in the construct state. The morphology of the noun פֶּה *pɛ* ‘mouth’ is discussed previously (§4.9.1).

4.14.2. Usage of lәpī

In addition to the multiple uses where the noun refers to a literal or metaphorical mouth, the accordantive function is evidenced by the grammaticalized string *lәpī*.

4.14.2.1. PREP (TO) + N (‘mouth’)

There are fifty-one instances of the use of *lәpī* as a preposition phrase in Biblical Hebrew.[146] The meaning of the noun falls into one of three semantic groups—the anatomic ‘mouth’, a more general ‘opening; orifice’, or the emblematic idiom ‘edge (of a sword)’. Example (194) demonstrates the first, which is found only with pronominal suffixes. In example (195), the phrase *lәpī* is used with a following noun to designate an opening. A figure of speech with the word חֶרֶב *ḥɛrɛḇ* ‘sword’, as in example (196), indicates the destruction wrought *lәpī ḥɔrɛḇ* ‘at the mouth of the sword’, that is, with the devouring part of a sword.

(194) שִׁיתָה יְהוָה שָׁמְרָה לְפִי

šiṯɔ	*YHWH*	*šɔmrɔ*	***lәpī***
set-IMP.M.SG.	PN	guard	**FOR+mouth+my**

Set put a guard, O Yahweh, for my mouth. (Ps 141:3)

(195) נִפְזְרוּ עֲצָמֵינוּ לְפִי שְׁאוֹל

nipzәru	*ʕᵃṣɔmenu*	***lәpī***	*šәʔol*
be.scattered-SC.3C.PL.	bones+our	**AT+mouth.of**	Sheol

Our bones shall be scattered at the opening of Sheol. (Ps 141:7)

(196) וַיַּכּוּהָ לְפִי־חָרֶב

wayyakkuhɔ	***lәpī-ḥɔrɛḇ***
strike-WCPC.3M.PL.+her (= city)	**AT+mouth.of**+sword

They struck the city with the edge of the sword. (Judg 1:8)

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146 Gen 34:26; Exod 4:16; 17:13; 28:32; 39:23; Num 21:24; 35:30; Deut 13:16 (2x); 20:13; Josh 6:21; 8:24 (2x); 10:28, 30, 32, 35, 37, 39; 11:11, 12, 14; 19:47; Judg 1:8, 25; 4:15, 16; 18:27; 20:37, 48; 21:10; 1 Sam 15:8; 22:19 (2x); 2 Sam 15:14; 1 Kgs 17:1; 2 Kgs 10:21, 25; 21:16; Job 1:15, 17; 29:9; 31:27; Pss 39:2; 119:103; 141:3, 7; Prov 8:3; 30:32; Qoh 6:7; Jer 21:7.

4.14.2.2. PREP (ACCORDING TO)

The complex preposition is found fourteen times as the logical relation ACCORDING TO.[147] The preposition is most commonly found with a following NP as with example (197). The representative surveyors allotted each tribe's land לְפִי נַחֲלָתָם *ləpī naḥ^{a}lɔ̲tɔm* 'according to their inheritance'.

(197) וְיִכְתְּבוּ אוֹתָהּ לְפִי נַחֲלָתָם

wəyiḵtə̲bu	*ʔoṯɔh*	***ləpī***	*naḥ^{a}lɔ̲tɔm*
CJ+write-PC.3M.PL.	DOM+her (= land)	**ACCRD**	inheritance+their

They will document the land according to their allotment. (Josh 18:4)

The complement of the complex preposition *ləpī* may also be an infinitive phrase as exemplified by example (198). In this instance from Jeremiah, the reappearance of God to Judah is envisioned as occurring *ləpī* 'according to' the culmination of the seventy years of punishment in the Babylonian exile.

(198) כִּי לְפִי מְלֹאת לְבָבֶל שִׁבְעִים שָׁנָה אֶפְקֹד אֶתְכֶם

ki	***ləpī***	*məloʔṯ*	*ləb̲ɔb̲ɛl*	*šiḇəʕim*	*šɔnɔ*
PTCL	**ACCRD**	fulfilling-INF.	AT+Babel	seventy	year
ʔɛp̄qod̲		*ʔɛṯək̲ɛm*			
visit-PC.1C.SG.		DOM+you-M.PL.			

Whenever the seventy years are complete in Babylon, I will visit you. (Jer 29:10)

4.14.3. Grammaticalization of ləpī

The grammaticalization of *ləpī* may be traced through an examination of similar cross-linguistic changes and the evidence of ambiguity in the usage of the linguistic sign. In the Semitic languages, several collocations of the form TO$_{\text{PREP}}$ + 'mouth'$_{\text{N}}$ evidence the grammatical meaning 'according to'. These complex prepositions include: *lpy* 'according to' in Punic (Friedrich and Röllig 1999, §252), *l p* 'according to' in Ugaritic (Tropper 2000, 777–78), *ana pî* 'according to' in Akkadian (von Soden 1995, §115t), and likely *ina pî* 'according to' at Amarna (EA 81:18).

Example (199) provides a plausible context in Biblical Hebrew where the expansion to the complex preposition could be envisioned. In the final preposition phrase, the expression, לְפִי הַטֶּף *ləpī haṭṭɔp̄*, could be understood as a composite or

147 Exod 12:4; 16:16, 18; 25:16 (2x), 51; 27:16; Num 9:17; 26:54; Josh 18:4; Prov 12:8; 27:21; Jer 29:10; Hos 10:12.

in aggregate. The former would designate that Joseph was giving food, [*l*-PREP [*p̄i hatṭɔp̄*]NP]PP 'for the mouth of the children'. A singular anatomic morpheme is commonly used to describe a collective idiom for a group (Joüon and Muraoka 1991, §136l). The latter grammatical meaning would specify who was sustained, [*ləp̄i*PREP *hatṭɔp̄*NP]PP 'according to (the number of) the children'. The suggested structural change is emblematic of the grammaticalization co-occurring with the functional shift to ACCORDING TO.

(199) וַיְכַלְכֵּל יוֹסֵף אֶת־אָבִיו וְאֶת־אֶחָיו וְאֵת כָּל־בֵּית אָבִיו לֶחֶם לְפִי הַטָּף

wayəkalkel	*yosep̄*		*ʔeṯ-ʔɔḇiw*
sustain-WCPC.3M.SG.	PN		DOM+father+his
wəʔeṯ-ʔeḥɔw	*wəʔeṯ*	*kɔl-beṯ*	*ʔɔḇiw*
CJ+DOM+brother+his	CJ+DOM	all+house	father+his
lɛḥɛm	***ləp̄i***		*haṭṭɔp̄*
bread	**FOR+mouth.of/ACCRD**		the.children

Joseph provided food for his father, his brothers, and his father's entire household according to [the number of]/for the mouths of the children. (Gen 47:12)

4.14.4. Mapping the Grammaticalization Trajectories of ləp̄i

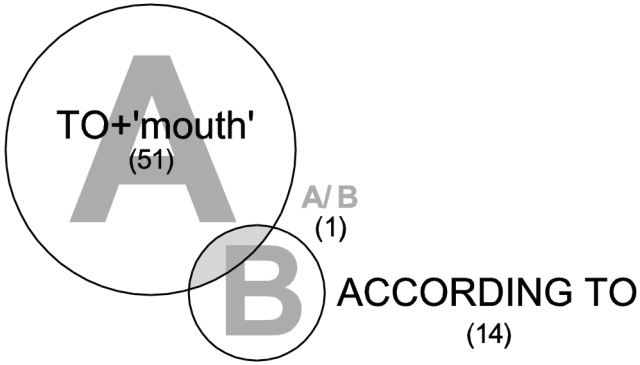
The functional expansion to the complex preposition is modeled in figure 4.22. The semantic change to the grammatical meaning ACCORDING TO is parallel to the structural rearrangement. Moreover, figure 4.23 demonstrates the structural and functional variation which is evidenced in Biblical Hebrew as is represented by stage II. Figure 4.24 designate the number of tokens for each meaning.

Figure 4.22. Functional Developments of *ləp̄i*
PREP (TO) + Noun ('mouth') > PREP (ACCORDING TO)

Figure 4.23. Overlap Model for *ləp̄i*

Stage:	I	II
PREP+N	TO+'mouth'	TO+'mouth'
PREP		ACCRD

Figure 4.24. Semantic Map of *ləpī*



4.15. לְפְנֵי lipne

4.15.1. Morphosyntax of lipne

The string לְפְנֵי *lipne* is composed of two lexemes, the preposition *l-* 'to, for' and the *plural tantum* noun פָּנִים *pənim* 'face' in the construct state. Most lexica relate the noun etymologically to the final-weak verbal root *PNW* or *PNY* 'turn'. The Biblical Hebrew noun is used to refer to the 'face' of a person, and by extension it may designate various emotions and the 'presence' of an individual. Further, it may refer metaphorically to the 'front' of something or even a 'surface' as in פְּנֵי־הָאָרֶץ *pəne-hɔʔɔrɛṣ* 'the face of the land'. A number of nominal cognates are known from the Semitic languages. In Phoenician and Ugaritic, *pnm* means 'face' or 'countenance'. The meaning 'front, face' glosses Akkadian *pānum*. The morphologically similar terms, Arabic *fināʔ* and Sabaic *pnw*, designate the 'front of (a building)'.

4.15.2. Usage of lipne

The Biblical Hebrew syntagm *lipne* governs a following independent lexeme or a pronominal suffix. The grammaticalized string functions to denote locative and temporal relations. Even though the compositional constituents are clearly discernible, the phrasal usage 'to the face of' is never found in Biblical Hebrew. Even the independent phrase לְפָנִים *ləpɔnim* is found only as the locative adverb 'forward' (Jer 7:24) or the temporal adverb 'formerly'.[148]

148 Deut 2:10, 12, 20; Josh 11:10; 14:15; 15:15; Judg 1:10, 11, 23; 3:2; Ruth 4:7; 1 Chr 4:40; 9:20; 2 Chr 9:11; Neh 13:5; Job 17:6; 42:11; Ps 102:26.

4.15.2.1. PREP (IN FRONT OF)

Eight hundred and seventy-five examples of *lipne* may be classified as functioning as the locative relation IN FRONT OF.[149] In example (200), the verb *QRB*

149 Gen 6:11, 13; 7:1; 10:9 (2x); 13:9; 17:1, 18; 18:8, 22; 20:15; 23:12, 17; 24:7, 12, 33, 40, 51; 27:7, 20; 30:33; 32:17, 18, 21; 33:14; 34:10, 21; 40:9; 41:43, 46; 43:9, 14, 15, 33; 44:14; 47:2, 6, 7, 18; 48:15; 50:18; Exod 4:21; 6:12, 30; 7:9, 10 (2x); 8:16; 9:10, 11, 13; 11:10; 13:22; 14:2 (2x), 9, 19; 16:9, 33, 34; 17:6; 18:12; 19:7; 21:1; 23:23; 25:30; 27:21; 28:12, 29, 30 (2x), 35, 38; 29:10,11, 23, 24, 25, 26, 42; 30:6 (2x), 8, 16, 36; 32:5; 33:19; 34:34; 40:5, 6, 23, 25, 26; Lev 1:3, 5, 11; 3:1, 7, 8, 12, 13; 4:4, 6, 7, 14, 15, 17, 18, 24; 5:26; 6:7, 18; 7:30; 8:26, 27, 29; 9:2, 4, 5, 21; 10:1, 2, 15, 17, 19; 12:7; 14:11, 12, 16, 18, 23, 24, 27, 29, 31; 15:14, 15, 30; 16:1, 7, 10, 13, 14, 15, 18, 30; 17:4; 18:23; 19:14, 22; 23:11, 20, 28, 40; 24:3, 4, 6, 8; 26:7, 8, 17, 37; 27:8, 11; Num 3:4 (2x), 6, 7, 38 (2x); 5:16, 18, 25, 30; 6:16, 20; 7:3 (2x), 10; 8:9, 10, 11, 13 (2x), 21, 22 (2x); 9:6 (2x); 10:9, 10; 11:20; 14:5, 37, 42, 43; 15:15, 25, 28; 16:2, 7, 9, 16, 17; 17:3, 5, 19, 22, 25; 18:2, 19; 19:3; 20:3; 22:33; 26:61; 27:2 (3x), 5, 19 (2x), 21 (2x), 22 (2x); 31:50, 54; 32:4, 20, 21, 22 (2x), 27, 29 (2x), 32; 33:7, 47; 35:12; 36:1 (2x); Deut 1:8, 21, 38, 42, 45; 2:31, 33, 36; 4:8, 10, 44; 6:25; 7:2, 23; 9:2, 18, 25; 10:8; 11:26, 32; 12:7, 12, 18 (2x); 14:23, 26; 15:20; 16:11; 18:7; 19:17 (2x); 22:6, 17; 23:15; 24:4, 13; 25:2; 26:4, 5, 10 (2x), 13; 27:7; 28:7 (2x), 25 (2x); 29:9, 14; 30:1, 15, 19; 31:5, 21; Josh 1:5; 3:14; 6:26; 7:4, 5, 6, 8, 12 (2x), 13, 23; 8:5, 6 (2x), 14, 15, 32; 10:10, 12; 11:6; 17:4 (3x); 18:1, 6, 8, 10; 19:51; 20:6, 9; 22:27, 29; 24:1; Judg 2:14; 3:27; 4:15, 23; 6:18; 8:28; 9:39; 11:9, 11; 13:15; 16:25; 18:21; 20:23, 26 (2x), 28, 32, 35, 39, 42; 21:2; 1 Sam 1:12, 15, 16, 19; 2:28, 30, 35; 3:1; 4:2, 3; 5:3 (2x), 4; 6:20; 7:6, 10; 9:24 (2x); 10:5, 19, 25; 11:15 (2x); 12:2 (2x), 7; 14:13; 15:33; 16:8, 10, 16, 21, 22; 17:31, 41, 57; 19:7, 24; 20:1 (2x); 21:8; 23:18; 28:22, 25 (2x); 29:8; 30:20; 2 Sam 2:14, 17; 3:31, 34; 5:3, 20; 6:4, 5, 14, 16, 17, 21 (2x); 7:16, 18, 26, 29; 10:15, 16, 19; 11:13; 13:9; 14:33; 16:19 (3x); 18:7, 9, 14; 19:9, 14, 19; 20:8; 21:9; 24:4; 1 Kgs 1:2, 5, 23, 25, 28 (2x), 32; 2:4, 26, 45; 3:6, 15, 16, 22, 24; 6:17, 20, 21; 7:49; 8:5, 22, 23, 25 (2x), 28, 31. 33, 46, 50, 59, 62, 64 (2x), 65; 9:3, 4, 6, 25; 10:8; 11:36; 12:8, 30; 14:9; 17:1; 18:15; 19:11 (2x), 19; 22:10, 21; 2 Kgs 3:14; 4:12, 38, 43, 44; 5:1, 2, 3, 15, 16, 23; 6:1, 22; 8:9; 10:4; 11:18; 14:12; 16:14; 18:22; 19:14, 15; 20:3; 22:10, 19; 23:3; 25:29; 1 Chr 6:17; 11:3; 12:18; 13:8, 10; 14:8; 15:24; 16:1, 4, 6, 27, 29, 37 (2x), 39; 17:16, 24, 25, 27; 19:7, 14, 16 (2x), 19; 21:30; 22:8, 18 (2x); 23:13, 31; 24:6, 31; 29:15, 22; 2 Chr 1:5, 6; 2:3, 5; 3:15; 4:20; 5:6; 6:12, 14, 16, 19, 22, 24 (2x), 36; 7:4, 7, 17, 19; 8:12; 9:7; 10:6, 8; 13:7, 8, 13, 15; 14:4, 6, 9, 11 (2x), 12 (2x); 15:2, 8; 18:9, 20; 19:11; 20:5, 9 (2x), 12, 13, 17, 18, 21; 23:17; 24:14; 25:8, 14, 22; 26:19; 27:6; 28:9, 14; 29:11, 19, 23; 30:9; 31:20; 32:12; 34:4, 18, 24, 27 (2x), 31; Ezra 7:28; 8:21, 29; 9:9, 15 (2x); 10:1; Neh 1:4, 6, 11; 2:1, 5, 6; 3:34; 5:15; 6:19; 8:1, 2, 3 (2x); 9:8, 11, 28, 32, 35; 12:36; Esth 1:3, 11, 13, 16, 17, 19; 2:9, 11, 17, 23; 3:7; 4:5, 6; 5:14; 6:1, 13 (2x); 7:9; 8:1, 3 (2x), 4, 5 (2x); 9:2, 11, 25; Job 3:24; 4:19; 8:16; 13:16; 15:4, 7; 21:8, 33; 23:4; 33:5; 34:19; 35:14; 41:2, 14; Pss 5:9; 18:7; 19:15; 22:28, 30; 23:5; 34:1; 41:13; 50:3; 56:14; 57:7; 61:8; 62:9; 68:4, 5; 69:23; 72:5, 9, 17; 76:8; 79:11; 80:3, 10; 85:14; 86:9; 88:3; 95:6; 96:6, 13; 97:3; 98:6, 9; 100:2; 102:1, 29; 106:23, 46; 116:9; 119:169, 170; 141:2; 142:3 (2x); 143:2; 147:17; Prov 4:3; 8:30; 14:12, 19; 15:33; 16:25;

'approach' is modified by three phrases, each headed by *lipne*. The phrases designate the location toward which the group of women went. That is, they drew near to the assembly of the three divisions of Israelite polity—the spiritual, political, and judicial branches of leadership—expressed as לִפְנֵי אֶלְעָזָר הַכֹּהֵן וְלִפְנֵי יְהוֹשֻׁעַ בִּן־נוּן וְלִפְנֵי הַנְּשִׂיאִים *lipne ʔelʕazar hakkohen wəlipne yəhošuaʕ bin nun wəlipne hannəśiʔim* 'in front of Eleazar the priest, Joshua son of Nun, and the leaders'.

(200) וַתִּקְרַבְנָה לִפְנֵי אֶלְעָזָר הַכֹּהֵן וְלִפְנֵי יְהוֹשֻׁעַ בִּן־נוּן וְלִפְנֵי הַנְּשִׂיאִים

wattiqraḇnə	***lipne***	*ʔelʕazar*	*hakkohen*
approach-WCPC.3F.PL.	**IN.FRONT.OF**	PN	the.priest
wəlipne	*yəhošuᵃʕ*	*bin-nun*	***wəlipne***
CJ+IN.FRONT.OF	PN	son.of+PN	**CJ+IN.FRONT.OF**
hannəśiʔim			
the.leaders			

They approached (in front of) Eleazar the priest, Joshua son of Nun, and the leaders. (Josh 17:4)

The locative relation is further combined with other spatial prepositions to form several compound-complex prepositions of note. The string מִלִּפְנֵי *millipne* 'from in front of' (< *min* + *lipne*) denotes the compound relation SOURCE + [IN FRONT OF].[150] Twice the locative preposition is preceded by עַל *ʕal* 'unto, upon, beside'.[151] This compound preposition *ʕal lipne* denotes a twofold spatial relation UPON + [IN FRONT OF]. These combinations secure the analysis of *lipne* as a grammatical unit which can be compounded with additional prepositions.

