DIACRONIC DEVELOPMENT IN BIBLICAL HEBREW PREPOSITIONS:  
A CASE STUDY IN GRAMMATICALIZATION

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אשתו יהוה היא תחתלו
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*Soli Deo Gloria.*
Abbreviations

The following is a comprehensive list of the abbreviations employed in this study. For the interlinear morpheme-by-morpheme linguistic glosses, the standard abbreviations and conventions of the Leipzig Glossing Rules developed by the Max Planck Institute (http://www.eva.mpg.de/lingua/resources/glossing-rules.php), as much as possible, are used.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>1</td>
<td>first person</td>
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<tr>
<td>2</td>
<td>second person</td>
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<tr>
<td>3</td>
<td>third person</td>
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<tr>
<td>ACCRD</td>
<td>accordantive</td>
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<td>ADV</td>
<td>adverb(ial)</td>
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<td>ADVZ</td>
<td>adverbializer</td>
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<td>AUX</td>
<td>auxiliary</td>
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<td>BH</td>
<td>Biblical Hebrew</td>
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<td>BEN</td>
<td>benefactive</td>
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<td>Abbreviation</td>
<td>Description</td>
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<td>construct state</td>
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<td>El-Amarna</td>
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<td>Early Modern English</td>
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<td>preposition phrase</td>
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<td>present</td>
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<td>PRO</td>
<td>pronoun</td>
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<td>PTCP</td>
<td>participle</td>
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<tr>
<td>PTCL</td>
<td>particle</td>
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<tr>
<td>PURP</td>
<td>purpose</td>
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<td></td>
<td></td>
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<tr>
<td>Q</td>
<td>question particle/marker</td>
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<td></td>
<td></td>
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<tr>
<td>RCPR</td>
<td>reciprocative</td>
</tr>
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</table>

xxxvii
Transliteration

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

\[
\begin{array}{ccccccccccc}
\text{א} & ʾ & \text{ב} & b & \text{ב} & b & \text{ג} & g & \text{ג} & g & \text{ד} & d & \text{ד} & d \\
\text{ה} & h & \text{ו} & w & \text{ז} & z & \text{ח} & ḥ & \text{ט} & ṭ & \text{י} & y & \text{כ} & ḫ \\
\text{ל} & l & \text{מ} & m & \text{נ} & n & \text{ס} & s & \text{ע} & ʿ & \text{פ} & ṁ & \text{ף} & ṭ \\
\end{array}
\]

The Tiberian sub-linear seven vowel system for Biblical Hebrew is transliterated as a, ɔ, ε, e, i, o, and u. The reduced-vowel schwa is not transliterated, but the compound-schwa vowels are indicated by the supralinear manifestation corresponding to their full vowels, i.e. ʿa, ʿe, and ʿo. The presence of matres lectionis is not represented in transliteration system.
The individual Semitic languages are transliterated according to the standard phonetic systems. The Central Semitic languages are represented consistent with Fox (2003, xvii-xix); Akkadian follows Heuhnergard and Woods (2004); Ge‘ez corresponds to Leslau (1987); OSA conforms to Beeston (1984) and Stein (2003); and Mandaic is according to Macuch (1965), where ʾ, y, and w are transliterated as a, i, and u.
CHAPTER ONE

You sometimes make a dust, a dark dust,
by sweeping away your little words.
-Elizabeth Barrett

1 Introduction and Analysis Framework

Diachronic change is a language universal; it therefore must be accounted for in
the investigation of languages. At every linguistic level—phonological and
morphological, syntactic and pragmatic—speakers interact and adapt to one another's
language patterns in discrete, recurrent steps resulting in the emergence of common
grammar (Hopper 1987). This linguistic negotiation produces systemic variation and
change, the interpretive value of which must be understood in light of the origin,
development, and spread of novel adaptations. This study aims to examine one such
linguistic innovation brought about by a particular type of change, namely
grammaticalization, in order to outline the origin and evolution of Hebrew grammar.

The corpus of this study comprises the Biblical Hebrew (BH) prepositions, which
traditionally have been categorized as independent particles but are better labeled as
function words, that is, words which express a grammatical relation. Focusing on prepositional morphemes within the BH corpus allows for an inductive, data-driven examination of developments and diachronic changes which provides a descriptive model for the emergence of this linguistic subsystem.

Thus, this thesis seeks to apply the linguistic "theory of grammaticalization" to a single component of a language within a well-established textual corpus to determine the applicability and implications of some of its hypotheses. In particular, this is accomplished by concentrating on the language adaptation and change evident in the usage of these preposition morphemes within the selected corpus. One of the primary goals, then, is to determine to what extent grammaticalization sheds light on the development of the grammatical subsystem of BH prepositions. It will be demonstrated that this rubric provides not just a descriptive analysis of the extant variation but allows for a diachronic description of the emergence of innovative grammatical functions. Another goal is to provide a constructive discourse between linguistics and philology to produce an explanatory model for language variation in BH. As such, the
primary audience of this study is philologists, specifically Hebraists and Semitists. However, an effort to provide broader accessibility for the historical linguist and typologist is attempted with the hope that the wealth of data available in Hebrew and other Semitic languages may be more widely integrated into future cross-linguistic investigations.

The following sections of this chapter present a theoretical framework for the entire investigation. First, grammaticalization will be defined in view of the history of research (§1.1) along with English language 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 investigation (§1.3). Finally, an overview of past studies of cases of grammaticalization in Semitic (§1.4), the place and contributions of the present study (§1.5), and the general methodology (§1.6) are presented.
1.1 Towards a Definition

Fundamentally, grammaticalization denotes the making of something to be grammatical. Yet the definition of the term grammaticalization\(^1\) has varied greatly in the century since its coining in 1912. A full survey of the assorted definitions is beyond the scope of this study, but those most widely referenced will be reviewed chronologically in this section.\(^2\) The purpose is to provide the groundwork for adapting a working definition of the term for this study.

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

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

The expansion of the study of grammaticalization was contained almost exclusively within Indo-European philological 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

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 discipline is updated only to the end of the twentieth century (Heine, Claudi, and Hünnefelder 1991, 5-23, Lehmann 1995, 1-8, Hopper and Traugott 2003, 19-38).

4 See, for example, Hoenigswald: "[G]rammaticalization [is] the emptying of lexically meaningful morphs (compound members, etc.) and their transformation into 'function' elements" (1966, 44).
helped to move 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).

So, in contrast to Meillet's understanding as the emergent process of new grammatical forms, Kuryłowicz defines grammaticalization as the quantitative growth in the grammaticality of either a lexical or grammatical item.⁵

Talmy Givón's "An archaeologist's field trip" pushed 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 several languages, including Amharic, Bantu, and Romance languages, that "bound morphemes, derivational as well as inflectional, arise historically from erstwhile free 'lexical' morphemes" (1971, 409). Based primarily on

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⁵ Several others, including Bernd Heine, Ulrike Claudi, and Friederike Hünnefelder (1991, 24), adopt the definition of Kuryłowicz without modification.
these landmark studies, the concept of grammaticalization had inundated nearly every aspect of the field of linguistics by the end of the 20th century.\(^6\)

In his highly influential 1982 essay *Thoughts on Grammaticalization*, not widely available in published form until more than decade later, Christian Lehmann returned to Meillet's characterization of grammaticalization as "a process leading from lexemes

to grammatical formatives" (1995, viii). Further, he developed a terminology and
parametric schema providing a preliminary framework for what he dubbed
"grammaticalization theory." Whereas his parameters will be discussed more fully in a
later section (§1.3.2), he 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

7 Bernd Heine claims: "Grammaticalization theory is neither a theory of language
nor of language change" (2004, 575). Hopper and Traugott (2003, 1) differentiate
between two distinct linguistic concepts: a 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; the latter is referred to as "grammaticalization theory"
following the standard usage found in the literature.