17:18; 18:16; 22:29 (2x); 23:1; 25:5, 6, 7, 26; 27:4; Qoh 2:26 (2x); 5:1, 5; 7:26; 9:1; Song 8:12; Isa 8:4; 9:2; 23:18; 36:7; 37:14; 38:3; 40:10; 41:2; 42:16; 45:1 (2x); 53:2, 7; 62:11, 22, 23; Jer 1:17; 2:22; 7:10; 9:12; 15:1, 9, 19; 18:17, 20, 23; 19:7; 21:8; 24:1; 26:4; 30:20; 31:36; 33:24; 34:15, 18; 35:5, 19; 36:7, 9, 22; 37:20; 38:26; 39:16; 40:4, 10; 42:2, 9; 44:10; 49:5, 19, 37 (2x); 50:8, 44; 52:12, 33; Lam 1:5, 6, 22; Ezek 2:10; 3:20; 4:1; 6:4, 5; 8:1, 11; 9:6; 14:1; 16:18, 19, 50; 20:1; 22:30; 23:24, 41; 28:9, 17; 30:24; 33:31; 36:17; 40:12, 19, 22, 26, 47; 41:22; 42:4, 11; 43:24; 44:3, 11, 12, 15; 46:3, 9; Dan 1:5, 9, 13, 18, 19; 2:2; 8:3, 4, 6, 7; 9:10, 18, 20; 10:12; 11:16; Hos 6:2; Joel 2:3 (2x), 10, 11; Amos 9:4; Jonah 1:2; Mic 6:4; Nah 1:6; Hab 3:5; Hag 2:14; Zech 3:1, 3, 4, 8, 9; 4:7; 12:8; 14:20; Mal 3:1, 16. An additional instance is also attested in the Iron Age Hebrew inscriptions (Arad 7.6).

150 Gen 4:16; 41:46; 47:10; Exod 23:28; 35:20; 36:3; Lev 9:24; 10:2; 16:12; 22:3; Num 17:11, 24; 20:9; Deut 9:4; 11:23; 17:18; 28:31; 31:3; Josh 23:5, 13; 1 Sam 8:18; 18:12; 21:7; 2 Sam 7:15; 1 Kgs 8:25, 54; 21:29; 2 Kgs 5:27; 6:32; 1 Chr 16:30, 33; 19:18; 29:12; 2 Chr 1:13; 6:16; 19:2; 20:7; 32:7; 33:12, 23; 34:27; 36:12; Ezra 10:6; Neh 3:37; Esth 1:19; 4:8; 7:6; 8:15; Pss 17:2; 51:13; 97:5 (2x); 114:7 (2x); Qoh 3:14; 8:12, 13; 10:5; Isa 48:19; 57:16; Jer 16:17; 18:23; 31:36; 33:18; Ezek 30:9; 40:19; Dan 11:22; Jonah 1:3 (2x), 10.

151 Ezek 40:15; Esth 4:2.

4.15.2.2. PREP/ADVZ (BEFORE)

Another function exhibited by *lipne* is the temporal relation BEFORE, which is evidenced in Biblical Hebrew seventy-one times.[152] Example (201) demonstrates this usage in conjunction with the opposite temporal relation אַחֲרָיו *ʔaḥ^{a}rɔw* 'after it'. The phrase לְפָנָיו *ləpɔnɔw* 'before it' designates the time previous to the day in question. Thus, the idiom suggests that there was never a time either previous or following comparable to that day. This temporal function is also found governing infinitive phrases as in example (202). Moses's final blessing contained in chapter thirty-three of Deuteronomy is designated as having been proclaimed לִפְנֵי מוֹתוֹ *lipne moṯo* 'before his dying'. That is, it was situated temporary prior to the action related by the infinitive.

(201) וְלֹא הָיָה כַּיּוֹם הַהוּא לְפָנָיו וְאַחֲרָיו

wəloʔ	*hɔyɔ*	*kayyom*	*hahuʔ*
CJ+NEG	be-SC.3M.SG.	LIKE+the.day	that
ləpɔnɔw	*wəʔaḥ^{a}rɔw*		
BEFORE+it	CJ+AFTER+it		

There has not been anything like that day before it or after it. (Josh 10:14)

(202) בֵּרַךְ מֹשֶׁה אִישׁ הָאֱלֹהִים אֶת־בְּנֵי יִשְׂרָאֵל לִפְנֵי מוֹתוֹ

beraḵ	*mošɛ*	*ʔiš*	*hɔʔ^{ɛ}lohim*
bless-SC.3M.SG.	PN	man.of	the.god
ʔɛṯ-bəne	*yiśrɔʔel*	***lipne***	*moṯo*
DOM+sons.of	PN	**BEFORE**	dead-INF.+his

Moses the man of God blessed the children of Israel before his death. (Deut 33:1)

Elsewhere, *lipne* may govern a sentence as a clause linker or an adverbializer with the temporal function BEFORE.[153] In example (203), the clause-initial adverbial clause, לִפְנֵי הִתְגַּלַּע *lipne hiṯgallaʕ* 'before it breaks out', is subordinate to the imperative clause, הָרֵיב נְטוֹשׁ *hɔriḇ nəṭoš* 'give up the strife'.

Lastly, the temporal function of *lipne* is found in combination with מִן *min* 'from' both before and after to form compound prepositions. The syntagm

152 Gen 13:10; 27:7, 10; 29:26; 30:30; 36:31; 45:5, 7; 48:20; 50:16; Exod 10:14; Lev 18:27, 28, 30; Num 13:22; Deut 33:1; Josh 10:14; 1 Sam 9:9 (2x), 15; 23:24; 25:19; 26:19; 2 Sam 3:13, 35; 1 Kgs 3:12; 15:3; 16:25, 30, 33; 2 Kgs 17:2; 18:5; 19:26; 21:11; 23:25; 1 Chr 1:43; 17:13; 22:5; 24:2; 29:25; 2 Chr 1:12; 33:19; Neh 13:19; Job 8:12; 21:18; Pss 35:5; 83:14; Prov 8:25; 16:18 (2x); 18:12 (2x); Qoh 1:16; 2:7, 9; 4:16; Isa 17:13 (2x); 18:5; 37:27; 43:10; 48:7; 65:6; Jer 28:8 (2x); 34:5; Ezek 33:22; Joel 3:4; Amos 1:1; Zech 8:10; Mal 3:23. See also the usage in Iron Age Hebrew (Meṣad Ḥashavyahu 1.5).

153 Prov 17:14

millipne 'from before' brings together the source relation FROM and the temporal function BEFORE.[154] With the following *min* 'from' in one instance from Late Biblical Hebrew, the aggregate construction לִפְנֵי מִזֶּה *lipne mizzɛ* 'before this' provides for a clause-initial preposition phrase which serves to mark the temporal situation of the following clause.[155]

(203) וְלִפְנֵי הִתְגַּלַּע הָרִיב נְטוֹשׁ

wəlipne	*hitgallaʕ*	*hɔriḇ*	*nəṭoš*
CJ+BEFORE	break.out-SC.3M.SG.	the.strife	give.up-IMP.M.SG.

Before a quarrel begins, concede. (Prov 17:14)

4.15.3. Grammaticalization of lipne

As seen previously (§3.1.3.2), there is abundant evidence in the world's languages for the shift from body part nouns to spatial terms and further from locative to temporal functions. Semitic examples with a similar trajectory of change to the locative IN FRONT OF include: Moabite *lpny* 'in front of' (< TO + 'face'), Phoenician *lpn* 'before' (< TO + 'face'), Ugaritic *l pn* 'before' (< TO + 'face'), Aramaic *bʔpy* 'in front of' (< IN + 'face'), *lʕyn* 'before' (< TO + 'eyes'), Akkadian *ina pāni* 'in front of' (< IN + 'front, face'), and Geʕez *fəṣma* 'in front of' (< 'forehead, front'). Examples of the locative preposition IN FRONT OF used for the temporal function BEFORE may be identified with Aramaic *qdm* 'before', *(l-)qdmy* 'ere', Arabic *ʔamāma* 'before', *qabla* 'before', Akkadian *ana pāni* 'before', Geʕez *qədma* 'before', and Sabaic *l-qbl* 'before', *b-qdm(y)* 'before'.

A number of Biblical Hebrew examples demonstrate situations where the shift from the locative to temporal function is likely to have occurred.[156] Each is evidenced with a verb of motion which evinces both spatial and chronological change. As such, the ambiguity created may well have provided for the expansion of the relation to temporal contexts. In example (204), the marching orders for the Israelite army are presented. The armed men are commanded to march לִפְנֵי אֲרוֹן יְהוָה *lipne ʔᵃron YHWH* 'before the Ark of Yahweh' and the priests. This designation clearly implies a spatial and chronological priority of the military.

154 Gen 23:4, 8; Qoh 1:10.

155 Neh 13:4.

156 Gen 32:4; 33:3, 14; 46:28 (2x); Exod 13:21; 17:5; 23:20, 27, 28; 32:1, 23, 34; 33:2; 10:33; 14:14; 27:17 (2x); 32:17; Deut 1:22, 30, 33; 3:18, 28; 4:32; 9:3 (2x); 10:11; 31:3 (2x), 8; Josh 1:14; 3:6 (2x), 11; 4:5, 11, 12, 13; 6:4, 6, 7, 8, 9, 13 (2x); 8:10; 24:12; Judg 4:14; 1 Sam 4:17; 8:11, 20; 9:12, 19, 27; 10:8; 17:7; 18:13, 16; 2 Sam 5:24; 15:1; 19:18; 24:13; 1 Kgs 18:46; 2 Kgs 4:31; 1 Chr 14:15; 2 Chr 1:10; Neh 9:24; Esth 6:9, 11; Pss 68:8; 105:17; Isa 45:2; 52:12 (2x); 58:8; Mic 2:13 (2x).

(204) עִבְרוּ וְסֹבּוּ אֶת־הָעִיר וְהֶחָלוּץ יַעֲבֹר לִפְנֵי אֲרוֹן יְהוָה

ʕiḇəru	*wəsobbu*	*ʔɛṯ-hɔʕir*
pass.over-IMP.M.PL.	CJ+go.around-IMP.M.PL.	DOM+the.city
wəhɛḥɔluṣ	*yaʕᵃḇor*	
CJ+the.army	pass.over-PC.3M.SG.	
lipne	*ʔᵃron*	*YHWH*
IN.FRONT.OF/BEFORE	ark.of	PN

Head out and go around the city. The army will pass before the Ark of Yahweh. (Josh 6:7)

4.15.4. Mapping the Grammaticalization Trajectories of lipne

The expansion of *lipne* is presented in this section in three figures. In figure 4.25, the grammaticalization changes are linked through the extension of individual functions. The proposed originating phrase expanded to the locative function and then to the temporal usage.

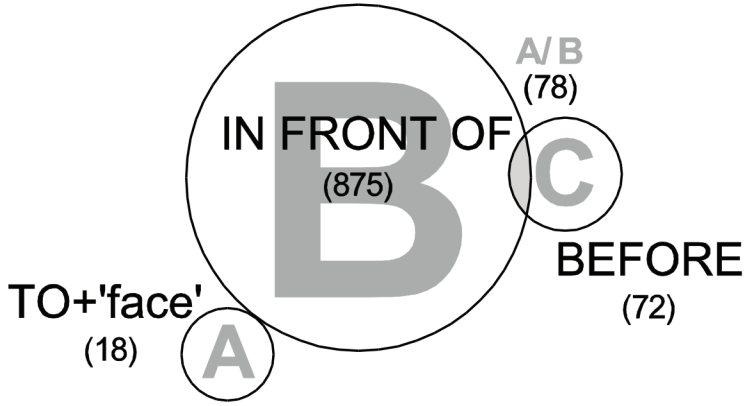
Figure 4.25. Functional Developments of *lipne*
*PREP (TO) + N (‘face’) > PREP (IN FRONT OF) > PREP/ADVZ (BEFORE)

Figure 4.26 displays these changes in the Overlap Model. The grammaticalization to the locative function is followed by the development of the TEMPORAL. Also, the structural change is apparent with the preposition phrase realigned as a complex preposition. The final phase presents the situation in Biblical Hebrew where the originating structure and function is not evidenced. Figure 4.27 provides the meanings and tokens of each.

Figure 4.26. Overlap Model for *lipne*

Stage:	I	II	III
PREP+N	*TO+‘face’	*TO+‘face’	
PREP		IN FRONT OF	IN FRONT OF
PREP/ADVZ			BEFORE

Figure 4.27. Semantic Map of *lipne*



4.16. לִקְרַאת liqraʔt

4.16.1. Morphosyntax of liqraʔt

The syntagm לִקְרַאת *liqraʔt* furnishes a morphological origin unlike that of the other cases in this chapter. The initial *l-* 'to, for' is unexceptional. The second element, however, appears to be either the verbal noun or the *qal* stem infinitive construct of *QRʔ* 'to meet' (homographic with *QRʔ* 'to call [out]'), which itself is a by-form of the more usual final-weak root. The infinitive-construct form of III-*ʔ* roots follows either the vocalic pattern **qv̆ɪtv̆ɪl* or **qv̆ɪtv̆ɪl* + *-t* (Bauer and Leander 1922, 372–76). Some roots exhibit both forms, שָׂנֹא *śənoʔ* 'hating' (< **śunuʔ*; Gen 37:5) and שִׂנְאַת *śənoʔt* 'hating' (< **śunuʔ* + *-t*; Prov 8:13), while most roots pattern after one or the other. In the case of *QRʔ* 'to meet', the latter patterning of קְרַאת *qəraʔt* 'meeting' (< **qaraʔ* + *-t*) is used exclusively in Biblical Hebrew.[157] The form is further anomalous as the syllable closing glottal stop is syncopated rather than quiescent. Thus, it follows the unconditioned phonological change of **Cv̆ʔC* > Cv(*ʔ*)C,[158] even though the historic orthography is maintained (Gesenius, Kautzsch, and Cowley 1910, §19k).[159]

157 The homophonous root *QRʔ* 'to call' follows the former pattern, קֹרֵא *qəroʔ* 'calling' (< **quruʔ*; 1 Sam 3:6). The example of *liqraʔt nəḥɔšim* in Num 24:1 should probably be realigned with this root as 'to summon omens'.

158 The original short vowels **u/a/i* realize as *o/a/e* in closed syllables and in open syllables *o/ɔ/e* hence the pronominal form לִקְרָאתִי *liqrɔ(ʔ)ti* 'to meet me' (Num 22:34).

159 The Siloam Tunnel Inscription evinces a less conservative spelling in line four, *lqrt* 'to meet' (< **lqrʔt*).

4.16.2. Usage of liqraʔt̲

Three usages of *liqraʔt̲* are evidenced: (1) the originating string of the preposition plus the infinitive construct 'to meet', (2) the directional complex preposition TOWARD, and (3) the adversative preposition AGAINST.

4.16.2.1. PREP (TO) + INF ('meet')

The composite meaning of 'to meet' comprises two-thirds of the cases of *liqraʔt̲*.[160] Most frequently (fifty-four of eighty-two examples), this usage modifies verbs of motion such as *BWʔ* 'enter' (1 Sam 25:34; 2 Sam 19:16, 21, 26; 2 Kgs 2:15), *HLK* 'go' (Gen 24:65; 32:7; Exod 4:27; Josh 9:11; 1 Kgs 18:16 [2x]; 2 Kgs 8:8, 9; 9:18; 16:10; 23:29; Isa 7:3), *YṢʔ* 'go out' (Gen 14:17; 30:16; Exod 4:14; 18:7; 19:17; Num 22:36; 31:13; Judg 4:18, 22; 11:31, 34; 1 Sam 9:14; 13:10; 18:6; 2 Sam 6:20; 2 Kgs 9:21; 2 Chr 35:20; Prov 7:15; Jer 41:6; Zech 2:7), *YRD* 'go down' (1 Sam 25:20; 2 Sam 19:17, 25; 1 Kgs 2:8; 21:18), *ʕLH* 'go up' (Gen 46:29; Judg 6:35; 2 Kgs 1:3, 6, 7), and *RWṢ* 'run' (Gen 18:2; 24:17; 29:13; 33:4; 2 Kgs 4:26; Jer 51:31 [2x]). The other instances are used with a wide range of other verbal notions without movement semantics. Example (205) demonstrates the infinitive construction 'to meet' modifying a main verb which does not denote motion. Ahimelech, the priest of Nob, is fearful (חרד) of the situation surrounding his encounter, or meeting, with David.

(205) וַיֶּחֱרַד אֲחִימֶלֶךְ לִקְרַאת דָּוִד

wayyɛḥᶜrad	*ʔᵃḥimɛlɛk̲*	***liqraʔt̲***	*dɔwid*
be.afraid-WCPC.3M.SG.	PN	**TO+meet**-INF.	PN

Ahimelech was afraid to meet David. (1 Sam 21:2)

4.16.2.2. PREP (TOWARD)

There are only a handful of clear examples of the directional preposition which may be differentiated categorically from the infinitive.[161] These usages are separable because of semantic and pragmatic reasons. Two instances are found with

160 Gen 14:17; 18:2; 19:1; 24:17, 65; 29:13; 30:16; 32:7; 33:4; 46:29; Exod 4:14, 27; 5:20; 7:15; 18:7; 19:17; Num 22:34, 36; 23:3; 31:13; Josh 9:11; 11:20; Judg 4:18, 22; 6:35; 11:31, 34; 19:3; 1 Sam 9:14; 10:10; 13:10; 15:12; 16:4; 18:6; 21:2; 25:20, 32, 34; 2 Sam 6:20; 10:5; 15:32; 16:1; 19:16, 17, 21, 25, 26; 1 Kgs 2:8, 19; 18:7, 16 (2x); 21:18; 2 Kgs 1:3, 6, 7; 2:15; 4:26, 31; 5:21, 26; 8:8, 9; 9:17, 18, 21; 10:15; 16:10; 23:29; 1 Chr 19:5; 2 Chr 35:20; Ps 59:5; Prov 7:10, 15; Isa 7:3; 14:9; 21:14; Jer 41:6; 51:31 (2x); Amos 4:12; Zech 2:7.

161 Exod 14:27; Judg 14:5; 15:14; 1 Sam 30:21 (2x).

verbs of shouting (וּפְלִשְׁתִּים הֵרִיעוּ לִקְרָאתוֹ *upəlištim heriʕu liqrɔʔto* ‘the Philistines were shouting at him’; Judg 15:14) or roaring (כְּפִיר אֲרָיוֹת שֹׁאֵג לִקְרָאתוֹ *kəpīr ʔᵃrɔyoṯ šoʔeḡ liqrɔʔto* ‘a young lion was roaring toward him’; Judg 14:5), where the complement is preceded by the grammaticalized complex preposition *liqraʔṯ* ‘toward’. In Exod 14:27, the directionality of the fleeing and confused Egyptians remarkably is toward Moses: וּמִצְרַיִם נָסִים לִקְרָאתוֹ *umiṣrayim nɔsim liqrɔʔto* ‘The Egyptians were fleeing to him’. Lastly, the string with a directional sense is found twice in example (206). The verb is being modified by two equivalent expressions, לִקְרַאת דָּוִד וְלִקְרַאת הָעָם *liqraʔṯ dɔwiḏ wəliqraʔṯ hɔʕɔm* ‘toward David and toward the people’. The repetition of identical prepositions is expected with Biblical Hebrew compound objects. However, only once in Biblical Hebrew is a duplicate infinitive used to modify a single verb, where it is used to highlight a sequence of multiple paired items (see 2 Kgs 5:26). It may be reasonably supposed that the double usage in example (206) is most probably prepositional.

(206) וַיֵּצְאוּ לִקְרַאת דָּוִד וְלִקְרַאת הָעָם אֲשֶׁר־אִתּוֹ

wayyeṣʔu	***liqraʔṯ***	*dɔwiḏ*
go.out-WCPC.3M.PL.	**TOWARD**	PN
wəliqraʔṯ	*hɔʕɔm*	*ʔᵃšɛr-ʔitto*
CJ+TOWARD	the.people	REL+WITH+him

They went towards David and the people who were with him. (1 Sam 30:21)

4.16.2.3. PREP (AGAINST)

An adversative relation is conveyed in ten instances of *liqraʔṯ*.[162] Example (207) exhibits this usage. In preparing for a battle, the armies array and take position opposite one another. The adverbial expression, מַעֲרָכָה לִקְרַאת מַעֲרָכָה *maʕᵃrɔ̲kɔ liqraʔṯ maʕᵃrɔ̲kɔ*, designates how the battle lines were drawn ‘rank against rank’.

(207) וַתַּעֲרֹךְ יִשְׂרָאֵל וּפְלִשְׁתִּים מַעֲרָכָה לִקְרַאת מַעֲרָכָה

wattaʕᵃroḵ	*yiśrɔʔel*	*upəlištim*	*maʕᵃrɔ̲kɔ*
arrange-WCPC.3M.SG.	PN	CJ+PN	line
liqraʔṯ	*maʕᵃrɔ̲kɔ*		
AGAINST	line		

Israel and the Philistines arrayed for battle rank against rank. (1 Sam 17:21)

162 Gen 15:10; 1 Sam 4:2; 17:2, 21; 2 Sam 10:9, 10, 17; 1 Chr 19:10, 11, 17.

4.16.3. Grammaticalization of liqraʔt̲

The expansion of *liqraʔt̲* to grammatical contexts is explored by looking at ambiguous usages and analogous cross-linguistic examples.

4.16.3.1. PREP (TO) + INF ('meet') > PREP (TOWARD)

In Semitic, an analogous semantic development yielding a directional relation 'towards' is evidenced from several dialects of Aramaic. Aramaic *lʔwrʕ* 'toward' in several dialects (Official Aramaic, Qumran Aramaic, and Syriac) is derived from a string of PREP + INF where the verbal root is *ʔRʕ* 'reach, meet'.

Ambiguity is apparent between the infinitive phrase to the directional preposition in at least twenty-two contexts.[163] In these examples, oftentimes the modified constituent is a verb of motion, notably *YṢʔ* 'go out' and *HLK* 'go', and the complement of *liqraʔt̲* is a person or group of people. Thus, the semantic ambiguity of 'go (out) to meet someone' and 'go (out) toward someone' is patent.[164] Example (208) provides one such situation. Saul turns from pursuing David to encounter a group of Philistines. The modifying phrase, לִקְרַאת פְּלִשְׁתִּים *liqraʔt̲ pəlištim*, may be understood as the modifying infinitive phrase, 'to meet the Philistines', or the preposition phrase, 'toward the Philistines'.

(208) וַיֵּלֶךְ לִקְרַאת פְּלִשְׁתִּים

wayyelɛḵ	***liqraʔt̲***	*pəlištim*
go-WCPC.3M.SG.	**TO+meet**-INF/**TOWARD**	PN

[Saul] went to meet/toward the Philistines. (1 Sam 23:28)

4.16.3.2. PREP (TOWARD) > PREP (AGAINST)

The extension of the directional to the adversative function is less clear, although not altogether without support. The typological evidence suggests a tendency of such adversative relations to develop from locative prepositions. The possibility of an expansion from the original infinitive phrase in Biblical Hebrew cannot be completely discounted. Heine and Kuteva point to a similar development. In the Indian Ocean French Creole, *kot* 'toward' (< French *côté* 'side') further designates the prepositional relation 'against' (Heine and Kuteva 2004, 272). Semitic examples provide additional evidence for the extension of the directional to the adversative. The Aramaic complex preposition *lʔwrʕwt* 'towards' takes on the

163 Num 20:18, 20; 21:23, 33; Deut 1:44; 2:32; 3:1; 29:6; Josh 8:5, 14, 22; Judg 7:24; 20:25, 31; 1 Sam 4:1; 17:48 (2x), 55; 23:28; 2 Sam 18:6; 1 Kgs 20:27; Job 39:21.

164 Other uses with motion verbs (§4.16.3.1) could plausibly be included with these ambiguous examples where movement is signaled by the verb.

notion of 'against' in the Psalms Targum. Aramaic *lzymwn* is multivalent denoting both 'towards' and 'against'. The Akkadian compounds, *ana libbi* 'towards' and *ana muḫḫi* 'towards', may designate opposition, 'against'. Several Sabaic function words composed of the preposition *ʕbr* 'towards' acquire the function 'against'.

In Biblical Hebrew, the ambiguity between these two relations may be observed in example (209). The imperative verb implores God to brandish his weapons in the defense of the speaker. The modifying phrase, לִקְרַאת רֹדְפָי *liqraʔṯ roḏəpōy*, may be read as a directional notion 'toward my pursuers' or an adversative 'against my pursuers'.

(209) וְהָרֵק חֲנִית וּסְגֹר לִקְרַאת רֹדְפָי

wəhɔreq	*hᵃniṯ*	*usəḡor*
CJ+empty-IMP.M.SG.	spear	CJ+weapon
liqraʔṯ	*roḏəpōy*	
TOWARD/AGAINST	pursuers+MY	

Draw out a spear and spar toward/against my pursuers. (Ps 35:3)

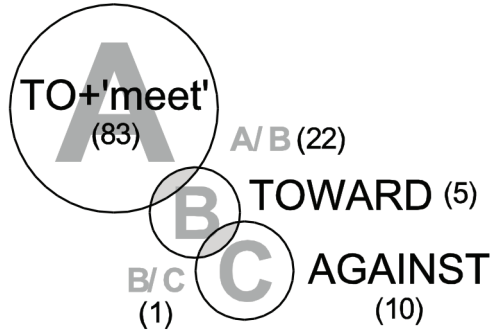
4.16.4. Mapping the Grammaticalization Trajectories of liqraʔṯ

The development of *liqraʔṯ* is traceable from the preposition-infinitive compound TO + 'meet' to the complex prepositions 'toward' and 'against'. These semantic and constructional expansions are represented in the Overlap Model of figure 4.28. First, the relation TOWARD developed from the PREP + INF. Second, the string was used in context with the function AGAINST. This latter step may have developed from the original syntagm or as was suggested in the previous section was a subsequent expansion of the directional preposition. The tokens of these three meanings and their overlapping uses are presented in a synchronic diagram on the figure 4.29.

Figure 4.28. Overlap Model for *liqraʔṯ*

Stage:	I	II	III
PREP+INF	TO+'meet'	TO+'meet'	TO+'meet'
PREP		TOWARD	TOWARD
PREP		(AGAINST)	AGAINST

Figure 4.29. Semantic Map of *liqraʔṯ*



4.17. מִיּוֹם *miyyom*

4.17.1. Morphosyntax of miyyom

The word מִיּוֹם *miyyom* is a composite of the preposition מִן *min* 'from' and the primary noun יוֹם *yom* 'day'. The assimilation of *nun* in the unaccented original preposition *min* accounts for the doubling of the initial *yod* of the noun (i.e., *min* + *yom* > *miyyom*). The details of the morphology of the noun were reviewed above with *bəyom* (§4.5.1).

4.17.2. Usage of miyyom

The *miyyom* string is used as a preposition phrase, a complex preposition, and an adverbializer. The grammatical meanings of the complex preposition and the adverbializer are identical denoting a temporal relationship.

4.17.2.1. PREP (FROM) + N ('day')

The composite meaning of the preposition phrase is evidenced thirteen times.[165] These instances are either followed by a distinct phrase or a modifying element, such as an adjective or a demonstrative. In example (210), the syntagm is not grammaticalized as evidence by the adjective, רִאשׁוֹן *riʔšon* 'first, former', which is modifying the noun *yom*. Elsewhere, the preposition phrase designates an idiom marking the extremities of a discrete timeframe. For example, *miyyom* may be followed by לְיוֹם *ləyom* '(from day) to day' (Num 30:15; 1 Chr 16:23), אֶל־יוֹם *ʔɛl-yom* '(from day) to day' (Esth 3:7; Ps 96:2), and עַד־לַיְלָה *ʕad-laylɔ* '(from day) until night' (Isa 38:12, 13).

165 Exod 12:15; Lev 22:27; Num 30:15; 1 Chr 16:23; Ezra 3:6, Esth 3:7; Ps 96:2; Qoh 7:1; Isa 38:12, 13; 43:13; Ezek 48:35; Hag 2:18.

(210) כִּי כָּל־אֹכֵל חָמֵץ וְנִכְרְתָה הַנֶּפֶשׁ הַהִוא מִיִּשְׂרָאֵל מִיּוֹם הָרִאשֹׁן עַד־יוֹם הַשְּׁבִעִי

ki		*kɔl-ʔoḵel*		*ḥɔmeṣ*
FOR		all+eating-PTCP.M.SG.		leaven
wəniḵrəṯɔ		*hannɛpēš*		*hahiʔ*
be.cut.off-WCSC.3.F.SG.		the.soul		that
miyyiśrɔʔel	***miyyom***	*hɔriʔšon*	*ʕad-yom*	*haššəḇiʕi*
FROM+PN	**FROM+day**	first	UNTIL+day	seventh

As for anyone eating leavened food, that person will be separated from Israel from the first day [of the festival] until the seventh. (Exod 12:15)

4.17.2.2. PREP/ADVZ (SINCE)

The grammaticalization of *miyyom* as the complex preposition is apparent in contexts where the object is an infinitive phrase.[166] Example (211) evidences the usage of the string as a durative temporal preposition SINCE. In this instance, the infinitive phrase headed by the grammaticalized phrase, מִיּוֹם הֱיוֹתָם עַל־הָאֲדָמָה *miyyom hᵉyoṯɔm ʕal-hɔʔᵃḏɔmɔ* ‘since their being upon the earth’, is sequenced with another preposition phrase עַד הַיּוֹם הַזֶּה *ʕaḏ hayyom hazzɛ* ‘until today’. Together this idiom designates the continuous nature of the action through an extended length of time.

The preposition is used once as an adverbializer at Jer 36:2 presented below as example (212). The modifying clause is headed by *miyyom* functioning as the temporal subordinator. As with the previous example, this sequence is found with the identical preposition phrase, *ʕaḏ hayyom hazzɛ* ‘until this very day’. The further designation of the original timeframe as מִימֵי יֹאשִׁיָּהוּ *mime yoʔšiyyɔhu* ‘from the days of Josiah’ evinces the loss of the lexical meaning of the component parts of this expression.

(211) לֹא־רָאוּ אֲבֹתֶיךָ וַאֲבוֹת אֲבֹתֶיךָ מִיּוֹם הֱיוֹתָם עַל־הָאֲדָמָה עַד הַיּוֹם הַזֶּה

loʔ-rɔʔu	*ʔᵃḇoṯɛḵɔ*	*waʔᵃḇoṯ*	*ʔᵃḇoṯɛḵɔ*
NEG+see-SC.3M.PL.	fathers+your	CJ+fathers.of	fathers+your
miyyom	*hᵉyoṯɔm*		*ʕal-hɔʔᵃḏɔmɔ*
SINCE	being-INF.+their		UPON+the.earth
ʕaḏ	*hayyom*		*hazzɛ*
UNTIL	the.day		this

Your fathers and grandfathers have never seen [it] since they were on the earth until this very day. (Exod 10:6)

166 Exod 10:6; Lev 23:15; Deut 9:24; 1 Sam 7:2; 8:8; 29:3, 6; 2 Sam 13:32; 2 Kgs 8:6; Ezek 28:15.

(212) דִּבַּרְתִּי אֵלַיִךְ עַל־יִשְׂרָאֵל ... מִיּוֹם דִּבַּרְתִּי אֵלַיִךְ מִימֵי יֹאשִׁיָּהוּ וְעַד הַיּוֹם הַזֶּה

dibbarti		*ʔelɛ̱ḵɔ*	*ʕal-yiśrɔʔel*	...
speak-SC.1C.SG.		TO+you	AGAINST+PN	…
miyyom		*dibbarti*		*ʔelɛ̱ḵɔ*
SINCE		speak-SC.1C.SG.		TO+you
mime	*yoʔšiyyɔhu*	*wəʕaḏ*	*hayyom*	*hazzɛ*
FROM+days.of	PN	CJ+UNTIL	the.day	this

I spoke to you against Israel … since I spoke to you from the days of Josiah until this very day. (Jer 36:2)

4.17.3. Grammaticalization of miyyom

Semitic examples in Akkadian, *anūmīšu* ‘since’ (< **ana* + *ūmi* + *-šu*), and in Ethiopic, *ʔəmʔama* ‘since’ (< **ʔəm* + *ʔama*), demonstrate analogous semantic shifts from similar strings, PREP + ‘day’/‘time’, to temporal functions.

The evolution of *miyyom* from a preposition phrase retaining the nominal properties of *yom* ‘day’ to the complex preposition is manifest semantically and syntactically. The original Biblical Hebrew idiom allows for modification of the noun, whereas the grammaticalized string is found only where the complement is an infinitive phrase or a clause. In these latter constructions, the semantic shift to a temporal notion is exhibited.

Regarding the usage as an adverbializer, this use may have obtained from the usage with the relative אֲשֶׁר *ʔᵃšɛr*. The two examples of this construction could be either a preposition phrase or a complex preposition.[167] In example (213), the phrase *miyyom* is followed by a relative clause. The literal, ungrammaticalized reading may be understood as a simple merism, ‘from the day when … until this very day’. The grammaticalized string, on the other hand, would provide for a more continuous aspect of the temporal meaning—‘since X until this very day’—analogous to the complex preposition.

(213) וּמַה־מָּצְאתָ בְעַבְדְּךָ מִיּוֹם אֲשֶׁר הָיִיתִי לְפָנֶיךָ עַד הַיּוֹם הַזֶּה

uma-mmɔṣɔʔṯɔ		*ḫəʕaḇdəḵɔ*	***miyyom***	
CJ+what+find-SC.2M.SG.		IN+servant+your	**FROM+day/SINCE**	
ʔᵃšɛr	*hɔyiṯi*	*ləp̄ɔnɛ̱ḵɔ*	*ʕaḏ*	*hayyom* *hazzɛ*
REL	be-SC.1C.SG.	BEFORE+you	UNTIL	the.day this

What have you found [wrong] with your servant since [or: ‘from the day when’] I was before you until this very day? (1 Sam 29:8)

167 1 Sam 29:8; Neh 5:14.

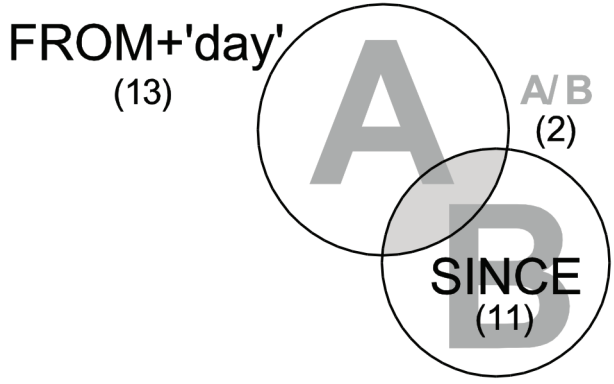
4.17.4. Mapping the Grammaticalization Trajectories of miyyom

The grammaticalization of *miyyom* allows for a simple model of grammatical change. The preposition phrase, FROM + 'day', extended to contexts where the temporal meaning generalized as SINCE. The rebracketing of [*min*PREP + *yom*N]PP to *miyyom*PREP designates the structural change corresponding to the grammaticalization. Secondly, the complex preposition expanded to take not just nominal but verbal complements—both as relative and nonrelative clauses. This extension results in the adverbializer usage without any apparent semantic change. The Overlap Model in figure 4.30 presents the structural and semantic expansions in two stages. In the second column, stage II designates the situation in Biblical Hebrew, where the preposition phrase, complex preposition, and adverbializer are evidenced. And the semantic map of figure 4.31 provides the tokens of each meaning.

Figure 4.30. Overlap Model for *miyyom*

Stage:	I	II
PREP+N	FROM+'day'	FROM+'day'
PREP/ADVZ		SINCE

Figure 4.31. Semantic Map of *miyyom*



4.18. מִפְּנֵי mippəne

4.18.1. Morphosyntax of mippəne

The morphology of מִפְּנֵי *mippəne* consists of the preposition מִן *min* 'from' and the construct state of the noun פָּנִים *pənim* 'face'. The *nun* of the first element assimilates to the initial bilabial of the noun (*min* + *pəne* > *mippəne*). The particular semantics and morphology of the noun have been appraised previously (§4.15.1).

4.18.2. Usage of mippəne

The string *mippəne* has two basic meanings: the composite idea FROM + 'face' and the logical relation CAUSE.

4.18.2.1. PREP (FROM) + N ('face')

Just over half of the occurrences of *mippəne* (171 examples) are the combination of the simple preposition FROM and the noun 'face, presence' without any evidence of grammaticalization.[168] One such usage is found in example (214). Esau leaves the land of Canaan where his brother Jacob lives. The adverbial phrase, מִפְּנֵי יַעֲקֹב אָחִיו *mippəne yaʕᵅqoḇ ʔɔḥiw* 'from the presence of his brother Jacob', functions to designate the location from which Esau journeyed.