8
designated by the term "grammaticality", that is, the scalar degree to which an element belongs to grammar (Lehmann 1995, 9).

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

[T]he process whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions, and, once grammaticalized, continue to develop new grammatical functions (2003, xv).

This definition provided several enhancements to previous characterizations, including specifying the types of originating linguistic elements as lexical items, constructions, and other grammatical functions, designating the context of language performance as instrumental, and adopting a secondary function, following Kuryłowicz's definition, in the development from one grammatical function to another. Traugott (2002, 26-27) later provided the convenient terminological designation of the two types of reorganizations as "primary" grammaticalization (lexical item > grammatical function) and "secondary" grammaticalization (grammatical function > new grammatical function).
Intervening studies, however, queried the depiction of grammaticalization as a process (Newmeyer 1998, 232-234, 2001), even though such descriptions were common throughout the literature beginning with Meillet:

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 (1912/1948, 130-131).

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 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 (2003, xv).

Finally, while attempting to understand grammaticalization as an extension of metaphor operating at the interface of semantics, syntax, and pragmatics, several linguists have moved 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

Taking into consideration this last criticism that the change is, at bottom, an
aggregation 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 expansion of grammatical relations to
innovative grammatical functions.
1.2 Grammaticalization of Future Markers in English

The Present-Day English [PDE] FUTURE provides a well-chronicled example of language change involving grammaticalization. To understand the current linguistic situation, one must explore the diachronic origin of tense-marking beginning, at least, in Old English [OE] (the Anglo-Saxon language before 1100 C.E.), if not Proto-Germanic. It is widely held that no specialized form of the simple future existed in OE, only past and present were marked—future action was generally inferred from context with a present tense verb as in Example (1).

(1) On morgenne, gā ic tō þām 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 OE, willan and sculan, the modal verbs of volition and obligation respectively, were grammaticalized becoming the verbal auxiliaries, will in Example (2)
and shall in Example (3), and function to mark future time in constructions with bare infinitives (Wischer 2006, 173-177).  

(2) I will go to town.  

(3) I shall go to town.  

In contrast to the two previous examples which follow the pattern AUX + VERB, another option, consisting of the form AUX + going to/gonna + VERB in Example (4), evolved into a future marker in the grammar of PDE.  

---

8 The original modal usages, however, are not completely lost in PDE, but in most contexts the auxiliaries should and must acquire these functions.  

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 PDE. 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.
(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 as the phonologically reduced form gonna with a cliticized auxiliary as in Example (4b)—underwent the change to a future marker, \([\text{GO}]_{\text{PTCP}} + \text{to} \) INF > \([\text{going to}]_{\text{FUT}} + \text{VERB}\)\(^{11}\). Going to is found marking the future first in Middle English [ME] (ca. 1100–1500 C.E.) and Early Modern English [EME] (ca. 1500 – 1650 C.E.) alongside its original andative meaning (i.e. movement away from the speaker: I am going to town). Beginning in ME as seen in Example (5) and continuing into EME with Example (6), the progressive formation \([\text{BE}]_{\text{AUX}} [\text{GO}]_{\text{PTCP}}\) is observed sporadically

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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 PDE even this differentiation is in the process of being lost. However, certain aspects of the progressive are still preserved in PDE, such as the past progressive in he was going to do it.

\(^{11}\) For alternative developments in non-standard varieties of English, such as African American Vernacular English and English Creoles, see Poplack and Tagliamonte (2000)
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 (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 (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 (Perez 1990)

It may be observed through the examination of this English example that the extension of the usage of *going to* is instructive for the study of this type of language change. The diachronic variation in the usage verifies the evolutionary directionality of the change. Also, the language-internal motivation and expansion contexts may be observed at each step in the process of change. Further, cross-linguistic evidence provides external data for analogous changes and directionality where verbs of motion
16

(COME, GO, etc.) are grammaticalized to markers of the future (Heine and Kuteva 2004).

1.3 Issues in Grammaticalization Theory

In this section, we aim to outline the main trends within grammaticalization theory and the proposed contexts, factors, and results of the linguistic change. Two paradigms, in particular, will be reviewed in the following sections: Heine's fourfold division (§1.3.1) and Lehmann's six parameters (§1.3.2). The discussion of these will be followed by a constructive theoretical framework for the investigation of grammaticalization in the present work (§1.3.3).

1.3.1 Evolitional Continuum & 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" (p. 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 gramm 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 by Heine and Reh (1984, 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 (pp. 46-62).

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

No absolute relations between the former processes were 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 later formulations of Heine (2004) with reference as needed to the former study (Heine and Reh 1984) for language specific illustrations or correlations of the properties.

1.3.1.1 Desemanticization

Heine is not alone in including the loss of lexical meaning (also variously called desemanticization\footnote{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 later work in favor of "loss in meaning content" (2004, 579).} or semantic bleaching) as a mechanism contained within grammaticalization. Rubin (2005, 2) offers this "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."

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 in other types of language change. One such example is found with compounds like cobweb (< ME 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 constituent parts which have been desemanticized as independent semantic units, such as cob 'spider' which has been lost in PDE.

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 the motion or the impending action. The observed ambiguity is a result of the fact that the source notion is not lost.
(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.

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, a subsequent change in the original source or the resultant function need not be directly caused by the change to an innovative grammatical function.

1.3.1.2 Functional Extension

Heine 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" (2004, 600 n. 8). As such, it appears to be identical to the process designated as "expansion" in Heine and Reh (1984, 39-41) as a required form of secondary grammaticalization. That is, an item or a construction once grammaticalized needs
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).\textsuperscript{13} This mechanism, however, should not be confused with contextual extension—or spread to similar contexts—but results in functional multiplicity of the linguistic item.

Although the secondary type of grammaticalization may, and frequently does, occur with previously grammaticalized lexical items, it is not the case that it operates either necessarily or exclusively therewith. For example, the English FUTURE will undergoes further grammaticalization to the marker of epistemic modality (9) as does going to/gonna (10), but the auxiliary shall (11) does not.

\textsuperscript{13} An analogous process has been proposed as occurring in several dialects of Aramaic (Rubin 2005, 94-110).
(9) That will be Susie. (on hearing the doorbell)\textsuperscript{14}

(10) That's going to be Susie.

(11) **That shall be Susie.

Not only is secondary grammaticalization not obligatory, it also functions in situations without previous grammaticalization. From 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 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.

\textsuperscript{14} This and other cross-linguistic examples of the change FUTURE $>$ EPISTEMIC MODALITY may be found in Heine and Kuteva (2004, 142-143).
(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

Heine's category of functional extension, like desemanticization (§1.3.1.1),
cannot be seen as a mechanism unique to or requisite of grammaticalization and therefore may not be considered a primary criterion.

1.3.1.3 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 requisite in or unique to grammaticalization; hence, it is difficult to construe a change like cliticization as an integral property of the grammaticalization.

Unlike the previous mechanisms, however, 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. Such variability changes may be accountable as a result of other conditions, because they 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. 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, such as [COME]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 [COME]PTCP to + INF in Example (14c) did not result in an expression of the future.