(214) וַיֵּלֶךְ אֶל־אֶרֶץ מִפְּנֵי יַעֲקֹב אָחִיו

wayyelɛḵ	*ʔɛl-ʔɛrɛṣ*	***mippəne***	*yaʕᵅqoḇ*
go-WCPC.3M.SG.	TOWARD+land	**FROM+presence.of**	PN
ʔɔḥiw			
brother+his			

[Esau] went to a land away from Jacob his brother. (Gen 36:6)

4.18.2.2. PREP (CAUSE)

The grammaticalized string *mippəne* exhibits a causal function with 127 Biblical Hebrew instances.[169] In example (215), the land of Canaan is not able to hold both

168 Gen 3:8; 4:14; 7:7; 16:6, 8; 31:35; 35:1, 7; 36:6; Exod 2:15; 4:3; 14:19, 25; 23:29, 30, 31; 34:11, 24; Lev 18:24; 19:32; 20:23; 26:10, 37; Num 10:35; 20:6; 22:33; 32:21; 33:8, 52, 55; Deut 2:12, 21, 22; 4:38; 6:19; 7:1, 20, 22; 8:20; 9:4, 5; 12:29, 30; 18:12; 20:19; 33:27; Josh 2:10; 3:10; 4:7, 23 (2x); 5:1; 9:24; 10:11; 13:6; 23:5, 9; 24:8, 12, 18; Judg 2:3, 21; 5:5 (2x); 6:9, 11; 9:40; 11:3, 23, 24, 33; 1 Sam 17:24; 18:11; 19:8, 10; 21:11; 23:26; 25:10; 31:1; 2 Sam 7:9, 23; 10:13, 14, 18; 15:14; 23:11; 1 Kgs 2:7; 12:2; 14:24; 21:26, 29; 2 Kgs 1:15; 3:24; 9:14; 11:2; 16:3; 17:8, 11, 20; 21:2, 9; 22:19; 1 Chr 5:25; 10:1; 11:13; 17:8, 21; 19:14, 15; 21:12; 2 Chr 10:2; 13:16; 22:11; 28:3; 33:2, 9; Job 13:20; 23:17; 30:10, 11; 39:22; Pss 3:1; 9:4; 17:9; 44:17; 57:1; 60:6; 61:4; 68:2, 3 (2x), 9 (2x); 78:55; 89:24; 139:7; Prov 30:30; Qoh 8:3; Isa 2:10, 19, 21; 7:2; 16:4; 17:9; 20:6; 21:15 (4x); 30:11, 17 (2x); 31:8; 57:1; 63:12; Jer 1:13; 4:1, 15; 48:44; Lam 2:3; Hos 2:4; 11:2; Amos 2:9; 5:19; Mic 1:4; Nah 1:5; Hab 2:20; Zeph 1:7; Zech 2:17; 14:5; Mal 3:14.

169 Gen 6:13; 27:46; 36:7; 41:31; 47:13; Exod 1:12; 3:7; 8:20; 9:11, 30; 10:3; 19:18; 23:21, Num 22:3 (2x); 32:17; Deut 1:17; 2:25; 5:5; 7:19, 21; 9:19; 20:3; 28:20, 60; 31:6; Josh 2:11; 5:1; 6:1; 9:24; 11:6; 23:3; Judg 2:18; 6:2, 6; 9:21; 1 Sam 7:7; 18:15, 29; 21:13; 1 Kgs 1:50; 3:28; 5:17; 8:11; 2 Kgs 16:18; 19:6; 25:26; 1 Chr 12:1; 21:30; 2 Chr 5:14; 12:5; 20:15; 32:7;

of the brothers, Esau and Jacob. The reason given is: מִפְּנֵי מִקְנֵיהֶם *mippəne miqnehɛm* 'because of [the large number of] their livestock'. The complex preposition *mippəne* presents the basis on which the assertion is made.

(215) וְלֹא יָכְלָה אֶרֶץ מְגוּרֵיהֶם לָשֵׂאת אֹתָם מִפְּנֵי מִקְנֵיהֶם

wəloʔ	*yɔḵəlɔ*	*ʔɛrɛṣ*	*məḡurehɛm*
CJ+NEG	be.able-SC.3F.SG.	land-F.	sojournings+their
lɔśeʔṯ	*ʔoṯɔm*	***mippəne***	*miqnehɛm*
TO+carry-INF.	DOM+them	**CAUS**	livestock-PL.+their

The land of their sojournings is not able to sustain them because of their cattle. (Gen 36:7)

4.18.3. Grammaticalization of mippəne

Cross-linguistic examples of similar grammaticalized locative notions acquiring causal functions are "extremely widespread" according to Heine and Kuteva (2004, 200). In Semitic languages, analogous changes may be illustrated by Syriac *ʕl ʔpy* 'on the grounds that' (< *ʕl* 'upon' + *ʔpyʔ* 'face'), Sabaic *l-qbl* 'because of' (< *l-qbl* 'in front of'), and Akkadian *ana libbi* 'because of, on account of' (< *ana* 'to[wards]' + *libbu* 'heart').

Several instances of the string *mippəne* demonstrate the potential ambiguity between the grammaticalized and ungrammaticalized usages.[170] In example (216), the brothers' horror is explained with מִפָּנָיו *mippɔnɔw*. This phrase may be functioning either as a locative, signaling that the brothers were fearful on account of Joseph's shocking appearance before them ('from his face'), or as a causal, designating their fear of him directly ('because of him'). Such situations of uncertainty between the locative and causative relations demonstrate the potential for an expansion in meanings.

(216) וְלֹא־יָכְלוּ אֶחָיו לְדַבֵּר אֹתוֹ כִּי נִבְהֲלוּ מִפָּנָיו

wəloʔ-yɔḵəlu	*ʔɛḥɔw*	*laʕᵘnoṯ*	*ʔoṯo*
CJ+NEG+be.able-SC.3M.PL.	brothers+his	TO+answer-INF.	DOM+him
ki	*niḇhᵃlu*	***mippɔnɔw***	
CAUS	be.horrified-SC.3M.PL.	**FROM+face+his/CAUS+him**	

Neh 4:3, 8; 5:15; Job 17:12; 19:29; 23:15, 17; 35:12; 37:19; Pss 38:4 (2x), 6; 55:4; 96:9; 102:11; Isa 7:16; 10:27; 19:1, 16, 17, 20; 26:17; 37:6; 51:13; 63:19; 64:1, 2; Jer 1:8, 17; 4:4, 26 (2x); 5:22; 7:12; 9:6; 13:17; 14:16; 15:17; 21:12; 22:25; 23:9 (2x), 10; 25:16, 27 (2x), 38 (2x); 26:3; 32:24; 38:9; 39:17; 41:9, 18 (2x); 42:11 (2x), 17; 44:3, 22 (2x), 23; 46:16; 50:16; 51:64; Lam 5:10; Ezek 2:6; 3:9; 16:63; 38:20; Hos 10:15; Joel 2:6; Hag 1:12; Mal 2:5.

170 Gen 45:3; Josh 2:9, 24; Jer 35:11 (2x); 37:11; Lam 5:9; Ezek 14:15.

> Now [Joseph's] brothers were not able to answer him for they were horrified because of him/at his presence. (Gen 45:3)

4.18.4. Mapping the Grammaticalization Trajectories of mippəne

The preposition phrase *mippəne* 'from the face of' is grammaticalized to the complex preposition with the function of CAUSE. The functional extension is assessed by its linear development as presented in figure 4.32.

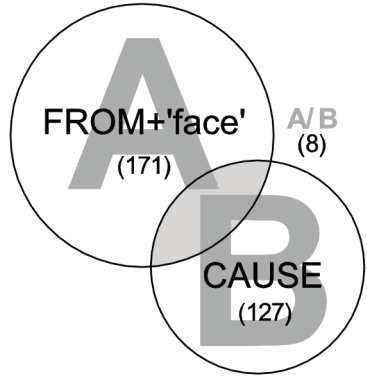
Figure 4.32. Functional Developments of *mippəne*
PREP (FROM) + N ('face') > PREP (CAUSE)

The Overlap Model in figure 4.33 shows the functional and structural changes from the initial stage to the expanded usage of Biblical Hebrew in stage II. And figure 4.34 graphs the meanings with their total number of tokens.

Figure 4.33. Overlap Model for *mippəne*

Stage:	I	II
PREP+N	FROM+'face'	FROM+'face'
PREP		CAUSE

Figure 4.34. Semantic Map of *mippəne*



4.19. עַל יֶרֶךְ ʕal yɛrɛḵ

4.19.1. Morphosyntax of ʕal yɛrɛḵ

The polymorphic expression, עַל יֶרֶךְ *ʕal yɛrɛḵ*, includes the preposition *ʕal* 'on, upon' and the anatomic noun יֶרֶךְ *yɔrɛḵ* 'thigh, hip' in the construct state. The noun belongs to the **qatil* nominal pattern. This pattern is typically realized in the

Tiberian vocalization system as the construct-state form *qətal* (e.g., זְקַן *zɔqen* is the absolute state, and זִקַן *zəqan* is the construct state). Several Hebrew **qatil*-type construct-state nouns have lexicalized biforms of the type **qatl* (e.g., גֶּדֶר *gɛḏər* 'wall', כֶּבֶד *kɛḇɛḏ* 'heavy',[171] כֶּתֶף *kɛṯɛp̄* 'shoulder', עֶרֶל *ʕɛrɛl* 'uncircumcised') or **qitl* (e.g., גֵּזֶל *gezɛl* 'robbery'). This phenomenon of multiple forms is known elsewhere in Central Semitic as in, for example, Arabic *warik*, *wark*, or *wirk* 'hip' (Fleisch 1961, 158–59) and Syriac *katpɔ* and *kṯep̄* 'shoulder' (Fox 2003, 167–71). The Hebrew allomorphic biforms are found in collocations with the absolute noun עַל יֶרֶךְ *ʕal yɔrɛḵ* 'on (the) thigh', the pronominal form עַל־יְרֵכוֹ *ʕal-yərɛḵo* 'on his thigh', and the construct form *ʕal yɛrɛḵ* 'beside NP'.

4.19.2. Usage of ʕal yɛrɛḵ

The string *ʕl yrk* is used in Biblical Hebrew both as a preposition phrase and a grammatical function. The former is found where *yrk* is a noun meaning 'thigh', and the latter functions as the grammaticalized SIDE-REGION locative relation.

4.19.2.1. PREP (ON) + N ('thigh')

The noun follows the preposition six times—half in the absolute form *yɔrɛḵ* 'thigh' and half as the suffixed form יְרֵכוֹ *yərɛḵo* 'his thigh'.[172] Example (217) demonstrates a typical occurrence of the preposition phrase. Each man is implored to arm himself for the upcoming skirmish by taking his sword and placing it עַל־ יְרֵכוֹ *ʕal-yərɛḵo* 'upon his thigh'.

(217) שִׂימוּ אִישׁ־חַרְבּוֹ עַל־יְרֵכוֹ

śimu	*ʔiš-ḥarbo*	***ʕal-yərɛḵo***
set-IMP.M.PL.	each+sword+his	**ON+thigh+his**

Each of you put his sword upon his side! (Exod 32:27)

4.19.2.2. PREP (BESIDE)

The complex preposition *ʕal yɛrɛḵ* may be accounted for as designating the SIDE-REGION, that is, 'beside' a location. In example (218) and (219), the Hebrew clans are assigned to camp in a position relative to the tabernacle (עַל יֶרֶךְ הַמִּשְׁכָּן *ʕal yɛrɛḵ hammiškɔn* 'beside the dwelling place').

171 The more common construct state of כָּבֵד *kɔḇeḏ* 'heavy' is the more regular formation כְּבַד *kəḇaḏ*.

172 Gen 32:32; Exod 32:27; Judg 15:8; Ps 45:4; Song 3:8; Jer 31:19.

(218) יַחֲנוּ עַל יֶרֶךְ הַמִּשְׁכָּן תֵּימָנָה
yaḥ[a]nu ***ʕal yɛrɛ̱k*** *hammiškɔn* *temɔnɔ*
camp-PC.3M.PL. **BESIDE** the.tabernacle southward
They should encamp beside the tabernacle on the south side. (Num 3:29)

(219) עַל יֶרֶךְ הַמִּשְׁכָּן יַחֲנוּ צָפֹנָה
ʕal yɛrɛ̱k *hammiškɔn* *yaḥ[a]nu* *ṣɔp̄onɔ*
BESIDE the.tabernacle camp-PC.3M.PL. northward
They should encamp beside the tabernacle on the north side. (Num 3:35)

Further their locality is specified by the cardinal direction תֵּימָנָה *temɔnɔ* 'southward' and צָפֹנָה *ṣɔp̄onɔ* 'northward', respectively. On account of the need for additional directional specificity, it may be supposed that the relation is not merely a metaphorical extension of the anatomic noun, but that the string *ʕal yɛrɛ̱k* is being used as a function word designating a SIDE-REGION. Six times in Biblical Hebrew this relation is found where it is specified with regard to cardinal location.[173]

4.19.3. Grammaticalization of ʕal yɛrɛ̱k

The shift from preposition phrase to complex preposition may be established by external linguistic evidence and internal Hebrew data providing a context for the meaning variance. Svorou (1994, 70–73) asserts that several body-part sources ('flank', 'ribs', 'abdomen', etc.) obtain as the spatial gram BESIDE, labeled as SIDE-REGION. Evidence in the Semitic languages includes polymorphic BESIDE constructions derivable from preposition phrases where the nominal element is anatomic, including Ugaritic *bd* 'at the hands of' (< *b-* 'in, at, by' + *yd* 'hand[s]'), Akkadian *ina aḫi* 'beside, at' (< *ina* 'in, at' + *aḫu* 'arm, side'), and possibly Geʕez *bawaʔda* 'by the side of' (< *ba-* 'in, by' + *ʔəd* 'hand').

With regard to internal data, two examples in chapter three of Judges demonstrate a context in which the expansion of meaning from the nominal source could be supposed.[174] In example (220), for instance, the adverbial modifier עַל יֶרֶךְ יְמִינוֹ *ʕal yɛrɛ̱k yəmino* may designate that the blade was tied 'on his right thigh' or simply 'beside his right side'. The ambiguity is motivated by the following NP which could describe to which leg the knife was attached or merely on which side of his body he hid it. The expression would be analyzed accordingly as [*ʕal*$_{\text{PREP}}$ [*yɛrɛ̱k* + *yəmino*]$_{\text{NP}}$]$_{\text{PP}}$ 'on his right thigh' or [[*ʕal yɛrɛ̱k*]$_{\text{PREP}}$ + *yəmino*$_{\text{N}}$]$_{\text{PP}}$ 'beside his right side'. Such contexts could provide for the expansion to the grammaticalized meaning.

173 Exod 40:22, 24; Lev 1:11; Num 3:29, 35; 2 Kgs 16:14.
174 Judg 3:16, 21.

(220) וַיַּחְגֹּר אוֹתָהּ מִתַּחַת לְמַדָּיו עַל יֶרֶךְ יְמִינוֹ

wayyaḥgor	*ʔoṯ-ɔh*	*mittaḥaṯ*	*ləmaddɔw*
gird-WCPC.3M.SG.	DOM+it	UNDER	robe+him
ʕal yɛrɛḵ		*yəmino*	
BESIDE/ON+thigh.of		right.side+his	

He bound [the sword] under his robe on his right side. (Judg 3:16)

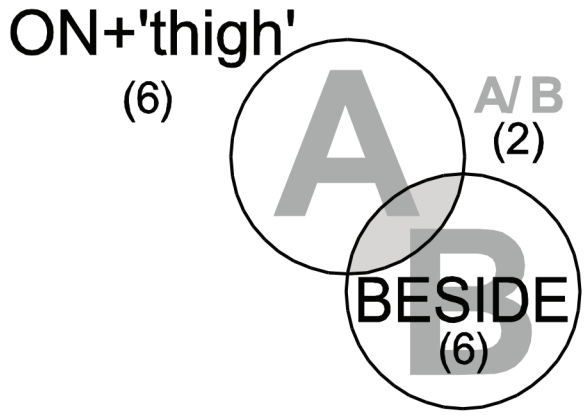
4.19.4. Mapping the Grammaticalization Trajectories of ʕal yɛrɛḵ

The expansion of the meaning of *ʕal yɛrɛḵ* is mapped using two charts: the Overlap Model of figure 4.35 and the Semantic Map of figure 4.36. The initial stage of the Overlap Model, including only the original preposition phrase (PREP + N), expands to the locative function of the complex preposition at stage II representing Biblical Hebrew. This stage is presented with the overlapping meanings and number of tokens in the second mapping.

Figure 4.35. Overlap Model for *ʕal yɛrɛḵ*

Stage:	I	II
PREP+N	ON+'thigh'	ON+'thigh'
PREP		BESIDE

Figure 4.36. Semantic Map of *ʕal yɛrɛḵ*



4.20. עַל פִּי ʕal pi

4.20.1. Morphosyntax of ʕal pi

The string עַל פִּי *ʕal pi* is composed of the locative preposition *ʕal* 'upon' and the anatomic noun פֶּה *pɛ* 'mouth' (< **pv̄*) in the construct state. The noun was previously discussed (§4.9.1).

4.20.2. Usage of ʕal pi

Two usages of *ʕal pi*—the preposition phrase and the grammatical relation—are exemplified in the following subsections.

4.20.2.1. PREP (ON) + N ('mouth')

Fifty-seven instances of the preposition phrase, PREP (ON) + N ('mouth'), are found in Biblical Hebrew.[175] The basic meaning of the noun as 'mouth' is observable in example (221). The anatomic noun is also used as a figure of speech to designate metonymically that which comes from one's mouth (a 'word' in Deut 17:6; a 'command' in Josh 19:50) or metaphorically the entry point into an object (an 'opening, orifice' in Gen 29:2ff; a 'riverbank' in Isa 19:7).

(221) הַחֲרֵשׁ שִׂים־יָדְךָ עַל־פִּיךָ

haḥ^{a}reš	*śim-yɔḏə̲ḵɔ*	***ʕal-piḵɔ***
be.quiet-IMP.M.SG.	put-IMP.M.SG.+hand+your	**UPON+mouth+your**

Keep quiet—put your hand over your mouth! (Judg 18:19)

The two examples of the string עַל־פֶּה *ʕal-pɛ* 'upon a mouth' do not include a complement following the absolute form of the noun *pɛ* 'mouth' (Mic 7:16; Job 21:5). These instances are excluded from this discussion.

4.20.2.2. PREP (ACCORDING TO)

The grammatical function of *ʕal-pi* as 'according to' is apparent eight times in Biblical Hebrew.[176] In all but one of these, the complement is a NP. For instance,

175 Gen 29:2, 3 (2x), 8, 10; 41:40; 45:21; Exod 17:1; 23:13; 38:21; Lev 24:12; Num 3:16, 39, 51; 4:27, 37, 41, 45, 49; 9:18 (2x), 20 (2x), 23 (3x); 10:13; 13:3; 27:21 (2x); 33:2, 38; 36:5; Deut 21:5; 34:5; Josh 10:27; 19:50; 22:9; Judg 18:19; 2 Sam 13:32; 1 Kgs 7:31; 2 Kgs 4:34; 23:35; 24:3; 1 Chr 12:33; Job 39:27; Pss 50:16; 133:2; Qoh 5:1; Isa 6:7; 19:7; Jer 1:9; Amos 6:5; Mic 3:5; Nah 3:12.

176 Gen 43:7; Exod 34:27; Lev 27:8, 18; Num 26:56; Deut 17:10, 11; Prov 22:6.

in example (222), the partitioning of the tribal land inheritances is further qualified as being distributed by this logical relation, that is to say, apportioned עַל־פִּי הַגּוֹרָל *ʕal-pi haggorɔl* 'according to the [casting of the] lot'.

(222) עַל־פִּי הַגּוֹרָל תֵּחָלֵק נַחֲלָתוֹ בֵּין רַב לִמְעָט

ʕal-pi	*haggorɔl*	*teḥɔleq*	*naḥ[a]lɔ̱to*
ACCRD	the.lot	be.divided-SC.3F.SG.	inheritance-F.+its
ben		*raḇ*	*limʕɔṭ*
SPRT		many	TO+few

Each inheritance will be apportioned by lot to the largest and the smallest (tribes) [*or:* between the numerous and the few]. (Num 26:56)

The lone case in example (223) includes a relative clause as the object of the preposition. The priest is provided the duty of evaluating the special vow (Lev 27:1–29). On the occasion when restitution cannot be made, a special dispensation may be given based not on the temple standard (vv. 3–7) but in accordance with the earnings of the pledger. Thus, the vow could be fulfilled עַל־פִּי אֲשֶׁר תַּשִּׂיג יַד הַנֹּדֵר *ʕal-pi ʔašɛr taśśīḡ yaḏ hannoḏer* 'according to what the vower can produce'.

(223) עַל־פִּי אֲשֶׁר תַּשִּׂיג יַד הַנֹּדֵר יַעֲרִיכֶנּוּ הַכֹּהֵן

ʕal-pi	*ʔ[a]šɛr*	*taśśīḡ*	*yaḏ*	*hannoḏer*
ACCRD	REL	produce-PC.3F.SG.	hand.of	the.vower
yaʕ[a]riḵɛnnu		*hakkohen*		
assess-PC.3M.SG.+it (= valuation)		the.priest		

The priest will assess the valuation according to what the vower will produce. (Lev 27:8)

4.20.3. Grammaticalization of ʕal pi

Several similar changes in Semitic are reviewed above with *kəpī* (§4.9.3) and *ləpī* (§4.14.3). Clear cases of ambiguity between the preposition phrase and the complex preposition are difficult to detect in Biblical Hebrew; however, several contexts provide possible environments for semantic expansion.[177] One is given as example (224). The preposition phrase, עַל־פִּי שְׁנַיִם עֵדִים אוֹ שְׁלֹשָׁה עֵדִים *ʕal-pi šənayim ʕeḏim ʔo šəlošɔ ʕeḏim* 'on the mouth of two or three witnesses', provides the evidential basis by which a lawbreaker is executed. In contradistinction, an execution is not legislated עַל־פִּי עֵד אֶחָד *ʕal-pi ʕeḏ ʔɛḥɔḏ* 'upon the mouth of one witness'. The change may well have been triggered by the metonymic usage of the preposition phrase: UPON + 'mouth'/'word' to ACCORDING TO.

177 Deut 17:6 (2x); 19:15 (2x).

(224) עַל־פִּי שְׁנַיִם עֵדִים אוֹ שְׁלֹשָׁה עֵדִים יוּמַת הַמֵּת לֹא יוּמַת עַל־פִּי עֵד אֶחָד

ʕal-pi	*šnayim*	*ʕeḏim*	*ʔo*	*šəlošɔ*	*ʕeḏim*
UPON+mouth.of/ACCRD	two	witnesses	OR	three	witnesses
yumaṯ	*hammeṯ*	*loʔ*	*yumaṯ*		
be.executed-PC.3M.SG.	the.dying	NEG	be.executed-PC.3M.SG.		
ʕal-pi	*ʕeḏ*		*ʔɛḥɔḏ*		
UPON+mouth.of/ACCRD	witness		one		

According to (the word of) two or three witnesses, one shall be put to death; one shall not be killed on account of (the word of) one witness. (Deut 17:6)

4.20.4. Mapping the Grammaticalization Trajectories of ʕal pi

The grammaticalization of *ʕal pi* is mapped according to its developmental trajectory and overlapping functions. In addition, the structural change from a preposition phrase [*ʕal*$_{\text{PREP}}$ [*pi* + NP]$_{\text{NP}}$]$_{\text{PP}}$ to a complex preposition [[*ʕal pi*]$_{\text{PREP}}$ + NP]$_{\text{PP}}$ is aligned herewith. In figure 4.37, the expansion is presented from the originating preposition phrase, 'on the mouth of', to the grammatical function, 'according to'.

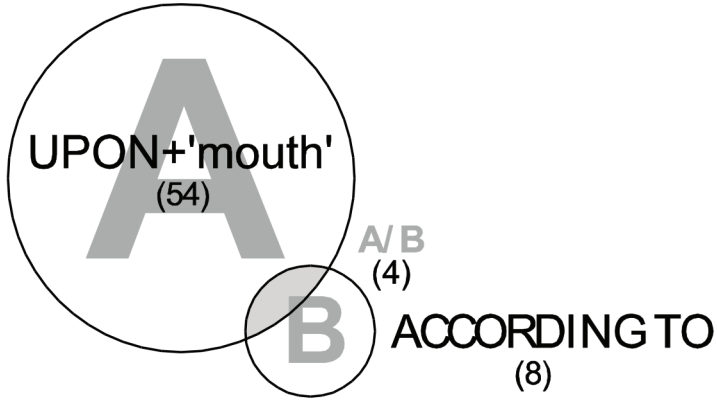
Figure 4.37. Functional Developments of *ʕal pi*
PREP (UPON) + N ('mouth, word') > PREP (ACCORDING TO)

The Overlap Model of figure 4.38 shows this extension in two stages. The first consists of the initial state of the preposition phrase, and stage II represents the situation in Biblical Hebrew where both the original usage and the grammaticalized function are extant. This latter situation is graphed in figure 4.39 as two overlapping meanings. The number of tokens is presented in parentheses for both values and the ambiguous situations.

Figure 4.38. Overlap Model for *ʕal pi*

Stage:	I	II
PREP+N	UPON+'mouth'	UPON+'mouth'
PREP		ACCORDING TO

Figure 4.39. Semantic Map of *ʕal pi*



4.20.5. A Further Note on kəpī, ləpī, and ʕal pi

Of the three complex prepositions containing the anatomic noun *pɛ* 'mouth', *ləpī* is the most frequent with sixteen instances (§4.14). The other two *ʕal pi* (§4.20) and *kəpī* (§4.9) are found eight and eleven times, respectively. There is no distinguishable difference between the semantics of grammatical functions of these three strings although several static idioms appear with certain collocations and not with the others. For example, כְּפִי עֲבֻדָּתוֹ *kəpī ʕᵘḇoḏəto* 'according to his service' is only construed with *kəpī* (Num 7:5, 7, 8; 2 Chr 31:2); while עַל־פִּי הַדְּבָרִים הָאֵלֶּה *ʕal-pi haddəḇorim həʔellɛ* 'according to the(se) matter(s)' is found with *ʕal pi* (Gen 43:7; Exod 34:27; Deut 17:10). Assessing this variation is further complicated by the lack of data and compounded by the fact that the non-grammaticalized usages show both static and variant preferences. For instance, לְפִי חֶרֶב *ləpī ḥɛrɛḇ* 'at the edge of the sword' is always construed with *ləpī*.[178] On the other hand, the idiom 'hand to mouth' signifying a gesture of silence is found as יָד עַל־פֶּה *yəḏ ʕal-pɛ* in Mic 7:16 and Job 21:5 but יָד לְפֶה *yəḏ ləpɛ* in Prov 30:32.

The distribution of each syntagm within the biblical corpus, however, is notable. Specifically, the occurrences of the string *kəpī* are confined to what is considered the Late Biblical Hebrew books, including Chronicles, Zechariah, and Malachi, as well as the Priestly material along with the Holiness Code. The instances of *ʕal pi* are attested in several different textual sources, but each is found in a magisterial or judiciary context. Finally, the string *ləpī* 'according to' appears

178 Gen 34:26; Exod 17:13; Num 21:24; Deut 13:16 (2x); 20:13; Josh 6:21; 8:24 (2x); 10:28, 30, 32, 35, 37, 39; 11:11, 12, 14; 19:47; Judg 1:8, 25; 4:15, 16; 18:27; 20:37, 48; 21:10; 1 Sam 15:8; 22:19 (2x); 2 Sam 15:14; 2 Kgs 10:25; Job 1:15, 17; Jer 21:7.

to be the least distinctive of the three—it is found across the biblical literature and in various genres. What's more, it should also be noted that all three complex prepositions are known from the post-Biblical Hebrew of the Qumran and Mishnaic literature with no clear distinction among their usage.

4.21. Other Examples

4.21.1. בְּאֶפֶס *bəʔɛpēs*

The string בְּאֶפֶס *bəʔɛpēs* is used as a complex preposition in Biblical Hebrew. It consists of the preposition *b-* 'in' and the noun *ʔɛpēs* 'end, extremity' (< **ʔaps*). There are only five instances of this sequence in Biblical Hebrew.[179] The composite meaning is found in example (225) functioning as a temporal adverb *bəʔɛpēs* 'in the end'. Israel's oppression at the hand of the Assyrians stands in contrast with their time spent in Egypt which is designated in the previous clause as בָּרִאשֹׁנָה *bɔriʔšonɔ* 'at the beginning'.

(225) וְאַשּׁוּר בְּאֶפֶס עֲשָׁקוֹ

wəʔaššur	***bəʔɛpēs***	*ʕᵃšɔqo*
CJ+PN	**IN+end**	oppress-SC.3M.SG.+him

But Assyria oppressed him in the end. (Isa 52:4)

A single example of the privative function WITHOUT is evident in example (226). The subject is an evil ruler, who seeks to destroy the saints by his own power and might. He is destined to annihilation. His ruin comes בְּאֶפֶס יָד *bəʔɛpēs yɔḏ* 'without (someone lifting) a hand', that is, not by human power.

(226) וּבְאֶפֶס יָד יִשָּׁבֵר

uḇəʔɛpēs	*yɔḏ*	*yiššɔḇer*
CJ+WITHOUT	hand	be.broken-PC.3M.SG.

But without a hand, he will be broken. (Dan 8:25)

The final three examples are ambiguous.[180] One of these instances is provided below as example (227).

(227) בְּאֶפֶס עֵצִים תִּכְבֶּה־אֵשׁ

bəʔɛpēs	*ʕeṣim*	*tiḵbɛ-ʔeš*
IN+end.of/WITHOUT	wood-PL.	go.out-PC.3F.SG.+fire-F.

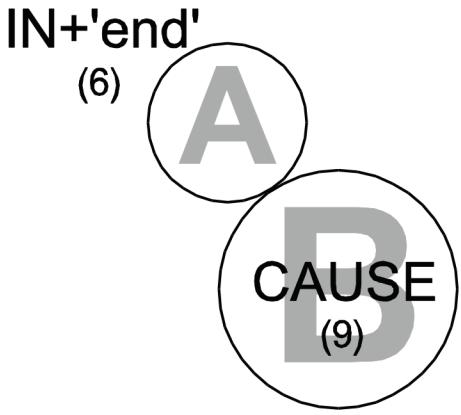
At the end of/without wood, the fire is extinguished. (Prov 26:20)

179 Isa 52:4; Job 7:6; Prov 14:28; 26:20; Dan 8:25.
180 Job 7:6; Prov 14:28; 26:20.

The proverb provides an analogy between the extinguishing of a fire and the ceasing of quarreling. The preverbal modifier (בְּאֶפֶס עֵצִים *bəʔɛpēs ʕeṣim*) may refer to when the fuel is extinguished ('at the end of wood') or the absence of kindling ('without wood').

Even with the paucity of instances of this string, the grammaticalization trajectory of *bəʔɛpēs* seems to follow from IN + 'end' to WITHOUT. The structural change would be analogous to the other Biblical Hebrew complex prepositions, that is, [*b*-PREP + *ʔɛpēs*N]PP to *bəʔɛpēs*PREP. Figure 4.40 provides the basic meanings (IN + 'end' and CAUSE) and the number of tokens.

Figure 4.40. Semantic Map of *bəʔɛpēs*

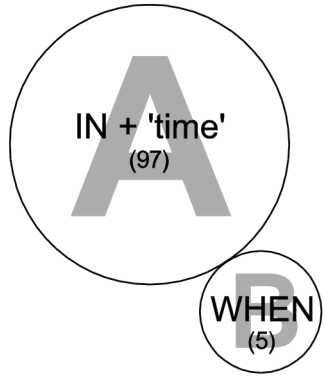


4.21.2. בְּעֵת *bəʕet*

The common string בְּעֵת *bəʕet* 'in the time of', composed of *b*- 'in' and *ʕet* 'time' (< **ʕint*), is often used to mark temporal phrases. Five examples in Late Biblical Hebrew are found governing a verb and may be considered grammaticalized as the function WHEN.[181] A clear semantic shift, however, is not evident even though the syntactic structure parallels similar grammatical changes from other examples. Therefore, this grammaticalization may only be included as a potential or nascent-stage change, IN + 'time' > WHEN. This situation is graphed with the meaning tokens in figure 4.41.

181 Job 6:17; Qoh 10:17; 2 Chr 20:22; 24:11; 29:27.

Figure 4.41. Semantic Map of *bəʕet*



4.21.3. לְעֻמַּת *ləʕummaṯ*

The string לְעֻמַּת *ləʕummaṯ* may be analyzed as the preposition *l-* 'to' and a construct-state noun *ʕummaṯ* (Brown, Driver, and Briggs 1906, 769, Koehler and Baumgartner 2001, 842). The noun, however, is not evidenced as an independent word, and its etymology is dubious. The only definite function of the string is used as the locative BESIDE or SIDE-REGION.[182] Example (228a) demonstrates this locative function. Shimei is said to be following along the mountainside *ləʕummɔṯo* 'beside him (i.e., David)'. In the same verse (228b), the single usage as the directional relation TOWARD is found. This second usage designates the direction in which Shimei was pelting rocks, that is, *ləʕummɔṯo* 'toward him'. Without a clear originating construction, however, it is impossible to evaluate the grammaticalization trajectory or even to discern the originating construction.

(228) a. וְשִׁמְעִי הֹלֵךְ בְּצֶלַע הָהָר לְעֻמָּתוֹ הָלוֹךְ
b. וְיַקֵּלֵל וְיַסקֵל בָּאֲבָנִים לְעֻמָּתוֹ

wəšimʕi	*holeḵ*	*bəṣelaʕ*	*hɔhɔr*	***ləʕummɔṯo***
CJ+PN	travelling	ON+side.of	the.mountain	**BESIDE+him**
hɔloḵ	*wayəqallel*		*wayəsaqqel*	
following	curse-WCPC.3M.SG.		throw-WCPC.3M.SG.	
bɔʔ^{a}ḇɔnim	***ləʕummaṯo***			
INSTR+stones	**TOWARD+him**			

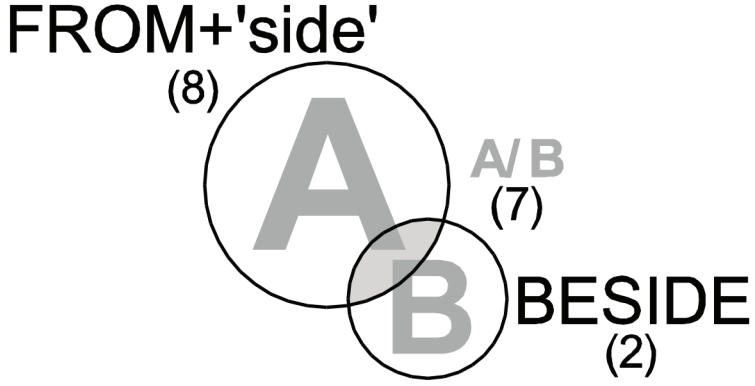
Meanwhile Shimei was following alongside David on the hillside.
He cursed and threw stones at him. (2 Sam 16:13)

182 Exod 25:27; 28:27; 37:14; 38:18; 39:20; Lev 3:9; 2 Sam 16:13; 1 Kgs 7:20; 1 Chr 24:31 (2x); 26:12, 16; Neh 12:24; Qoh 7:14; Ezek 1:20, 21; 3:8 (2x), 13; 10:19; 11:22; 40:18; 42:7; 45:6, 7; 48:13, 18 (2x), 21.

4.21.4. מִצַּד *miṣṣaḏ*

The string מִצַּד *miṣṣaḏ* provides another possible instance of grammaticalization yielding the locative relation BESIDE. The first element is the preposition *min* 'from', and the second is the construct noun *ṣaḏ* 'side' (< **ṣadd*). The preposition phrase is found eight times with the meaning 'from the side of' (FROM + 'side').[183] The string appears to designate the SIDE-REGION as a grammatical function and not simply as an analogical extension in instances where the complement is a locality.[184] As with many examples, there are a number of usages which may be analyzed with either the lexical or grammatical meaning.[185] Figure 4.42 diagrams these overlapping meanings and tokens for Biblical Hebrew. In the end, *miṣṣaḏ* may provide another case with an anatomic meaning which is grammaticalized as a locative relation; however, the scarcity of data precludes an absolute assessment.

Figure 4.42. Semantic Map of *miṣṣaḏ*



4.22. Overview of Multi-Word Prepositions

In this chapter, twenty-one strings are presented as examples of the grammaticalization of Biblical Hebrew multi-word prepositions. In each string, the polymorphic structure consists of an initial preposition in sequence with a noun in the construct state or, in one case, an infinitive construct. The preposition element in every construction is a simple preposition (*b-* 'in', *k-* 'as', *l-* 'to', *min*

183 Exod 25:32 (3x); 37:18 (3x); Ezek 4:8; Ps 91:7.
184 Josh 3:16; 12:9.
185 Deut 31:26; 1 Sam 6:8; 20:25; 23:26 (2x); 2 Sam 13:34; Ruth 2:14.

'from', or *ʕal* 'on'). The construct-state sources refer to a body part ('face', 'hand', etc.), a space ('part', 'side'), a time ('time', 'day'), or a more abstract semantic concept ('purpose', 'meet').

These examples of grammaticalization are classifiable according to their outcomes.

Table 4.2 presents the resulting complex prepositions that grammaticalized from strings with a preposition and a noun. The resulting functions demonstrated directional-spatial (BEFORE, BESIDE, INSIDE, NEAR, THROUGH, TOWARD, and WITHIN), temporal (DURING, SINCE, and WHEN), and logical relations (ACCORDING TO, AGAINST, BY -SELF, CAUSE, COMITATIVE, CONSEQUENTLY, EXCHANGE, FOR, PURPOSE, and WITHOUT). Sixteen strings are classified as these logical relations. The locative and temporal functions consist of six examples each. The directionals (THROUGH and TOWARD) account for two. The grammatical outcomes AGAINST and TOWARD developed from the string *liqraʔṯ*. These functions obtained from the originating infinitive phrase headed by the preposition TO with the verb MEET. The primary grammaticalization resulted in the directional function. Finally, a subsequent expansion yielded the adversative logical relation AGAINST.

Table 4.2. Grammatical Outcomes from Preposition Phrases

Function	Outcome	Source
Locatives:		
BEFORE	לִפְנֵי *lipne*	< *l-* TO + *pne* 'face of'
BESIDE	מִצַּד *miṣṣaḏ*	< *min* FROM + *ṣaḏ* 'side of'
BESIDE	עַל יֶרֶךְ *ʕal yɛrɛḵ*	< *ʕal* ON + *yɛrɛḵ* 'thigh (of)'
INSIDE	בְּתוֹךְ *bəṯoḵ*	< *b-* IN + *toḵ* 'middle of'
NEAR	לְיַד *ləyaḏ*	< *l-* TO + *yaḏ* 'hand of'
WITHIN	בְּקֶרֶב *bəqɛrɛḇ*	< *b-* IN + *qɛrɛḇ* 'innards (of)'
Directionals:		
THROUGH	בְּתוֹךְ *bəṯoḵ*	< *bəṯoḵ* INSIDE
TOWARD	לִקְרַאת *liqraʔṯ*	< *l-* TO + *qraʔṯ* 'meet'
Temporals:		
BEFORE	לִפְנֵי *lipne*	< *lipne* IN FRONT OF
DURING	בְּתוֹךְ *bəṯoḵ*	< *bəṯoḵ* INSIDE
SINCE	מִיּוֹם *miyyom*	< *min-* FROM + *yom* 'day'
THROUGHOUT	בְּקֶרֶב *bəqɛrɛḇ*	< *bəqɛrɛḇ* WITHIN
WHEN	בְּיוֹם *bəyom*	< *b-* IN + *yom* 'day (of)'
WHEN	בְּעֵת *bəʕeṯ*	< *b-* IN + *ʕeṯ* 'time (of)'

Table 4.2. Grammatical Outcomes from Preposition Phrases (cont.)