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

Subsequent to the grammaticalization of the progressive, the form could be used in new contexts (e.g. I'm going to go/come) where the previous construction would not have been well-formed. Thus, the original morphosyntactic properties of the source
are, in a sense, frozen or made a chunk. Later these grammaticalized forms are expanded to contexts where otherwise it would have not previously functioned.

1.3.1.4 Erosion

According to Heine (2004, 579), three of these four mechanisms presume the diminishing of linguistic properties: desemanticization is decrease in meaning, decategorialization is morphosyntactic loss, and erosion is phonological reduction. The only property increase is that of functional extension. Often in grammaticalization studies, the concept of erosion is addressed in the context of boundness, that is, reduction of phonology occurs with the decrease of the independent status of a morpheme that can be tracked along a universal cline.

The term *cline*, first used by Julian Huxley as "a gradation in measurable characters" (1938), was meant to be a synonym of gradient with special application to incremental changes in a property through time.¹⁵ Adapted from this taxonomic

¹⁵ A restriction of Huxley's definition to "continuous smooth clines" is suggested in Langlet (1971, 278).
terminology of evolutionary biology into linguistics, Halliday rightly designated it as a "relation along a single dimension" (1961, 249). However, as with many co-opted terms, the meaning was 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" (morphology). Thus the cline of boundness, dubbed a "cline of grammaticality" (pg. 7), was circumscribed as:

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 is equivalent to grammaticality and lesser boundness corresponds to lexical meaning. Two conspicuous difficulties are readily apparent within this position: 1) a grammatical word is not necessarily more bounded than a content item and yet it is placed to the right (i.e. the more bounded extreme) on the
cline, and 2) 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.

These two problems may be illustrated by the diachronic changes in the English
verb *will*. First, Wischer (2006, 173-174) notes that the morphosyntactic features of
the lexical verb *willan* and future auxiliary are nearly identical, that is, one cannot
distinguish one morpheme in early usage from the other form based on boundness
alone but must employ semantic distinctions for the differentiation. In other words,
the grammaticalization, VOLITION > FUTURE, occurred without an increase in the
boundness of the grammatical word; thus, grammaticality changed without a shift in
boundness. 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", these grammatical words lost their primary stress resulting
in the cliticized form \textit{we'll}, possibly on analogy to \textit{we'd} (< \textit{we would/should}).\textsuperscript{16} 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. Thus, boundness increased whereas grammatical function remained constant. In terms of the derivative value ($\delta f/\delta x$), relating the ratio of change as the difference in boundness through time: the former example would be zero (no change in boundness with change in time) and the latter is undefined (change in boundness with no change in time), which does not generate a meaningful gradient, mathematical or linguistic.

The characteristics of erosion and boundness, then, 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 word resulting in phonological erosion, and boundness may increase separately from grammaticalization.

\textsuperscript{16} Explicitly the analogy would be \textit{we would} : \textit{we'd} :: \textit{we will} : \textit{X} = \textit{we'll}.
1.3.1.5 The "Overlap Model"

Heine's "Overlap Model" (pg. 579) characterizes the general progression by which a linguistic expression develops into a fully formed grammatical function. The change of grammaticalization is expressed in a three stage model of transformation described as:

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

This idea may be further explained with reference to Figure 1-A. Usage A is found in a context where grammatical function B may be inferred, leading to ambiguity between the forms (Stage II). Oftentimes, the original expression A is lost so that function B remains the only productive one (Stage III). Heine notes, however, that not every instance of grammaticalization continues through to the final stage.
This model is not too unlike the concept of layering advanced by Hopper (1991), Bybee, Perkins, and Pagliuca (1994), and others. This change of $A > B$ 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 1 with Grammar 2. Thus, layering is the property of language in which both grammatical forms are possible, that is, the middle stage of $A > [A, B] > B$. From a synchronic point-of-view this step in which two homophonomous forms coexist, $[A, B]$, may be categorized as a type of polysemy.

1.3.2 Six Parameters

Creating a grid of parameters for grammaticalization, Lehmann lays out the properties of three rows consisting of the characteristics of weight, cohesion, and variability with two columns—paradigmatic and syntagmatic. 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. Thus, grammaticalization is understood as the increase in cohesion and the decrease of weight and variability. The paradigmatic and syntagmatic aspects are related to "the selection and combination of linguistic signs," yielding six parameters—integrity, structural scope, paradigmaticity, boundedness, paradigmatic variability, and syntagmatic variability—as found in Figure 1-B (Lehmann 1995, 123).

Figure 1-B: Parameters of Grammaticalization

<table>
<thead>
<tr>
<th></th>
<th>Paradigmatic</th>
<th>Syntagmatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>integrity</td>
<td>structural scope</td>
</tr>
<tr>
<td>Cohesion</td>
<td>paradigmaticity</td>
<td>boundedness</td>
</tr>
<tr>
<td>variability</td>
<td>paradigmatic variability</td>
<td>syntagmatic variability</td>
</tr>
</tbody>
</table>

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

The semantic and phonological weight of a sign, the loss of which would be described as desemanticization (§1.3.1.1) and erosion (§1.3.1.4), 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. 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" (126-127).

1.3.2.2 Structural Scope

The structural scope is the size, structurally speaking, of the construction of which it is a part. Condensation is the property of 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*, etc.—provide an example of this loss in structural scope which results in
cliticization. As has been demonstrated above (§1.3.1.4), however, condensation resulting in boundness is not unique to or required in grammaticalization.

1.3.2.3 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 während, which governs the genitive case analogous to the secondary prepositions, with wegen. The latter has been more paradigmaticized as it has been adopted into the paradigm of the primary prepositions taking the dative case increasingly in speech and certain dialects. Thus, 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 often times yields an innovative form which cannot be relegated to an existing paradigm, for example, the innovation of direct object markers in several Central Semitic languages, or a complete reduction of a
paradigm leading to fossilization. Second, adoption into an existing paradigm is not always evident as in the example of während. Third, the forming of suppletive paradigms is well known in non-grammaticalized situations (e.g. English good, better, best). So it fails as neither a universal nor unique criteria for grammaticalization.

1.3.2.4 Cohesion

The connectiveness of a sign in a syntagm is labeled syntagmatic cohesion and includes cliticization, univerbation, fusion, and adaptation which have either been discussed in a previous section (§1.3.1.4) or may be seen to be properties of broader semantic change (Eckardt 2006). Even so, other changes besides grammaticalization may cause the increase of cohesion. For example, univerbation may occur followed by multiple phonological processes in idiomization, as in the colloquial English greeting sup? (/wɔt iz ʌrp/ > /wɔz ʌrp/ > /wəzʌrp/ > /sʌp/).

1.3.2.5 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 must be used or
another may be substituted therewith. This quality leads punitively to an increase in the frequency of the feature. The variability change which accompanied the grammaticalization of the Latin demonstrative into the French definite article is illustrative. French \textit{le} is obligatory as a determiner on nouns, whereas in Latin the demonstrative \textit{ille} was not so required. Lehmann points out a poignant consideration about obligatoriness which should "keep us from over-emphasizing its importance" (1995, 142). The omnipresence of a grammatical element may lead to its meaninglessness. This happens commonly 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 aptly 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" (2004, xiii).
1.3.2.6 Syntagmatic Variability

Syntagmatic variability, in contrast with paradigmatic variability, describes the degree to which the position of a sign is codified or mutable within the syntagm. The reason for the rigidity of the syntagm may be understood as 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.