Function	Outcome	Source
Logical-Relations:		
ACCORDING TO	כְּפִי *kəpī*	< *k-* LIKE + *pi* ‘mouth of’
ACCORDING TO	לְפִי *ləpī*	< *l-* TO + *pī* ‘mouth of’
ACCORDING TO	עַל פִּי *ʕal pi*	< *ʕal* ON + *pi* ‘mouth of’
AGAINST	לִקְרַאת *liqraʔt̲*	< *liqraʔt̲* TOWARD
BY -SELF	לְבַד *ləb̲aḏ*	< *l-* TO + *b̲aḏ* ‘part (of)’
CAUSE	בִּגְלַל *biḡəlal*	< *b-* ON + **ḡlal* ‘matter of’
CAUSE	בַּעֲבוּר *baʕᵘb̲ur*	< *b-* IN + *ʕᵘb̲ur* ‘produce’
CAUSE	לְמַעַן *ləmaʕan*	< *l-* FOR + **maʕn* ‘purpose’
CAUSE	מִפְּנֵי *mippəne*	< *min* FROM + *pəne* ‘face of’
COMITATIVE	בְּתוֹךְ *bət̲oḵ*	< *bət̲oḵ* INSIDE
CONSEQUENTLY	כְּפִי *kəpī*	< *kəpī* ACCORDING TO
EXCHANGE	בַּעֲבוּר *baʕᵘb̲ur*	< *b-* IN + *ʕᵘb̲ur* ‘produce’
FOR	לְנֹכַח *ləno*ḵ*aḥ*	< *l-* TO + *no*ḵ*aḥ* ‘front (of)’
PURPOSE	בַּעֲבוּר *baʕᵘb̲ur*	< *b-* IN + *ʕᵘb̲ur* ‘produce’
PURPOSE	לְמַעַן *ləmaʕan*	< *l-* FOR + **maʕn* ‘purpose’
WITHOUT	בְּאֶפֶס *bəʔɛpēs*	< *b-* IN + *ʔɛpēs* ‘end (of)’

The final chapter provides an overview of the evolution of the Biblical Hebrew prepositional system. It reviews all the Biblical Hebrew examples of grammaticalization discussed in the previous chapters. A model of the linguistic change and a discussion of the properties inherent within this type of language change are discussed and exemplified.

5.
CONCLUSION

This study presents an analysis of the sources and diachronic developments of prepositions from the viewpoint of grammaticalization within a historical linguistics framework. The approach contributes a detailed corpus-based accounting of the variation evidenced by the usages of Biblical Hebrew prepositions and provides a descriptive model of the emergence of this linguistic subsystem. Furthermore, it demonstrates the value of integrating diachronic linguistics and philological approaches in the investigation of grammar providing for an exhaustive language-internal description. The following sections include an overview of the entire study, an illustration of the implications of grammaticalization for assessing diachronic change, and an exploration of several conclusions of this research.

5.1. Overview of the Study

In chapter 1, grammaticalization is described as the principal language-internal mechanism by which new grammatical morphemes and functions arise within a linguistic system. This distinct change does not transpire in a linguistic vacuum. But linguists have often coupled other resultant phenomena with grammaticalization, such as phonological erosion (e.g., the loss of phonological elements as in *going to* > *gonna*), desemanticization (i.e., the loss of the original lexical meaning as in ***I am gonna town*), and syntactic reanalysis (i.e., the rebracketing of phrasal components as in *going*$_{\text{PTCP}}$ [*to go*]$_{\text{INF}}$ > [*going to*]$_{\text{FUT}}$ *go*$_{\text{VB}}$). Because these adaptations cannot be attributed to all cases of the change resulting in a grammatical function and may arise on account of other factors, they are determined not to be fundamental characteristics of grammaticalization. Accordingly, grammaticalization is defined as the change whereby a lexical item or a construction comes in certain linguistic contexts to acquire a grammatical function different from its original meaning, or whereby an item or a construction expands its grammatical function(s).

An example of this change resulting in a new grammatical morpheme traces the discrete steps involved in the evolution of the English FUTURE marker *going*

to. Initially, a morpheme is used in environments where semantic ambiguity would allow for an innovative grammatical meaning. A novel function is extended into contexts where the original usage is no longer accessible. The new meaning is incorporated and standardized as a part of the grammar.

Chapter 2 provides an assessment of prepositions as a part of speech. This accounting discusses the morphology, syntax, and semantics of Biblical Hebrew prepositions in the context of the Semitic language family. Similar morphemes are arranged into a basic taxonomy. Comparing the linguistic traits of these categories, twelve prepositions and twenty-one multi-word prepositions are identified as meeting the criteria for examining the origin and evolution within Hebrew.

Chapter 3 examines twelve simple prepositions in which the original source is identifiable from language-internal data. The functions of each preposition are analyzed and exemplified. Internal and external linguistic data are considered in the mapping of the development of the grammatical changes. Cases of semantic ambiguity along with cross-linguistic examples of grammaticalization are examined in order to evaluate the trajectories of change. Finally, the changes are charted using various diagrams to map the purported semantic changes.

Chapter 4 assesses twenty-one multi-word prepositions of the form PREP + NP. Each example provides a clear discernible source and certain grammatical outcomes. The analysis of these polymorphic morphemes corresponds to that of the simple prepositions in the use of language-internal ambiguity and external cross-linguistic comparison. The resulting relationships between the source constructions and resulting functions are mapped as overlapping or related usages through examining potential environments of change.

5.2. Diachronic Change and Grammaticalization in Biblical Hebrew

Comparing two previously discussed prepositions provides an illustration for understanding the results and implications of this study. This presentation does not rehearse all of the details of each function word but concentrates on the potential results that emerge from the present study. The goal is to evaluate the degree to which one may draw reliable conclusions regarding diachrony in Biblical Hebrew based on the internal and comparative investigations entailing grammaticalization.

The prepositions *ʔaḥar* (§3.1) and *ʔaḥ^{a}re* (§3.2) are etymologically related, having derived from an anatomic noun meaning ‘back’. The Biblical Hebrew evidence indicates that both terms developed into locative functions designating the BEHIND relationship. Further, both locative functions are used for similar temporal notions, AFTER. While the expansion of function are similar for both morphemes, they did not likely develop at the same time or rate of change. This conclusion is evidenced by comparing the distribution of their functions (§3.2.6). At this point, the pathway of development diverge. For *ʔaḥar*, the LOCATIVE is expanded to the ACCORDANTIVE and COMITATIVE functions. Also, the

temporal function is found in certain contexts as a conjunctive adverb THEN. For *ʔaḥ[a]re*, on the other hand, the locative and temporal functions are extended to a particle-verb construction and a causative function.

The various functions can be represented by graphing the semantics synchronically on a single chart for each lexeme. In figure 5.1, *ʔaḥar* is mapped. Similarly, *ʔaḥ[a]re* is presented in figure 5.2.

Figure 5.1. Semantic Map of *ʔaḥar*

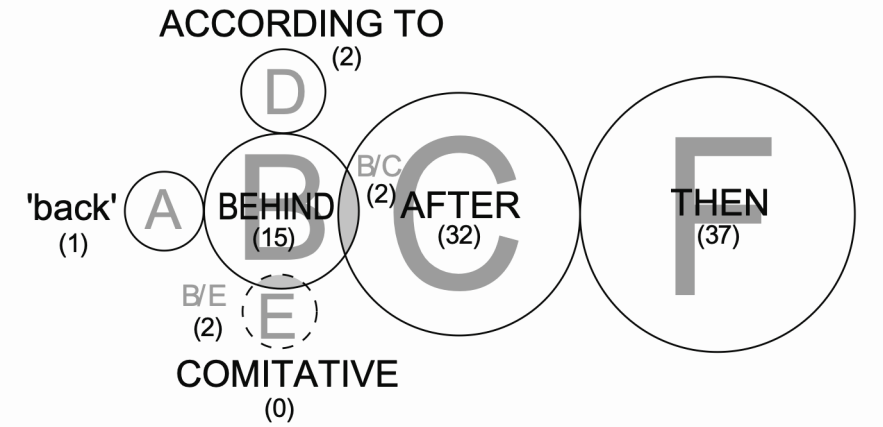
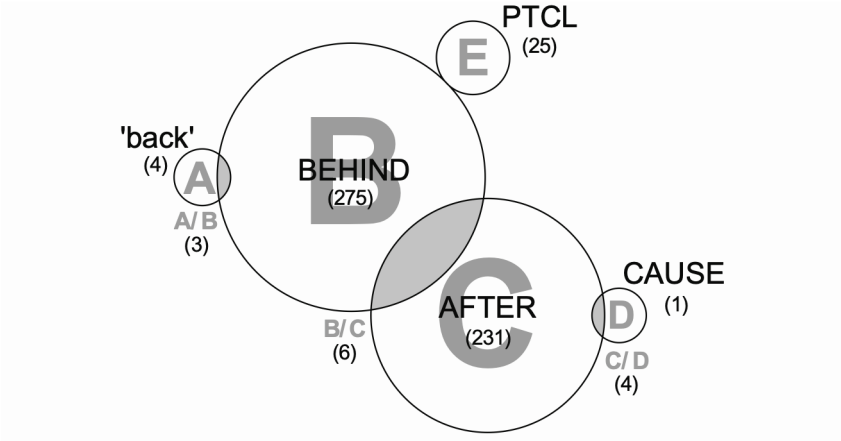


Figure 5.2. Semantic Map of *ʔaḥ[a]re*



Each usage is represented by a circle with the number of Biblical Hebrew tokens indicated in parentheses. The diameter corresponds to the number of instances found—larger circles indicate more Biblical Hebrew tokens. Those contexts in which the meaning is ambiguous are designated as the intersection of the sets

(e.g., the set A ∩ B is labeled "A/B"; B ∩ C is labeled "B/C"; etc.). The overlap of the circles represents semantic ambiguity, which has been proposed to be required for function extension and oftentimes is preserved in the language even after the morpheme is fossilized in new contexts. Where the circles touch tangentially, no Biblical Hebrew examples of ambiguity between the two sets are identified, but the comparative or typological data suggest a likely connection.

In the cases where the circle is dashed, the usage may only be reconstructed and is not definitely attested in Biblical Hebrew. Using the conventions established previously, the nominal usages are represented by single quotation marks, and grammatical functions are indicated by all capitalized letters. The letters associated with each usage (A, B, C, etc.) are merely representative of differences in function and should not necessarily be seen as a claim of sequential expansion. The suggested sequential development, however, is approximated from earlier to later in time with the progression from left to right in these charts.

One question arising from the present investigation concerns what historical data, if any, may demonstrate that the results reflect actual changes realized in time. For most of the examples detailed in this study, providing such evidence is difficult because of the limited corpus and the nature of the data in the Hebrew Bible. That is, the compositional realities of editing and redaction as well as the subsequent transmission history do not allow for a straightforward assessment of the internal diachrony of most biblical books. Nonetheless providing some conclusions are not altogether impossible from the extant data. In particular, the usage of these two morphemes within the different strata of Biblical Hebrew and a comparison to later Hebrew usage patterns provides for at least a partial appraisal of the actual diachronic changes as compared to the results of the present study.

Several suppositions should be outlined before providing the analysis. First, the designations, "Standard Biblical Hebrew" and "Late Biblical Hebrew," are applied only to Genesis–Kings and Ezra-Nehemiah-Chronicles. Constraining the examination to only narrative texts is an attempt to limit the number of false positives within the data which could arise on account of differences in literary genre or register. As has been noted previously, there is much recent scholarly debate about the exact nature of the chronological relationship between these corpora; however, the classic understanding of these books has yet to be displaced and continues to provide a valuable starting point for diachronic studies (Miller-Naudé and Zevit 2012). Second, one main external source for linguistic comparison is the later corpus of Mishnaic Hebrew, which is understood as related, at least in some measure, to Biblical Hebrew (Rendsburg 1992). This does not mean that direct lineage is necessarily obliged without reference to any other influence nor does it mean that Mishnaic Hebrew and Biblical Hebrew are diachronically separate entities, but it is assumed that Mishnaic Hebrew ancestry may be traced to an earlier strain of Hebrew that is at the very least related to Biblical Hebrew.

With these cautions in mind, the changes evidenced with these two morphemes are compared internally using a conservative demarcation of Standard Biblical Hebrew and Late Biblical Hebrew along with external reference to Mishnaic Hebrew. The semantic maps of the usage of *ʔaḥar* and *ʔaḥ[a]re* are presented below according to the attested tokens. For *ʔaḥar*, the Standard Biblical Hebrew examples are represented in figure 5.3 and Late Biblical Hebrew in figure 5.4. For *ʔaḥ[a]re*, figure 5.5 and figure 5.6 provide similar diagrams.

Figure 5.3. Functions of *ʔaḥar* in Standard Biblical Hebrew

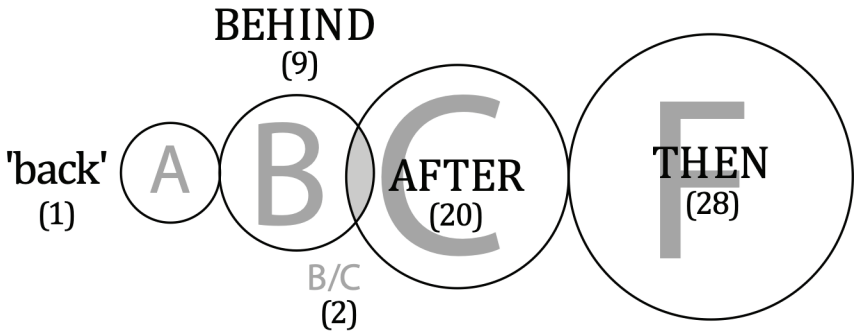


Figure 5.4. Functions of *ʔaḥar* in Late Biblical Hebrew

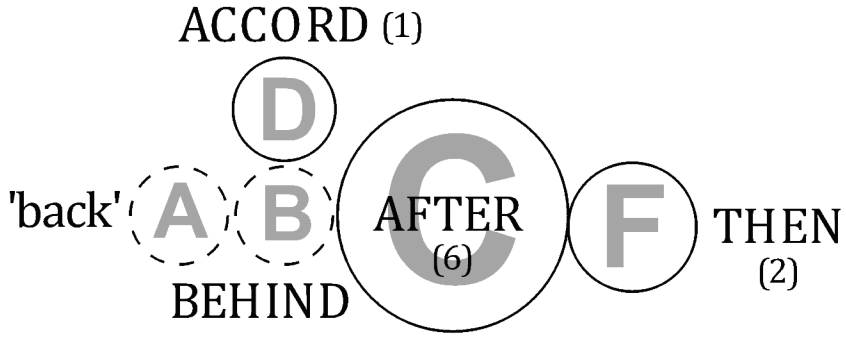


Figure 5.5. Functions of *ʔaḥ^{a}re* in Standard Biblical Hebrew

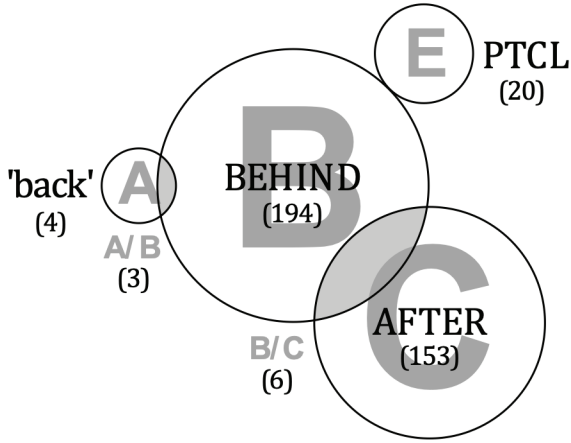
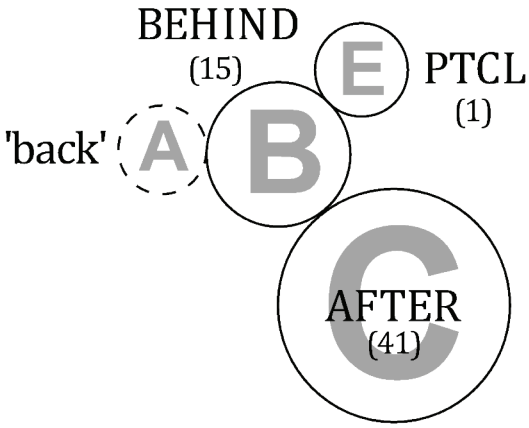


Figure 5.6. Functions of *ʔaḥ^{a}re* in Late Biblical Hebrew



These models allow for an exploration of the semantic landscape of each function word as they potentially developed from Standard Biblical Hebrew to Late Biblical Hebrew. The Standard Biblical Hebrew mapping of *ʔaḥar* (fig. 5.3) reflects four usages—'back', BEHIND, AFTER, and THEN. The last two functions provide the majority of the Standard Biblical Hebrew attestations. The previous two are vestigial. For *ʔaḥar*, in contrast, the Late Biblical Hebrew model (fig. 5.4) is limited to only three functions: ACCORDING TO, AFTER, and THEN. As represented by the dashed circles, the original noun meaning 'back', and the locative function are not attested. It may be concluded that the Late Biblical Hebrew usage

lost the source noun and the BEHIND function in favor of the more derived ones. It is noteworthy that these attested relations consist of the the later most expansions from their etymological origin.

The semantic maps of *ʔaḥ^{a}re* demonstrate similar modifications in usage patterns when comparing Standard Biblical Hebrew to Late Biblical Hebrew tokens. The first *ʔaḥ^{a}re* diagram (fig. 5.5) presents four Standard Biblical Hebrew uses: 'back', BEHIND, AFTER, and PARTICLE. These instances are evenly divided between the locative and the temporal functions with slightly more attestations of the former. The tokens of the original lexeme 'back' and the PARTICLE are limited. In Late Biblical Hebrew (fig. 5.6), three functions of *ʔaḥ^{a}re* (BEHIND, AFTER, and PARTICLE) are found, and the original noun 'back' is unattested. The AFTER function is the most prevalent relation with a ratio of the tokens at nearly five to one as compared to the instances of BEHIND. Comparing the attestations of *ʔaḥ^{a}re* in Standard Biblical Hebrew and Late Biblical Hebrew, the usage pattern suggests the loss of the originating noun and a shift away from the locative function to the temporal usage, that is, the trend is toward the innovated functions, principally stipulating the temporal function, as in the case of *ʔaḥar*.

Post-Biblical Hebrew further evidences these evolving patterns of change. The two morphemes, *ʔaḥar* and *ʔaḥ^{a}re*, consolidated into a single lexeme. In the morphosyntax of Mishnaic Hebrew, the form *ʔaḥ^{a}re* is restricted to the pronominal form, and *ʔaḥar* is the corresponding independent morpheme. The semantic value of the Mishnaic Hebrew *ʔaḥar*/*ʔaḥ^{a}re* is almost exclusively the temporal AFTER, similar to the most common Late Biblical Hebrew usage. The locative BEHIND is only preserved in Mishnaic Hebrew with fossilized strings, such as לְאַחַר *ləʔaḥar* (Segal 1927, 141–42). Into this Mishnaic Hebrew situation, a novel morpheme functions primarily as the locative relation BEHIND. The anatomic term אָחוֹר *ʔɔḥor* 'back' grammaticalized, resulting in the innovation of the locative BEHIND with the form *ʔ^{a}ḥore* (Segal 1927, 141).

The interplay between these functions provides a diachronic picture of semantic development starting with the early stages of Biblical Hebrew and continuing through Mishnaic Hebrew. The suggested pathway of change for all three morphemes—*ʔaḥar*, *ʔaḥ^{a}re*, and *ʔɔḥor*—originates from body part nouns denoting 'back'. Initially, *ʔaḥar* grammaticalizes into a locative function and is extended to a temporal function. Subsequently, *ʔaḥ^{a}re* follows a similar trajectory to the locative, possibly as *ʔaḥar* began to be used more regularly as a temporal marker. This situation reflects the Standard Biblical Hebrew system, where *ʔaḥar* is primarily temporal and *ʔaḥ^{a}re* is locative. A strict division of these locative and temporal morphemes, however, is precluded by the exclusive use of pronominal suffixes with the *ʔaḥ^{a}re* form. This morphosyntactic association may well have allowed for the semantic expansion and growth of *ʔaḥ^{a}re* into the temporal function as found in Late Biblical Hebrew, the functional fusion of the two morphemes, and the eventual loss of the independent status of *ʔaḥ^{a}re* in Mishnaic

Hebrew. As these two forms are reanalyzed as the independent and pronominal biforms of the temporal function, the semantic space vacated by the loss of the locative is filled by the innovative use of the third morpheme, *ʔᵃḥore*. This noun experiences a similar change ('back' > BEHIND) as that of the other two prepositions resulting in the locative function. The Overlap Model of figure 5.7 demonstrates these pathways of change using schematized stages, where the primary usages are indicated by bold typeface. The parentheses indicate vestigial and nascent usages. Stages II, III, and V correspond to the evidence from Standard Biblical Hebrew, Late Biblical Hebrew, and Mishnaic Hebrew, respectively.

Figure 5.7. Overlap Model of *ʔaḥar*, *ʔaḥᵃre*, and *ʔɔḥor*

Stage:	I	II (SBH)	III (LBH)	IV	V (MH)
ʔaḥar	'back' BEHIND (AFTER)	('back') BEHIND AFTER THEN	AFTER THEN (ACCORD)	AFTER THEN	AFTER+NP THEN
ʔaḥᵃre	'back' (BEHIND)	('back') BEHIND AFTER PTCL	BEHIND AFTER PTCL	(BEHIND) AFTER (PTCL)	AFTER+PRO
ʔᵃḥore	('back')	'back'	'back'	'back' (BEHIND)	'back' BEHIND

In light of this example, it may be concluded that the variation need not be consigned to purely synchronic realities, but plausible diachronic analyses of Biblical Hebrew can be considered based on established models of diachronic change (Cook 2012a). Grammaticalization provides one of these robust comparative criteria for assessing language change even in situations where diachronic data is complex or inaccessible. While each individual developmental trajectory must be ultimately confirmed through available historical evidence, it is not unreasonable that the general developments outlined in this study reflect likely diachronic realities even where temporality is not readily accessible from the textual evidence itself. Stated positively, the developments proposed by examining functional ambiguity and cross-linguistic changes may be legitimate even when the philological data comes from diverse chronological strata.

5.3. Further Implications

Several further implications may be concluded from this analysis that lead to a better understanding of grammatical change. These include a number of

observations pertain to the emergence of Biblical Hebrew prepositions, the interpretation of functional variation, and the typological pathways of grammaticalization. Finally, some suggestions for future investigation conclude this section.

5.3.1. Emergence of Biblical Hebrew Prepositions

It is widely recognized that prepositions develop from lexical origins. The detectable sources of grammatical innovation in Biblical Hebrew include nouns in the genitive construction and grammaticalized strings including prepositional and infinitive phrases. This study provides strong evidence connecting the grammatical results and the sources demonstrating clear overlap in the semantic and morphosyntactic usages of the two. Accordingly, several conclusions may be drawn concerning the emergent grammar of Biblical Hebrew prepositions.

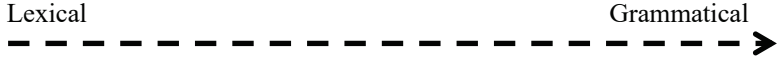
Contrary to the assumptions of many Hebrew grammarians (§2.1), the Biblical Hebrew evidence does not support the development from noun to adverb to preposition. Out of the more than sixty grammaticalized morphemes, only four constructions, viz. *taḥaṯ* 'below' (§3.12.4), *səḇiḇ* 'around' (§3.10.2.2), *ləḇaḏ* 'alone' (§4.10.2.2), and *ləpɔnim* 'forward; formerly' (§4.15.2), are attested as independent adverbs.[186] It would be difficult to require an intermediate step from a noun to an adverb before the development of the preposition without evidence connecting at least a majority of these forms. This adverbial stage is all the more unlikely because of the abundant empirical support for the overlapping noun-preposition usages discussed in the present study.

Additional confirmation of the direct change from noun to preposition is found with typological comparisons. In her initial cross-linguistic study of the emergence of locative prepositions, Svorou (1986, 516) presents a continuum of morphological change beginning with nouns and ending with bound affixes (reproduced below with slight modifications as fig. 5.8).[187] Her expanded study (Svorou 1994) provides an amended presentation of the comparative data showing that two different sequences are evinced: (1) genitive constructions become adpositions without the intermediating step to adverbs, and (2) genitive constructions become adverbs then adpositions.

186 Of these, the attestations of *taḥaṯ* 'below' are rare and limited to poetry.

187 Heine (1989, 107) proposes two revisions to this continuum: (1) in all of the African languages known to him, the development bypasses the genitive construction and "leads straight from noun to adverb without involving an intermediate genitive stage," and (2) the move from adverb to adposition "does not hold true for the vast majority of languages in our sample." These are represented on the figure by placing the adverb stage in parentheses.

Figure 5.8. Evolution of Locative Expressions from Nominal Sources



Noun > Genitive Construction (> Adverb) > Adposition > Bound Affix

She further hypothesizes that the typological pattern of "the morphosyntax of the adpositional constructions and the position of genitive markers (GEN) within them in that language" is predictive of the development pathway (Svorou 1994, 104). In sum, the adpositional pattern, PREP-GEN + N or N + GEN-POSTP, is indicative of a sequence without adverbs, and the adpositional pattern, PREP + N-GEN or N-GEN + POSTP, is connected to the adverbial sequence.[188] Svorou indicates that the first pattern is well-supported from her sample, and Biblical Hebrew prepositions provide additional support for this claim.

Understanding the development of Biblical Hebrew prepositions allows for a more thorough discerning of the syntactic environment in which the source constructions emerged. For the simple prepositions, a genitive construction is grammaticalized in situations where the source came to be understood as a preposition: N_{GEN} + NP > [PREP, N_{GEN}] + NP > PREP + NP. This change of category and function in the initial element does not require reanalysis, specifically syntactic rebracketing (§1.5.1). The multi-word strings, on the other hand, attest syntactic rebracketing and grammaticalization. The original construction, PREP + $[N_{GEN} + NP]_{NP}$, is reinterpreted as $[PREP + N_{GEN}]_{PREP}$ + NP. This transformation occurs in conjunction with the grammaticalization and recategorialization of the expression. Lastly, the extension of existing grammatical functions into innovative environments (i.e., secondary grammaticalization: $PREP_1$ + NP > $PREP_2$ + NP), regardless of the source construction, does not require syntactic reanalysis or category change.

Several examples demonstrate further that recategorialization occurs separately from grammaticalization. A category change from a preposition to an adverbializer is seen with seven Biblical Hebrew examples from the dataset: *ʔaḥar* AFTER (§3.1.2.4), *ʔaḥ^{a}re* AFTER (§3.2.3.2), *ʕeqɛḇ* CAUSE (§3.11.2.2), *bəyom* WHEN (§4.5.2.2), *ləmaʕan* RESULT (§4.12.2.1), *lipnē* BEFORE (§4.15.2.2), and *miyyom* SINCE (§4.17.2.2). Each demonstrates little to no difference in the semantic function between the prepositional and adverbializer usages. In other words, the functional similarity of prepositions and adverbializers

188 Svorou (1994, 105) further notes that these patterns correspond to head-marking and dependent-marking languages (Nichols 1986). This connection, however, should be tempered to include only the construction strategies for the adpositional phrase types and not the marking strategy of the language as a whole seeing as Biblical Hebrew presents a mixed-marking system.

suggests a clear category shift (recategorialization), even though the semantic function does not change (grammaticalization).

The study indicates that following the change of grammaticalization, the source morpheme and usage is generally preserved alongside the innovative function resulting in polysemy. This variation often remains salient for an extended time as the original construction continues to encode both the source meanings and the expanded functions. As the outcome is incorporated into the grammar, however, the frequency of the function word increases and eventually outpaces even the most common source constructions.

This inference is observed in Biblical Hebrew by comparing the source tokens to the outcomes in the dataset. Table 5.1 provides the cases where the original constructions are attested, and table 5.2 details the reconstructed sources. The ratio of the lexical sources to the grammaticalized outcomes is presented in the last column of these tables. Accounting for all thirty-two types equally, the mean of the ratio of the source to the outcome tokens is 1.56 with a range from 19.4 to zero. This distribution means that for the types with detectable source constructions, the original source on average is found one and a half times for every instance of the grammatical usage. However, only six examples (*bəʕeṯ*, *ʕal pi*, *liqraʔṯ*, *miṣṣaḏ*, *ləpī*, *bəyom*) attest a ratio greater than this average, meaning that a small number of outlier types are significantly increasing the mean. If these outliers are excluded, the average ratio falls to 0.343. A better accounting of the ratio of lexical source to grammatical outcome is provided by weighing the types according to their relative frequency. The resulting ratio is 0.186 (734 to 3939 examples), which is more reflective of the ratio of the total number of tokens. Even considering those types which may be designated as outliers, the grammaticalized tokens are in excess of five times more frequent than the lexical tokens.

Table 5.1. Ratio of Lexical Sources to Grammatical Outcomes

Lexical Source	Source Tokens	Outcome Tokens	Ratio of Source to Outcome
bəʕeṯ ‘in the time’	97	5	19.4
ʕal pi ‘on the mouth’	54	8	6.75
liqraʔṯ ‘to meet’	83	15	5.533
miṣṣaḏ ‘from the side’	8	2	4
ləpī ‘to the mouth’	51	14	3.643
bəyom ‘in the day’	126	74	1.703
mippəne ‘from the face’	171	127	1.346
ləyaḏ ‘to the hand’	4	3	1.333
miyyom ‘from the day’	13	11	1.182
bəʔepēs ‘in the end’	1	1	1
ləmoḵaḥ ‘to the front’	1	1	1
ʕal yərēḵ ‘on the thigh’	6	6	1

Table 5.1. Ratio of Lexical Sources to Grammatical Outcomes (cont.)

Lexical Source	Source Tokens	Outcome Tokens	Ratio of Source to Outcome
ʕeqɛḇ 'end'	6	9	0.667
kəp̄i 'like the mouth'	5	10	0.5
səḇiḇ 'environs'	13	37	0.351
bəqɛrɛḇ 'in the innards'	29	125	0.232
noḵaḥ 'front (of object)'	3	19	0.158
taḥaṯ 'place'	23	377	0.061
ben (< **bayn* 'space between')	11	379	0.029
lip̄ne 'to the face'	18	1025	0.018
bəṯoḵ 'in the middle'	5	310	0.016
ləḇaḏ 'to a part'	1	88	0.011
ʔaḥar 'back'	1	90	0.011
ʔaḥ^{a}re 'back'	4	542	0.007
Totals:	734	3278	

On a linguistic level, one may conclude that the functional usage of the six outliers has been integrated to a much lesser degree into the Biblical Hebrew grammatical system. This lack of incorporation could be construed as a result of the relative "newness" of the grammaticalization change or perhaps, more likely, as a result of common idioms, like *bəyom* 'in the day of' or *bəʕeṯ* 'in the time of', providing for the preservation of the source construction on account of its high frequency status in certain syntactic strings. Such is demonstrably the case for *bəyom* (§4.5.2), where the source construction is found exclusively with a following NP accounting for nearly all of the tokens of the non-grammaticalized string (124 of 126 examples). Excluding this string, the ratio with a following infinitive phrase falls well below the mean (0.026, i.e., two to seventy-seven examples).

It is interesting to note further that as one moves farther down table 5.1, which is organized by the ratio of the lexical to functional meanings, the number of tokens of the originating source generally decreases. This correspondence supports the notion that as the function is incorporated into the grammatical system, the lexical source typically begins to lose its independent status. In a quarter of the examples (eight of the thirty-two types; table 5.2), the lexical source is not evidenced at all. However, this loss should not be tied directly to grammaticalization. It is better understood as a secondary result. That is to say, the grammaticalization itself does not cause the decrease in the original source construction, but the usage may become specialized and the lexical source is often lost completely or replaced unless specific linguistic factors provide for its preservation.

Table 5.2. Tokens of Grammatical Outcomes without Lexical Sources

Lexical Source	Source Tokens	Outcome Tokens	Ratio of Source to Outcome
ḥelɛp̄ (< *ḫilp* 'change')	0	2	0
ʔeṣel (< *ʔiṣl* 'side')	0	54	0
baʕaḏ (<*baʕd* 'distance')	0	99	0
nɛg̱ɛḏ (< *nigd* 'opposite [place]')	0	89	0
yaʕan (< *yaʕn* 'answer')	0	99	0
biḡəlal (< *galal* 'matter')	0	10	0
baʕᵘḫur 'in the produce'	0	36	0
ləmaʕan (< מַעַנֵה *maʕᵘnɛ* 'purpose')	0	272	0
Totals:	0	661	

In sum, this study of grammaticalization allows for a detailed description of grammatical change with Biblical Hebrew prepositions. The source constructions consist of genitive-construction nouns or preposition-noun strings which acquired innovative grammatical functions. Accompanying this change designated as grammaticalization, other shifts of category and structural realignment may or may not occur. The innovative forms are expanded by analogy to new contexts, providing for the detection of the functional expansion. At this point, the functions could grammaticalize again or even undergo other structural changes, such as re-categorialization, as a part of the grammatical system. The original construction oftentimes remains salient especially where the source morphemes are common, but this polysemy typically reduces as the lexical source became less frequent or are lost altogether.

5.3.2. Interpreting Functional Variation

Function variation may be considered the consequence of development through time. By employing diachronic research and cross-linguistic comparison, the present study appraises language-internal variation and affords an evaluative matrix to view semantic ambiguity as indicative of contexts where functional innovative occurs. As such, polysemy is properly understood as the preservation of transitional encoding and not relegated to sundry or anomalous usage patterns.

Most grammatical evaluations, however, categorize function words using limited etic relations. Each instance is necessarily assigned to a discrete category. An example of this approach is the magisterial three-volume work of Jenni (1992–2000) on three Biblical Hebrew prepositions. The instances where functional ambiguity exists are necessarily attributed to well-established clusters. Such studies limit the explanative options of polysemy to synchronic connections without reference to diachronic and typological developments. In contrast, a central premise

of this study is that functional variation and emergent environments result in fuzzy categorical boundaries. And proper development trajectories provide a limit on speculative interpretations.

Several Biblical Hebrew examples may be highlighted to demonstrate that functional variation is best explained by language change.

The various constructions of *ben* (§3.4.2) demonstrate a converging of semantics and constructions in the later strata of Hebrew. In Standard Biblical Hebrew, the semantics of the *ben*-NP structure primarily includes the locative function BETWEEN along with the temporal function. The *ben*-NP *(w)l*-NP sequence is generally used as the separative relation. The construction *ben*-NP *w-ben*-NP functions more generally with locative, separative, or reciprocative notions. In Late Biblical Hebrew, this taxonomy is complicated by an increase in the cases of the *ben*-NP *(w)l*-NP pattern and the breakdown of the semantic distinctions among the different sequences. This variation is preserved in morphosyntax and function of Mishnaic Hebrew (Segal 1927, 142–43).

In the description of *ʔaḥ^{a}re* and *ʔaḥar* above (§5.2), both morphemes are used interchangeably for the functions BEHIND and AFTER, demonstrating the connectiveness of these lexemes morphosyntactically and semantically. This functional correlation, however, does not limit the grammatical innovation of either as distinct morphemes with sometimes divergent developmental trajectories. In certain environments, the particle-verb construction occurs uniquely with the preposition *ʔaḥ^{a}re* (§3.2.3.4), while a clause linker develops with *ʔaḥar* (§3.1.2.6).

At times, the convergence of similar morphemes and functions can drive change. The locative semantic space vacated by the morphemes *ʔaḥ^{a}re* and *ʔaḥar* by Mishnaic Hebrew is filled by the grammaticalization of a new morpheme *ʔ^{a}ḥore* BEHIND (§5.2). Such interactions can motivate the reduction in the number of morphemes expressing similar functions as well. For example, Biblical Hebrew evidences eight different morphemes with causative functions: *ʔaḥ^{a}re*, *biḡəlal*, *baʕ^{a}b̲ur*, *yaʕan*, *ləmaʕan*, *mippəne*, *ʕeqɛb̲*, and *taḥaṯ*. This multiplicity is reduced in later linguistic strata. Three of these morphemes—*biḡəlal*, *baʕ^{a}b̲ur*, and *ləmaʕan*—are not attested at all in Mishnaic Hebrew, and the causative function is lost for most of the other Biblical Hebrew examples (Segal 1927, 148; Pérez Fernández 1999, 160).

5.3.2.1. Typological Shifts

This investigation attempts to provide a thorough picture of the morphosyntactic origin and functional development of a number of Biblical Hebrew prepositions through the lens of grammaticalization. Each preposition is examined with regard to the discrete steps of change contributing to the emergence of new grammatical notions. The individual pathways of change are appraised in light of diachronic

typology with particular attention given to similar changes suggested by examples from within the Semitic language group.

The following sections provide a summary of all the Biblical Hebrew sources and the grammatical results with attention given to the place of these changes within typological research. As noted previously, prepositions obtain from a variety of grammatical and nominal sources. The morphosyntactic characteristics of the originating sources generally consist of nouns in genitive constructions or preposition phrases with nouns. The nominal sources (§5.3.3) are grouped together in semantic categories to allow for broader typological comparison. Following the cross-linguistic grouping of Svorou (1994) and, to a lesser degree, Heine and Kuteva (2004), the originating semantics are grouped according to body parts, locations, objects, relations, and abstract notions. The functional sources (§5.3.5), such as the locative, directional, and temporal, which evidence secondary grammaticalization, are likewise categorized together.