1.3.2.7 Parametric Correlation

Lehmann 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" (126-127). 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.
1.3.3 Theoretical Framework for the Present Study

Having evaluated in the previous sections much of what theorists have claimed about the properties and mechanisms of grammaticalization, where does this leave the study of the phenomenon? The answer is that there is room to provide a theoretical foundation 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. This framework may be based on the criticism of the past theories but additionally should be supported by inductive investigations of this type of language change. The present study will attempt, at least in part, to demonstrate that such an understanding of grammaticalization is consistent with the language-internal evidence of this change in BH.

In light of this, it is proposed that grammaticalization may be delimited by a single unique criterion, namely, the acquisition of a grammatical function either by a denotative item or another function word. The diagnostic used to designate this acquisition requires the examination of semantic and functional shifts. Such changes
occur in contexts where ambiguous constructions provide multiple interpretations of a single construction, leading to the layering of polysemous linguistic material and the extension of the innovative function to new contexts. All other mechanisms or parameters suggested above are not unique to grammaticalization and are not required; 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, these should not be invoked as primary criteria for the exposition of grammaticalization but, at most, relegated to secondary status. These secondary results may be a consequence of analogy or contextual extension as the new grammatical function is adopted into the grammatical system. It should further be noted that secondary changes in the variability of the source formation do regularly occur, but they are not exclusive to grammaticalization or part of some multistage grammaticalization "process".
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 grammatical function of marking the future (§1.2). 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 would not be well-formed on a semantic level, such as I'm going to go/come. Subsequent to this grammaticalization, the progressive and the future diverged 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. For instance, the phonological reduction, going to > gonna, may be explained on analogy with that of other complex auxiliaries (want to : wanna :: going to : X = gonna).

Further, a subsequent development may be assessed where the future is expanded to contexts marking epistemic modality.
1.3.3.1 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 (§1.3.3.2) will attempt a concise treatment of these topics as they relate to the present study.

Langacker defined *syntactic reanalysis* for the first time\(^{18}\) as "change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation" (1977, 58). This change 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

\[^{18}\text{The idea of syntactic reanalysis, however, predates Langacker having been discussed in detail as Verschiebung der syntaktischen Gliederung, "shift of syntactic structure" by Hermann Paul (1920, 282-303).}\]
subject of the clause followed by the modifying NP full of wine (15a) or a part of the NP a glass full of wine (15b).\(^\text{19}\)

\begin{align*}
(15) \quad & \text{a. [A glass] [full of wine] is on the floor.} \\
& \text{b. [A glass full] [of wine] is on the floor.}
\end{align*}

Campbell claims that the underlying structure also applies to grammatical categories and relations with the result that 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 \(^\text{20}\).

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

\[^{19}\text{Eckardt (2012) discusses a similar example under the rubric of "semantic reanalysis," contrasting the German phrases Ein Glas voll Weines stand auf dem Tisch and Ein Glas voll Wein muss in die Soße.}\]

\[^{20}\text{Notice the later variation: "Reanalysis changes the underlying structure of syntactic construction..." (emphasis added) (Campbell 2004).}\]
Heine (2004, 592) outlines four general views on the relationship between reanalysis and grammaticalization:

i  Grammaticalization and reanalysis are independent, but coextensive properties—all instances of one are also instances of the other, and vice versa.

ii 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.

iii Grammaticalization and reanalysis are distinct phenomenon, but some instances will overlap with the other.

iv 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 depiction that "grammaticalization does not have any independent status of its own, but rather is derivative of other kinds of language change" (2001, 116). 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 represent one end of this continuum, claiming "both grammaticalization and reanalysis appear to be inseparable twins" (1991, 219), while
Haspelmath holds to the opposite extreme wherein the phenomenological union is negligible but not non-existent. He claims:

[T]he 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 (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

(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, 324-325)

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

At the initial stage with Example (17a), the preposition phrase for me modified the
main verb; however, the pronoun was later reanalyzed as the logical subject of the
infinitive as with Example (17b). This latter stage is exemplified in the ability of the
entire phrase, "for me to slay myself", to be prepositioned as the subject of the clause as
found in Example (18).

Second, grammaticalization is independent of syntactic reanalysis in the case of
the English demonstrative and numeral changing to the definite (e.g. this man > the
man) and indefinite articles (e.g. one man > a man) (Heine, Claudi, and Hünnemeyer
1991, 219). No syntactic rebracketing occurs in such a situation, 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 AUX + \([\text{going to}]_{\text{FUT}} + \text{VERB}\) which arose from the reanalysis and grammaticalization of AUX + \([\text{GO}]_{\text{PTCP}} + \text{to} + \text{INF}\). The categorical shift and rebracketing of the transitive preposition \text{to}\) from being the head of the infinitival phrase in Example (19a) to a part of the future tense marker \text{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 \text{going to}\) is reinterpreted as a complex auxiliary \text{be going to}, diverges from the homophonic \([\text{GO}]_{\text{PTCP}},\) and undergoes reduction to \text{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.
1.3.3.2 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), rather if a grammatical function was to be recognized as the origin of an innovative lexical item, this change should be designated differently.

Indeed, Kuryłowicz (1965, 69) in conjunction with defining grammaticalization did just this by characterizing *lexicalization* as the "reverse" change: grammatical function to lexical item (lexical item > grammatical function). Analogous to grammaticalization, lexicalization is defined by the outcome of the change and not characterized as 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, 112-114), is regrettable in that any attempt to define a word with a privative prefix entails reference necessarily 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 pathways of 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 trajectory 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 punitively developed from grammatical origins.
Another type of change that has, at times, been 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 (Figure 1-C).

Figure 1-C: Expansion

![Diagram of Expansion Grammaticalization](image)

1. $A_1$
2. $A_1 - A_2$
3. $A_2 - A_3$
4. $A_2 - A_3 - A_4$
5. $A_4 - A_5$
6. $A_5 - A_6$

Adapted from Figure 2 in Haspelmath (2004, 33)

However, this expansion need not, of necessity, eliminate previous linguistic layers as in Figure 1-D, where $B_2$ is preserved as a polysemous function even though the form has been expanded to other contexts, $B_3$ and $B_4$, which are eventually lost.\(^{21}\) As

\(^{21}\) See the above discussion (1.3.1.1) on desemanticization concerning the elimination of semantic meaning.
Haspelmath (2004) has keenly noted, retraction is a change by which an older linguistic layer is preserved as (rightward) expansion continues. If certain succeeding layers are lost leaving the earlier preserved usage, then degrammaticalization may appear to have occurred, although it may only be the conservation of an earlier function.

Figure 1-D: Retraction

grammaticalization

1. B₁
2. B₁ – B₂
3. B₁ – B₂ – B₃
4. B₂ – B₃ – B₄
5. B₂ – B₃
6. B₂

t
Adapted from Figure 3 in Haspelmath (2004, 33)

1.4 Studies of Grammaticalization in Semitic

Even though Lehmann (1995, 6) states that Carl Meinhof applied grammaticalization to the Semitic languages in his work on flexional morphology, Die Entstehung flektierender Sprachen (1936), exploration in Semitic grammaticalization was
almost non-existent until about the last two decades of the twentieth century. This section will provide 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 will be handled in the corresponding sections.