The majority of these changes are known from the world's languages (Heine and Kuteva 2004). A few of the Biblical Hebrew examples, however, should be highlighted as providing additional support to tentative pathways of change and even suggesting unique trajectories. For instance, the abstract noun *ḥelɛp̄* 'change' is demonstrated to develop the meaning EXCHANGE (§3.6.3), and the function AROUND obtained from the location noun *sɔb̲iḇ* 'environs' (§3.10.2.4). These examples may be connected with several other known but rare instances and likely indicate cross-linguistic trends. Strings with the nouns 'produce' (*baʕᵘb̲ur*) and 'front' (*lənoḵaḥ*) provide evidence for the grammatical functions of CAUSE (§4.6.3) and BENEFACTIVE (§4.13.2.3), respectively. Unique pathways of secondary grammaticalization result in the COMITATIVE (§3.1.3.3), ACCORDANTIVE (§3.1.3.4), CAUSE (§3.2.4.3), and DIRECTIONAL (§3.3.3.3) from the BEHIND, AFTER, and BESIDE functions. Finally, the lone Biblical Hebrew verbal source *liqraʔṯ* 'to meet' suggests evidence for a possible tendency for such expressions to become a directional (§4.16.3.1).

5.3.3. Nominal Sources

5.3.3.1. Body Part Nouns

The most common nominal sources for Biblical Hebrew prepositions are body part nouns. Anatomic nouns make up thirteen examples of grammaticalization to locative functions and logical relations (table 5.3). Three sources are simple nouns in the genitive construction, and ten are complex preposition phrases. The body parts include the core semantic concepts of BACK, FACE, HAND, INNARDS, MIDDLE, MOUTH, SIDE, and THIGH.

Table 5.3. Body Part Sources

BH Source	Body Part	Outcome	Function Type
אַחַר *ʔaḥar* ‘back’	BACK	BEHIND	LOC
אַחֲרֵי *ʔaḥ^{a}re* ‘back’	BACK	BEHIND	LOC
לִפְנֵי *lipnε* ‘to the face’	FACE	BEFORE (space)	LOC
מִפְּנֵי *mippənε* ‘from the face’	FACE	CAUSE	LOG REL
לְיַד *ləyaḏ* ‘to the hand’	HAND	NEAR	LOC
בְּקֶרֶב *bəqɛrɛḇ* ‘in the innards’	INNARDS	WITHIN	LOC
בְּתוֹךְ *bətoḵ* ‘in the middle’	MIDDLE	INSIDE	LOC
כְּפִי *kəpī* ‘like the mouth’	MOUTH	ACCORDING TO	LOG REL
לְפִי *ləpī* ‘to the mouth’	MOUTH	ACCORDING TO	LOG REL
עַל פִּי *ʕal pi* ‘on the mouth’	MOUTH	ACCORDING TO	LOG REL
אֵצֶל *ʔeṣɛl* (<**ʔiṣl* ‘side’)	*SIDE	BESIDE	LOC
מִצַּד *miṣṣaḏ* ‘from the side’	SIDE	BESIDE	LOC
עַל יֶרֶךְ *ʕal yɛrɛḵ* ‘on the thigh’	THIGH	BESIDE	LOC

It is noteworthy that a single source can evolve into multiple functions, and different originating constructions can converge into similar spatial grams. Two of the Biblical Hebrew body-part sources demonstrate these trajectories. The Biblical Hebrew noun *pənɛ* ‘face’, yields two outcomes: the spatial notion BEFORE and the logical relation CAUSE. And three different strings including the nominal source *pɛ* ‘mouth’ result in the ACCORDING TO function (*kəpī* ‘like the mouth’, *ləpī* ‘to the mouth’, and *ʕal pi* ‘on the mouth’).

Nearly all of these Biblical Hebrew anatomic sources and the resulting spatial grams are evidenced in either Svorou’s (1994, 71) database of fifty-five languages or Heine’s various cross-linguistic studies (Heine and Reh 1984, Heine 1989, Heine and Kuteva 2004). One Biblical Hebrew body-part source, however, evidences a spatial notion that is not found in these typological studies. The proximal NEAR evolves from a construction with the body part HAND (*ləyaḏ* ‘to the hand’). A somewhat similar shift, HAND to LOC, however, is predicted by Heine and Kuteva (2004, 166) as “an instance of a more general process whereby certain body parts, on account of their relative location or their function, are used as structural templates to express location.” This Biblical Hebrew example provides additional support for this change.

Generally speaking, Svorou (1994, 73–79) suggests two evolutionary templates of body-part terms which result in spatial grams. The models depend on the tendency to relate certain spatial notions either to anthropomorphic (upright human) or zoomorphic (horizontal, four-legged animal) anatomies.[189] Biblical

189 Heine (1989) designates this latter category, the “pastosralist model,” connecting it to certain nomadic societies dependent on animal husbandry.

Hebrew follows the former model. The body-part nouns for BACK (*ʔaḥar* 'back' and *ʔaḥ^{a}re* 'back'), following the anthropomorphic archetype, are used to designate the relative location BEHIND. In the prototypical zoomorphic model, this spatial gram (BEHIND) is prototypically derived from terms designating BUTTOCKS or LOINS, whereas BACK results in a TOP-REGION relation.

5.3.3.2. Location Nouns

In eight cases, a location noun, or an "environmental landmark" (Svorou 1986, 526), serves as the source of a grammatical function. These examples originate with environmental landmarks designating the semantic notions of HOUSE, INTERVAL, DISTANCE, OPPOSITE PLACE, ENVIRONS, and PLACE (see table 5.4). The nouns, *baʕaḏ* 'distance' and *taḥaṯ* 'place', are the source of two different outcomes each. There are no complex preposition constructions with location nouns.

Table 5.4. Location Sources

Source	Location	Outcome	Function Type
בַּיִת *bayiṯ* 'house'	HOUSE	*IN	LOC
*בַּעַד *baʕaḏ* (<**baʕd* 'distance')	*DISTANCE	THROUGH	DIR
*בַּעַד *baʕaḏ* (<**baʕd* 'distance')	*DISTANCE	BEHIND	LOC
סְבִיב *səḇiḇ* 'environs'	ENVIRONS	AROUND	LOC
*בֵּין *ben* (<**bayn* 'space between')	INTERVAL	BETWEEN	LOC
תַּחַת *taḥaṯ* 'place'	PLACE	UNDER	LOC
תַּחַת *taḥaṯ* 'place'	PLACE	INSTEAD	LOG REL
*נֶגֶד *nɛḡɛḏ* (<**nigd* 'opposite [place]')	*OPPOSITE	BEFORE	LOC

It is observed that Afroasiatic languages evolve spatial relations from sources different than those of other areal-related African languages. In particular, Heine (1989, 98–100) uses five basic functions (ON, UNDER, IN, FRONT, and BACK) to highlight this difference. Non-Afroasiatic languages, specifically the Western Nilotic and Bantu families, derive these relations from body parts and environmental landmarks, but he claims that most Afroasiatic languages have "an unproportionally high number [nearly sixty-two percent in his sample] of 'relational concepts' like 'top', 'bottom', or 'interior'," which are the source constructions for these spatial grams (Heine 1989, 99–100). It should be noted that Heine's sample of Afroasiatic languages appears to be absent a proportionate

number of Semitic exemplars.[190] In contrast to Heine's "Afroasiatic pattern," Biblical Hebrew is more comparable to the "Bantu pattern" where the body parts are restricted to the basic spatial notions of IN, FRONT, and BACK, and the landmarks account for the UNDER and ON notions. Only two Biblical Hebrew sources, *nɛ̄ḡɛ̄ḏ* 'opposite (place)' and *noḵaḥ* 'front (of object)', could even plausibly be connected with Heine's "relational concept" designation. As such, one should perhaps limit Heine's typological observation to only the non-Semitic phyla of the Afroasiatic family.

Several other sundry typological connections may be mentioned. The tendency of African languages to associate the spatial concept of UNDER with landmarks of the type GROUND, EARTH, and SOIL is evidenced with *taḥaṯ* 'place' (Heine 1989, 94). Additionally, the locative relation IN derived from the object noun *bayiṯ* 'house' has only minimal Biblical Hebrew evidence, although this change is evidenced later with Mishnaic Hebrew *bbyt*/*ʔbyt* 'in, inside' (Pérez Fernández 1999, 160).[191] Finally, the environmental landmark, *səḇiḇ* 'environs', provides evidence for the evolution of a cross-linguistic locative outcome AROUND from location-noun sources designating an 'area' or 'vicinity' of a locality. This change is known in the European languages Icelandic and Lithuanian (Heine and Kuteva 2004, 122–23), the Papuan language Imonda (44), the Niger-Congo language Kpelle (44), and the isolate Basque (68). On account of the areal and genetic diversity of the languages evidencing this change, this grammaticalization may be considered a more general typological change.[192]

5.3.3.3. Object Nouns

Several Biblical Hebrew outcomes grammaticalized from concrete nouns. These nouns are identified as object sources in table 5.5. All three, CAUSE, EXCHANGE, and PURPOSE, likely developed from the same preposition phrase, *baʕᵃḇur* 'in the production of', which has a nominal component with a disputed etymology and meaning (§4.6.2.1). No clear typological connections are known connecting these source notions and outcomes.

190 To wit, the specific eighteen Afroasiatic languages are not given in his article (Heine 1989). Though, it may be assumed that the list is similar to his earlier work on African languages (Heine and Reh 1984). In this sample of Afroasiatic languages (Amharic, Beja, Berber, Boni, Gorowa, Hausa, Iraqw, Lamang, Oromo, Rendille, Saho, the Sam languages, Tigrinya, and Somali), only Amharic and Tigrinya are Semitic.

191 Compare to an analogous change found in Abkhaz (Svorou 1994, 81).

192 Svorou's (1994, 152–53) CIRCUMFERENTIAL-path outcome, which originates from a POSTERIOR, does not appear to be related.

Table 5.5. Object Sources

BH Source	Object	Outcome	Function Type
בַּעֲבוּר *baʕᵘb̲ur* ‘in the production’	PRODUCE	CAUSE	LOG REL
בַּעֲבוּר *baʕᵘb̲ur* ‘in the production’	PRODUCE	EXCHANGE	LOG REL
בַּעֲבוּר *baʕᵘb̲ur* ‘in the production’	PRODUCE	PURPOSE	LOG REL

5.3.3.4. Relation Nouns

The sources of five grammatical functions are classified as relational object nouns: FRONT, END, and PART. Two instances originate in simple nouns, and two outcomes are complex prepositions (table 5.6). The nominal components designating END, *bəʔɛpēs* ‘in the end’ and *ʕeqɛb̲* ‘end’, are unrelated lexemes. The sources for FRONT, however, are equivalent: *nok̲aḥ* ‘front (of object)’ yields a locative function, and *lənok̲aḥ* ‘to the front’ results in the BENEFACTIVE relation. Elsewhere, relational nouns are recognized to have been the source of the BENEFACTIVE (Svorou 1994, 158). For a discussion on the typological relationship between relation nouns and spatial relations, see the previous discussion on locative nouns (§5.3.3.2).

Table 5.6. Relation Sources

BH Source	Relation	Outcome	Function Type
בְּאֶפֶס *bəʔɛpēs* ‘in the end’	END	WITHOUT	LOG REL
עֵקֶב *ʕeqɛb̲* ‘end’	END	CAUSE	LOG REL
לְנֹכַח *lənok̲aḥ* ‘to the front’	FRONT	FOR	LOG REL
נֹכַח *nok̲aḥ* ‘front (of object)’	FRONT	BEFORE	LOC
לְבַד *ləb̲aḏ* ‘to a part’	PART	BY -SELF	LOG REL

5.3.3.5. Abstract Nouns

Abstract nouns designate nonmaterial referents. Seven grammatical functions originate from abstract sources (table 5.7). These nouns include the semantic notions of DAY, TIME, MATTER, CHANGE, and PURPOSE. Six examples are found as complex prepositions. Only one of the sources is a noun in the genitive construction. The original Biblical Hebrew lexeme *yom* ‘day’ is the noun component of both a grammaticalized temporal function and a logical relation. The string *ləmaʕan* ‘for the purpose’ develops into both purpose and causative functions.

Table 5.7. Abstract Sources

BH Source	Abstract	Outcome	Function Type
חֵלֶף *ḥelɛp̄* (< **ḫilp* ‘change’)	*CHANGE	EXCHANGE	LOG REL
בְּיוֹם *bəyom* ‘in the day’	DAY	WHEN	TEMP
מִיּוֹם *miyyom* ‘from the day’	DAY	SINCE	TEMP
בְּגִלַּל *bigəlal* (< **bV* + *galal* ‘on the matter’)	*MATTER	CAUSE	LOG REL
לְמַעַן *ləmaʕan* ‘for the purpose’	PURPOSE	PURPOSE	LOG REL
לְמַעַן *ləmaʕan* ‘for the purpose’	PURPOSE	CAUSE	LOG REL
בְּעֵת *bəʕeṯ* ‘in the time’	TIME	WHEN	TEMP

Several typological connections should be mentioned with this source type. Heine and Kuteva (2004, 299) suggest that the evolution to temporal relations from abstract nouns designating time is connected via “some salient semantic property [that] gives rise to a grammatical marker highlighting that property.” The extension of a salient semantic property may provide for the emergence of the PURPOSE function from a noun denoting ‘purpose’ (*ləmaʕan* ‘for the purpose’). The connection between this abstract noun and the causative function confirms, at least in this case, the hypothesis that the semantic notion PURPOSE is primary (Heine, Claudi, and Hünnemeyer 1991, Heine and Kuteva 2004, 247).

5.3.4. Verb Phrases

As noted previously, a lone Biblical Hebrew outcome derives from an infinitive source, *liqraʔṯ* ‘to meet’. The verb *QRʔ* ‘meet’ is construed as an infinitive-construct phrase with the prefixed element TO. This grammaticalized string yields the directional function TOWARD (table 5.8). Although cross-linguistic studies indicate that serial verbs and participles are the primary source constructions for prepositions, directional outcomes are known to grammaticalize from verbs with similar semantics, such as ‘to approach’ (Svorou 1994, 109–17).

Table 5.8. Verbal Sources

BH Source	Verb	Outcome	Function Type
לִקְרַאת *liqraʔṯ* ‘to meet’	TO MEET	TOWARD	DIR

5.3.5. Grammatical Sources

5.3.5.1. Locative Functions

The largest group of innovative relations with previously grammaticalized source constructions (secondary grammaticalizations) derives from locative functions. Seventeen Biblical Hebrew examples have their sources in spatial notions such as

BEFORE, BEHIND, BESIDE, BETWEEN, INSIDE, UNDER, and WITHIN (table 5.9). Several sources produce multiple different grammatical outcomes.

These grammaticalization pathways can be connected with known typological tendencies in the world's languages. The largest group of locative functions provides the source of various temporal notions. In particular, temporal outcomes are connected to the path of motion or goal of anterior and posterior grams. The locative function is extended into temporal contexts when used with a situation as its landmark. Svorou (1994, 159) explains this metaphorical extension through the cognitive connection that "reaching a goal translates into completing an event." There do not appear to be any additional large-scale patterns of the resulting outcomes having developed from the locative functions. Such an observation is required at present because of the diversity of the outcomes themselves and the lack of scholarship devoted to exploring the cognitive connections between these more abstracted relations.

Table 5.9. Locative Function Sources

BH Source	Locative	Outcome	Function Type
לִפְנֵי *lip̄ne* 'before'	BEFORE (space)	BEFORE	TEMP
אַחַר *ʔaḥar* 'after'	BEHIND	THEN	TEMP
אַחַר *ʔaḥar* 'behind'	BEHIND	ACCORDING TO	LOG REL
אַחַר *ʔaḥar* 'behind'	BEHIND	AFTER	TEMP
אַחֲרֵי *ʔaḥᵃre* 'behind'	BEHIND	PTCL	OTHER
אַחֲרֵי *ʔaḥᵃre* 'behind'	BEHIND	AFTER	TEMP
בַּעַד *baʕaḏ* 'behind'	BEHIND	FOR	LOG REL
אֶצֶל *ʔeṣɛl* 'beside'	BESIDE	TOWARD	DIR
אֶצֶל *ʔeṣɛl* 'beside'	BESIDE	NEAR	LOC
בֵּין *ben* 'between'	BETWEEN (space)	SEPARATIVE	LOG REL
בֵּין *ben* 'between'	BETWEEN (space)	RECIPROCATIVE	LOG REL
בֵּין *ben* 'between'	BETWEEN (space)	BETWEEN	TEMP
בְּתוֹךְ *bətoḵ* 'inside'	INSIDE	THROUGH	DIR
בְּתוֹךְ *bətoḵ* 'inside'	INSIDE	COMITATIVE	LOG REL
בְּתוֹךְ *bətoḵ* 'inside'	INSIDE	DURING	TEMP
תַּחַת *taḥaṯ* 'under'	UNDER	CAUSE	LOG REL
בְּקֶרֶב *bəqɛrɛḇ* 'within'	WITHIN	THROUGHOUT	TEMP

5.3.5.2. Directional Functions

The directional function TOWARD is the source of a single grammatical outcome. The resulting logical relation is AGAINST (table 5.10). This secondary change follows the grammaticalization of the verbal string 'to meet' (§5.3.4). The

typological data is quite limited for this example, being primarily circumscribed by only genetically related languages (§4.16.3.2).

Table 5.10. Directional Function Sources

BH Source	Directional	Outcome	Function Type
לִקְרַאת *liqraʔt̲* 'toward'	TOWARD	AGAINST	LOG REL

5.3.5.3. Temporal Functions

Two logical relations find their source in temporal functions that grammaticalized from locatives (§5.3.5.1). The sources consist of the etymologically related terms *ʔaḥar* and *ʔaḥ^{a}re*. These temporal sources both mark the AFTER function (table 5.11) and develop the logical relations, CAUSE and COMITATIVE. The latter relation appears to be in the earliest stage of expansion for Biblical Hebrew (see above §3.1.3.3). The changes to these functions, COMITATIVE (Svorou 1994, 156–57) and CAUSE (Heine and Kuteva 2004, 48), are well-known cross-linguistically.

Table 5.11. Temporal Function Sources

BH Source	Temporal	Outcome	Function Type
אַחַר *ʔaḥar* 'after'	AFTER	*COMITATIVE	LOG REL
אַחֲרֵי *ʔaḥ^{a}re* 'after'	AFTER	CAUSE	LOG REL

5.4. Suggestions for Future Studies

Two directions for continued study include an extension of this analysis to other Biblical Hebrew function words and an attempt to compare more comprehensively the Post-Biblical Hebrew data. Each study would allow for a more complete picture of the evolution of Hebrew grammar by incorporating a larger corpus of constructions and diachronic evidence. While the present study has suggested and provided evidence for the development of Hebrew grammar through time, additional inquiries using a broader corpus would contribute to a more well-defined accounting of the diachronic relationships encompassed within Biblical Hebrew.

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Ancient Source Index

Modern Author Index