One of the earliest case studies in Semitic grammaticalization is Givón's essay "The Evolution of Dependent Clause Morpho-syntax in Biblical Hebrew" found in the widely cited two-volume collection of studies, *Approaches to Grammaticalization*, edited by Traugott and Heine (1991). Givón examined subordinators in BH encompassing primarily the evolution of the REL ʾešer with brief mention of complementizers and quotatives; from these data, Givón extracted several implications for the dialectal and diachronic nature of BH with regard to the changes observed. Focusing on semantic change, Rubba (1994) developed several claims using insights from Cognitive Linguistics (Langacker 1987) in the Neo-Aramaic dialect of Telesqof, Iraq and

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22 Only a single Semitic example from Ethiopian Semitic is included as part of the "preliminary" treatment of African Languages (Heine and Reh 1984, 238).
concerning the transition from body parts to prepositions. Baalbaki (1995) appraised a multiplicity of grammatical changes in Arabic, which he designated 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 the Maltese and six Arabic varieties spoken in Yemen and Oman, Simeone-Senelle and Vanhove (1997) detailed the emergence of verbal auxiliaries, following Cohen's (1984) earlier work on the evolution of the Semitic verbal system. Kouwenberg (1997, 2005) presented a theory of the origin of the Akkadian D-stem appealing to the process of iconicity and subsequent grammaticalization, which he again invoked nearly a decade later when studying the Gt-stem (2005) and the Semitic background of the Akkadian verbal system (2010). Also, Contini (1997) examined 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 referenced the historical process in an
attempt to differentiate the origins of the Central Semitic definite article, and independently, Voigt (1998) presented 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 -āʾīṯ) should not be derived from existential *ʾīṯ," Gensler (2000) used 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) discussed the quotative, which was 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 were offered by Dobbs-Allsopp (2000), Cook (2002, 2004, 2006), Eskhult (2008), Anstey (2009), and Andrason (2010b); 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), and the Akkadian verbal form *iprus* (Andrason 2010a) invoke grammaticalization albeit, at times, only nominally. Several studies on individual Semitic free and bound morphemes were produced in the last five years including the definite article (Rubin 2005, 65-90, Pat-El 2009a), object markers (Rubin 2005, 91-128), tense markers (Rubin 2005, 129-152), particles (Anstey 2006), subordinators (Pat-El 2008), and prepositions (Esseesey 2010). Heuhnergard (2006) also detailed the etymological correlation of the Hebrew relatives šər and še- (*pace* Holmstedt (2006)), first studied by Givón (1991).
1.5 Place of the Current Study

In view of the extensive work already conducted on grammaticalization, one may query what, if anything, can another study offer to the fields of linguistics, Semitic philology, or Hebrew studies. This study aims to be the first to analyze in a comprehensive way the prepositional grammatical morphemes in BH, providing a diachronic evaluation and development of each function with special attention to grammaticalization. Previous work has either lacked the needed theoretical framework or applied the phenomenon in too limited a sampling or scope to provide a thorough account of the origin and expansion of BH prepositions. This study contributes original research on many grammatical morphemes which have yet to be studied and a reevaluation of previous work from the perspective of grammaticalization theory. The result is a fuller understanding of the usage of each preposition not merely as unrelated relations but diachronically related functions. This leads to a descriptive understanding of the polysemy of prepositions and the particular philological options for particular usages and an explanation of the presence of ambiguity in many examples.
Important contributions to the fields of historical linguistics, diachronic typology, Semitic philology, and Hebrew grammar will be sought in the application of grammaticalization to BH prepositions. With regard to historical linguistics, the present work provides a study of nearly all of the identifiable changes recognized as grammaticalization in a well-attested and well-defined subset of a language. Such an investigation stands in contrast with many linguistic studies which only provide a small number of examples from a single language to illustrate the supposed variation. Thus, this study provides additional materials to support the empirical claims of grammaticalization theorists and diachronic typologists. In contrast to some early attempts in Semitic grammar that relied exclusively on comparative phonology and morphology, the present study seeks to augment these approaches with considerations of grammaticalization theory and typology. Additionally, the present study proposes incremental developments through detailed analysis of materials from different linguistic strata. Regarding Hebrew grammar, this program produces a comprehensive investigation of variation found in BH prepositions and proposes a diachronic
understand of the change which leads to this dissimilarity. Almost none of these morphemes have been studied previously through the paradigm of grammaticalization. The large majority are detailed here for the first time, so these provide fertile ground for a reevaluation of past philological assumptions about the origin and development of the prepositional system in BH.

1.6 Methodology of the Study

In order to evaluate the grammaticalization of BH 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 complex prepositions. Second, the various functions of each lexeme are analyzed and outlined. Third, the grammaticalization pathways linking the original denotative meaning to various usage patterns are investigated where ascertainable.

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

First, the comparative method allows for the examination of philological data from languages related to BH. From this methodology one may establish plausible reconstructions of the Hebrew and Semitic protolanguages as well as potential influences by language contact and later developments in dialects of Hebrew.

Second, cross-linguistic comparison, in particular diachronic typology, provides a form of uniformitarian control. This approach is useful both positively to identify prospective changes and negatively to restrict speculative developments.

Third, the investigation of overlapping meanings, discussed previously as a core component of this study and the so-called Overlap Model (§1.3.1.5), is one of the principle language-internal means of determining the environments and pathways of changing 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 grammatical construction as another (Traugott and
Trousdale 2010). Like the comparative method, however, this approach is restricted to providing only positive evidence for functional changes. That is to say, the lack of attested contexts of functional extension does not preclude 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—may provide usage pattern variation which can be used to detect potential changes 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.

The following chapter will provide an overview of BH prepositions and provide a study of a subset of the simple prepositions. In particular, the source constructions, the functional usages, and the potential innovations accountable to grammaticalization are examined. Chapter Three, then, will provide a similar accounting of the changes attested with BH complex prepositions. Finally, Chapter Four presents a summary and
an explication of the implications for the current study in assessing the philological and
linguistic research on BH prepositions in light of grammaticalization theory.
CHAPTER TWO

2 Introduction to Simple Prepositions

Simple prepositions provide arguably the most straightforward examples in Biblical Hebrew of diachronic language change as a result of grammaticalization. In this chapter, the morphology of prepositions in Semitic is overviewed (§2.1), a classification framework for Hebrew prepositions is presented (§2.2), and the detectable paths of grammaticalization are detailed for simple prepositions based on internal and external linguistic evidence (§2.3). Hebrew prepositions of the complex type are discussed in Chapter Three.

2.1 Overview of Semitic Prepositions

The morphology of BH words, as with all Semitic languages, principally consists of a tri-consonantal root, a base (the combination of vocalic and consonantal lengthening patterns), and affixes. Moreover, three word classes have been
distinguished from the earliest Semitic grammarians. These groups include substantives (nouns, pronouns, and adjectives), verbs, and everything else.

Traditionally, prepositions along with adverbs and the other function words are assigned to this third category. The properties of syntactic function and relational status—standing before certain constituents and signaling a relationship between a referent, or trajector (TR), and the prepositional complement, or landmark (LM)—circumscribe the category of prepositions (Waltke and O'Connor 1990, §11). Examples of the semantic relationships include notions of place, time, goal, and interest.

Semitic prepositions are classified conventionally as either primary or secondary (Bauer and Leander 1922, 634-647, Brockelmann 1908, 494-499). The former are, for the most part, mono- or bi-radical morphemes; the latter are tri-consonantal and derivational, usually with a demonstrable etymology. Primary prepositions are found in all Semitic languages. They may be prefixed to the following word as "inseparable prepositions" (e.g. Ethiopic 'em- 'from', Aramaic l- 'toward', Arabic bi- 'in') or as
independent morphemes, that is, "separable prepositions" (e.g. Akkadian ana 'to', OSA bn 'from', Phoenician 'd 'until').

Secondary prepositions, on the other hand, are almost always free morphological units in the Semitic languages and may be related etymologically to nouns (e.g. Ugaritic āhru 'after'; Syriac ṭḥet 'under'; Mehri ḡanōhan 'before'). Brockelmann states that this latter type originates from "Subst. im Akk. adv." (1908, 494). Similarly, the nineteenth-century etymological understanding that "Sämtliche Wörter, welche im Sprachgebrauche als Präpositionen erscheinen, sind urspr. Substantiva" (Gesenius and Kautzsch 1896, §101) is an oft-repeated refrain even in more recent BH grammars (Bauer and Leander 1922, §81, Joüon 1923, §103, Waltke and O'Connor 1990, §11.1.1, Blau 2010, §5.1). To this notion that prepositions come from original accusative-case substantives, it should be added that they develop from morphologically construct state, or bound, forms and govern the genitive case.¹ This supposition is substantiated

¹ In Arabic grammar, these function words are referred to as ḥurūfu l-jarri, that is, "particles which govern the genitive case" (Wright 1896, §355).
in several Semitic languages, most notably Arabic where, for example, the preposition

\( \text{ba'\textbar da} \) 'after' is distinguishable from the adverb \( \text{ba'dan} \) 'afterwards'.\(^2\) Both words derive from a \( q\text{atl} \)-type noun with the accusative suffix \(-a(n)\). The latter, however, is the absolute form, whereas the former is the construct form (Voigt 1999, 22).

### 2.2 Classification of Hebrew Prepositions

Two additional groups of Semitic prepositions, however, do not fit precisely within this schema—those made up of tri-consonantal structures with unknown roots (e.g. Arabic \( \text{ladun} \) 'at') and complex prepositions (e.g. Ugaritic \( \text{btk} \) 'in the midst of', \( \text{lpn} \) 'in front of'). Reassessing the traditional categories, Voigt (1999) developed a four-part classification schema of Arabic prepositions which is adopted here as a threefold structure for Hebrew prepositions.\(^3\)

---

\(^2\) See, also, Arabic \( \text{ma\textbar a} \) 'with' as a preposition compared with the adverb \( \text{ma\textbar an} \) 'together'.

\(^3\) Voigt's category II is not applicable in Hebrew as there appear to be no examples of "teilweiser Monemisierbarkeit" (1999, 28).
In the first category, prepositions without a detectable root are categorized. This group (I) contains all mono- and bi-consonantal examples. Some have asserted that an underlying tri-radical, third-weak root provides the morphological origin of some of these prepositions (Gesenius, Kautzsch, and Cowley 1910, §103n, Driver 1937, Blau 2010, §5.1.4). For example, Hebrew וּל ‘al 'upon', דַע ‘ad 'until', and לֵל ’el 'toward' are explained as tri-radical as seen in the long forms, וּלֵי, דַעֵי, and לֵלֵי. These are found primarily as vestigial independent forms in Hebrew poetic texts and with pronominal suffixes. Based on the comparative data (e.g. Sabaic ḫy 'on, upon', Akkadian adi 'until', and Arabic ʾilā/ʾilay- 'to'), however, it is more parsimonious to reconstruct the frozen Proto-Semitic *-ay gentilic morpheme to account for the witnessed variation (Kienast 2001, 175). Otherwise, one needs to resort to positing parallel ad hoc phonological reductions to explain the short forms in different languages (e.g. Ge‘ez la’la 'on, above', Syriac al 'above, upon'). Thus, the present study categorizes these prepositions along with other lexemes with obscured roots.

4 One possible solution understands the Hebrew forms as remnants of original
The second category (II), which corresponds to Voigt's third grouping, is comprised of those prepositions with an etymologically analyzable root. Lastly, the polymorphic prepositions of various types are grouped in Category III. Each of these is exemplified in Table 2-1. The first two groupings are comprehensively listed, but the third is only illustrative of the various types of compound and complex prepositions found in BH. This last category will be discussed further in Chapter Three.

biforms (*‘al/*‘alay, *‘ad/*‘aday, *‘il/*‘ilay), while either the short (e.g. Aramaic ‘d ‘to, unto’) or long (e.g. Arabic ‘alā ‘upon’) forms were generalized in most of the daughter languages. Alternatively, the short forms may have been a Northwest Semitic innovation, likely on analogy to the plural construct/pronominal suffix on nouns (e.g. dīḥr : dōḥr :: *‘le : X = ‘al, and also, dḥoreka : dḥor :: *‘leka : X = *‘el), while the long forms (Hebrew ‘qel, ‘qḕde, and *‘le) and pronominal forms (Hebrew ‘qelekā, ‘qelkā, and *‘elekā) were original. The Ge‘ez forms, such as la‘la and la‘leka, may tip the balance in favor of positing Proto-Semitic biforms, but they too could have developed independently through a process of internal leveling via analogy.
Table 2-1: Classification of Hebrew Prepositions

<table>
<thead>
<tr>
<th>Category</th>
<th>Structure</th>
<th>Base</th>
<th>Root</th>
</tr>
</thead>
<tbody>
<tr>
<td>I: 1. ב b ‘in, on’</td>
<td>*bV-</td>
<td>*qV</td>
<td>–</td>
</tr>
<tr>
<td>2. כ k ‘as, like’</td>
<td>*kV-</td>
<td>*qV</td>
<td>–</td>
</tr>
<tr>
<td>3. ל l ‘at, to, for’</td>
<td>*lV-</td>
<td>*qV</td>
<td>–</td>
</tr>
<tr>
<td>4. אל el ‘toward’</td>
<td>*il(ay)⁵</td>
<td>*qil(ay)</td>
<td>–</td>
</tr>
<tr>
<td>5. את ʾ et ‘with’</td>
<td>*ʾitt</td>
<td>*qill</td>
<td>–</td>
</tr>
<tr>
<td>6. בל bli ‘without’</td>
<td>*bVliyy</td>
<td>*qVliyy</td>
<td>–</td>
</tr>
<tr>
<td>7. מול mul ‘before’</td>
<td>*mūl</td>
<td>*qūl</td>
<td>–⁶</td>
</tr>
<tr>
<td>8. מ min ‘from’</td>
<td>*min(n)</td>
<td>*qil(l)</td>
<td>–</td>
</tr>
<tr>
<td>9. עד ‘ad ‘until’</td>
<td>*ʿad(ay)</td>
<td>*qal(ay)</td>
<td>–</td>
</tr>
<tr>
<td>10. על al ‘upon’</td>
<td>*ʿal(ay)</td>
<td>*qal(ay)</td>
<td>–</td>
</tr>
<tr>
<td>11. עם ʾ imm ‘with’</td>
<td>*ʿimm</td>
<td>*qill</td>
<td>–</td>
</tr>
<tr>
<td>12. ל bilti ‘except’</td>
<td>*biltiyy</td>
<td>*qiltiyy</td>
<td>–</td>
</tr>
<tr>
<td>13. ל zulṭi ‘except’</td>
<td>*zūlatiyy</td>
<td>*qūlatiyy</td>
<td>–</td>
</tr>
<tr>
<td>14. טר טרומ terem ‘before’⁷</td>
<td>*ṭarm</td>
<td>*qatl</td>
<td>–</td>
</tr>
<tr>
<td>II: 1. אḥ ה aḥar ‘before’</td>
<td>*ʿaḥḥar</td>
<td>*qattal</td>
<td>√ḤR</td>
</tr>
<tr>
<td>2. אṭḥאḥreh aḥ’re ‘before’</td>
<td>*ʿaḥḥaray</td>
<td>*qattalay</td>
<td>√ḤR</td>
</tr>
<tr>
<td>3. א ṣiṣel ‘beside’</td>
<td>*ʾisḥl</td>
<td>*qitl</td>
<td>√ṢL</td>
</tr>
<tr>
<td>4. ב bayin ‘between’</td>
<td>*bayn</td>
<td>*qatl</td>
<td>√BYN</td>
</tr>
</tbody>
</table>

⁵ See above for an exposition of the origin of the long forms of *le, *de, and ʾle.

⁶ Any connection to the Hebrew root *MWL relating to 'circumcision' is unlikely. Conversely, some have proposed a connection with ʾWL ‘strong; front’ (Olshausen 1861, §223c); however, this suggestion too is unsubstantiated.

⁷ Biform: טר טרומ terem ‘before’.
Table 2-1: Classification of Hebrew Prepositions (cont.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Structure</th>
<th>Base</th>
<th>Root</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. בַּעַד</td>
<td>*baʿd</td>
<td>*qatl</td>
<td>√BʿD⁸</td>
</tr>
<tr>
<td>6. הֶלֶּפֶת</td>
<td>*ḥilp</td>
<td>*qitl</td>
<td>√HLP</td>
</tr>
<tr>
<td>7. יָאָן</td>
<td>*yaʿn[iy]</td>
<td>*yaqtil</td>
<td>√NY</td>
</tr>
<tr>
<td>8. נֶגֶד</td>
<td>*nigd</td>
<td>*qitl</td>
<td>√NGD</td>
</tr>
<tr>
<td>9. נָקוּח</td>
<td>*nukḥ</td>
<td>*qutl</td>
<td>√NKḤ</td>
</tr>
<tr>
<td>10. סְבִיב</td>
<td>*sabīb</td>
<td>*qalil</td>
<td>√SBB</td>
</tr>
<tr>
<td>11. 'iqb</td>
<td>*qitl</td>
<td>√QB</td>
<td></td>
</tr>
<tr>
<td>12. התַּחַת</td>
<td>*taḥt(ay)</td>
<td>*qatl(ay)</td>
<td>√THT</td>
</tr>
</tbody>
</table>

III: 1. מֵאֵת  | *min+ʾit(t) | PREP + PREP |
| 2. מֵעַל  | *min+ʿal+IV- | PREP + PREP + PREP |
| 3. בִּגְלַל  | *bV+galal- | PREP + NP |
| 4. מִלְמַט ה  | *min+IV+maṭṭ+at | PREP + PREP + NP |
| 5. מִבְּיִתָּל  | *min+bayt+IV- | PREP + NP + PREP |
| 6. אֶלָּׁמִחוּץ  | *ʾil+min+ḥūṣ+IV- | PREP + PREP + NP + PREP |

2.3 Grammaticalization of Category II Prepositions

The following subsections will discuss the examples of the Category II prepositions. In each section, the morphology, synchronic usage patterns, and

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⁸ The corresponding verb, however unwitnessed in Biblical Hebrew, is well-known in Semitic (2.3.5.1).

⁹ The biform *nîkḥ is included herewith.
grammaticalization pathway(s) will be examined. The morphology of the lexeme will be reviewed first, followed by the various grammatical contexts in which the form is found. The changes will be outlined with particular attention to the contexts wherein the grammatical functions are acquired and extended. Last, a mapping of the proposed grammaticalization changes will be summarized.

2.3.1 אַחַר ʾaḥar

As with a number of the Category I prepositions, ʾaḥar and ʾaḥʾre derive from original short and long biforms (*ʾaḥḥar and *ʾaḥḥaray)\(^\text{10}\). In BH, however, these two forms have diverged with regard to their morphology and semantics. As such, a joint analysis would privilege the diachronic similarity over clear synchronic differences. Thus, this section will discuss ʾaḥar, while the analysis of ʾaḥʾre is undertaken in Section 2.3.2 below. The relationship between these prepositions is examined at the end of the following section (§2.3.2.5).

\(^{10}\) The biforms—ʾal/ʾoʾle, ʾad/ʾoʾde, and ʾel/ʾoʾle—have been discussed previously.
2.3.1.1 Morphology of ʾaḥar

A frozen construct form of the PS base *qattal (Hebrew qattal) from the root ʾHER accounts for the vocalic pattern and invariability of the morpheme (Fox 2003, 253-261, Bauer and Leander 1922, 479). Other invariable, construct-state forms are detectable among the BH prepositions, including בְּדֵי bde 'as much as', בִּגְלַל biglal 'because of (§3.2.1), and מִפְּנֵי mippne 'because of (§3.2.15). Driver (1937, 346) assigns this form along with תַּחַת taḥat 'below' (§2.3.12) to the *qatl noun category with, for example, paʿam 'step'. This pattern, however, fails to explain the accentual difference between these forms—ʾaḥar has word-final accent, whereas taḥat/paʿam is word-initial.

The expected, but unattested, absolute state of *ʾaḥhar would have been realized as ʾehor on the pattern of other similar forms, most notably ʾehd 'one' (< *ʾahḥad) and ʾehow 'his brothers' (< *ʾahḥayhū). A distinctive suffixed form of

11 This sound change (*a >  ε / _CCɔ) occurs where C is an originally doubled voiceless fricative of the h/h/h series (IPA [h], [h], [x]): בֵּה ל ה bahalat 'horror' (< *bahhalat), ʾehat 'one (F.)' (< *ʾahat), and peḥo 'governor' (< *pahṭ).
'aḥar is not known; however, 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 'aḥre which witnesses suffixes.

2.3.1.2 Usage of 'aḥar

Of the 93 examples of 'aḥar in BH, seven usage patterns—two denotative and five grammatical—are differentiated: Noun, Locative Adverb, LOCATIVE (BEHIND), TEMPORAL/ADVERBIALIZER (AFTER), ACCORDANTIVE (ACCORDING TO), and CONJUNCTIVE ADVERB (THEN).12

2.3.1.2.1 Noun (‘back’)

As with many prepositions (e.g. English beside, behind, in front of), 'aḥar appears to have its origin in an anatomic noun designating 'backside'. Etymological speculation about the exact referent of this erstwhile substantive extends from Joüon and Muraoka

Elsewhere, it is productive with derivable morphological forms—such as the definite article, הֶחֶרֶב hemerab ’the dry ground’ ( < *hahḫarrabat), and certain verbal forms, יִתְנֶחַם yitnēḥam ’he is grieved’ ( < *yitnahham).

12 Three additional examples are found as part of the compound preposition מֵאַחַר me’ahar ’from after’ (SOURCE + LOC).

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'the back' (1991, §103) to G.R. Driver 'buttocks' (1933, 378, 1937, 346) and Gesenius 'hinder part' (1910, §101). In BH, only a single usage of ʾaḥar 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 'back' for the original lexeme.

(20) וַיֶּהָּמַלְנוֹן יָּשֶׁרְשׁוֹן אַחַר הָמִיתְבּוֹרִים
wayyinhaḥ ʾet-haṣson ʾaḥar hammiḏbōr
lead-WCPC.3M.SG. DOM + the.flock west.of the.wilderness
[Moses] led the flock to the west of the wilderness. Exodus 3:1

2.3.1.2.2 Locative Adverb ('behind')

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

In the first case (21), the phrase אַיִל ʾaḥar '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, ʾaḥar was understood as the number adjective חֹד ʾehoḏ 'one' hence 'a ram was caught by its horns' as found in the LXX, Targums, and Peshitta.
A ram behind [him] was caught by its horns in the thicket. Genesis 22:13

The Book of Proverbs provides the second instance of a possible adverbial reading of ʾaḥar as in Example (22). The versions, though, opt for various non-adverbial renderings of this usage. For instance, the Septuagint translates πορεύου κατάπισθέν μου, apparently reading, יָצָא ʾaḥray 'follow after me', interpreting the preceding word as a verb and adding a suffix to ʾaḥar. The Targum, on the other hand, translates ובתר כְּבַיִיתך, understanding it as a clause-coordinator akin to אַחַר ʾaḥar 'afterwards' (see further 2.3.1.2.6).
(22)  הָכֹן בַּחֹזֶהּ לָכָּם וְטַחֲתֶהָ בְּשֵׁמֶיהָ לְאֹהֶר בֹּנֵי בֵיתָּם
hōken bahūs mlaḵtēḵō
prepare-IMV.M.SG. outside work-F. + your
wʿattḏōh baššōḏē lōḵ
CJ + prepare-IMP.M.SG. + her IN + the.field FOR + you
ʾaḥar ʿubənît̄o betēḵō
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. Proverbs 24:27

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

2.3.1.2.3 PREP (BEHIND)

Seventeen instances of the preposition ʾaḥar may be grouped together as
marking the spatial relation behind a participant. 13 Svorou (1994, 144-147)
categorizes this notion as BACK-REGION. Example (23) is illustrative of this function

13 Genesis 37:17; Exodus 11:5; Ruth 2:2; 1 Samuel 11:7; 12:14; 2 Kings 11:6;
13:2; 23:3; 25:5; Job 31:7; 39:8; Song of Solomon 2:9; Ecclesiastes 12:2; Isaiah 57:8;
65:2; 66:17; Ezekiel 13:3.
in BH. Having been told that his brothers were going to Dothan, Joseph travelled to
that location designated as 'אַחַר אֶחִי behind his brothers' to find them.

The most frequently attested prepositional function of 'אַחַר consists of thirty
examples. It is used to denote a temporal participant which took place prior to the
perspective of the events of the clause. This temporal modifier may precede a NP (24),
an infinitive (25), a demonstrative (26), or a relative (27).

14 Genesis 9:28, 10:1, 10:32, 11:10, 15:1, 22:1, 39:7, 40:1; Exodus 18:2; Leviticus
25:15, 27:18; Numbers 6:19; 1 Kings 13:33, 17:17, 19:11, 19:12 (2x), 21:1; 1
Chronicles 2:24; 2 Chronicles 32:9; Ezra 7:1; Nehemiah 13:19; Esther 2:1, 3:1; Job
21:3, 42:7; Proverbs 20:25; Jeremiah 40:1; Ezekiel 40:1; Amos 7:1.
(24) Sons were born to them after the flood. Genesis 10:1

wayyiwwa'dlu īhēm bōnim ʾāhar hammabbul
be-born-W CPC-3M.PL. TO + them sons-M. AFTER the.flood
Sons were born to them after the flood.

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

wnnatan ʾal-kappe hannahzir
give-W CSC-3M.SG. INTO + hands.of the.Nazirite
ʾāhar hitgallḥo ʾet-nizro
AFTER shave-INF.CSTR. + him DOM + hair + his

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

ʾāhar ze šolah sanḥerib meleḵ-aššur
AFTER this send-SC.3M.SG. PN king.of + PN
ʾəḇdōw yrušlaymō
servants + his Jerusalem

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

ʾāhar ʾašer hukktō haʾir ...
AFTER REL be.struck-SC.3F.SG the.city
hoytō ʾalay yad-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.
There are two cases of 'ahar functioning as an adverbializer—a subclass of subordinators, or subordinating conjunctions, which marks an intra-clausal, adverbial relation. In both Example (28) and Example (29), the clause governed by the adverbializer follows the main clause it modifies. Also, each embedded clause is temporally prior to the mainline events akin semantically to the temporal function outlined above for the preposition phrases headed by 'ahar.

(28) wʾim-yošuḥ hannieɡaʾ uporaḥ babbayiṭ
CJ + IF + return-PC.3M.SG. the.plague infest-WCSC.3M.SG. IN + the.house 'ahar ḥilles ᵌ ʾet-hɔbaṇim
ADVZ remove-SC.3M.SG. DOM + the.stones wʾahʾre hiqṣot ᵌ ʾet-habbayiṭ wʾahʾre hiṭṭoḥ
CJ + TEMP scraping-INF. DOM + the.house CJ + TEMP 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. Leviticus 14:43

(29) hešiḥ meʾeṭ yišmoʾel ben-ntanyo min-hammispo
bring.back-SC.3M.SG FROM PN son.of + PN from + Mizpah 'ahar hikko ᵌ ʾet-gdalyo ben-Šhiqom
ADVZ 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. Jeremiah 41:16
2.3.1.2.5 PREP (ACCORDANTIVE)

A third function of 'aḥar is found in two instances and conveys the relational idea of 'in accordance with' or 'according to', here labeled as ACCORDANTIVE. In Example (30), the preposition governs a NP denoting the accordant value of the acquired merchandise. The parallel lines of Example (31) in the seventy-third Psalm demonstrate the semantic parallelism between, on the one hand, the verbs, תַּנְחֵנִי 'you lead me' and תִּקְחֵנִי 'you take me', and, on the other hand, the modifying phrases, בַּעֲצָה תֶּנֶק 'with your counsel' and אַחַר בֶּנוֹד 'according to glory'.

(30) נַחֲנוֹתָם בִּלְחַם וַיֵּקְחוּ מָהֶם בָּלֶחֶם וַיִּאֶין לִין אַחְרָּכְסֶף שְׁק לִימוֹ אַרְבּ עִים
wayyiqhu mehem blehem yayin
take-WCPC-3M.PL. FROM + them IN + bread CJ + wine
'aḥar kəboḏ
ACCRD silver + shekels forty
[The governors] took bread and wine from them in the amount of forty silver shekels. Nehemiah 5:15
With your counsel you guide me,
and in accordance with [your] glory you lead me.  Psalm 73:24

Example (32) from the book of Ben Sira indicates that this function continues to be used in later stages of Hebrew.

He shall bend the law according to his desire.  Ben Sira 32:17 (Ms. B)

2.3.1.2.6 CONJUNCTIVE ADVERB (THEN)

The largest number of usages of ʾaḥar in BH functions temporally as a conjunctive adverb. Each of the thirty-seven instances heads a clause, and all but seven are preceded by an initial 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.\textsuperscript{15} This usage is found as a type of instructive speech act in narrative direct speech (33)\textsuperscript{16} and casuistic law (34).\textsuperscript{17} Slightly less frequent, the conjunctive adverb is also employed with suffix-conjugation clauses to mark the end of a narrative sequence (35).\textsuperscript{18}

(33) יאמר אחיו ואמה눈שם הנער אית נוי מים שורחש להלך
\textit{wayyomer ʾḥihi w’immoh}
\textit{say-WCPC.3M.SG. brother + her CJ + mother + her}
\textit{tešeḥ hannaʾor ittōnu yōmim ʾo ʾōstor}
\textit{remain-PC.3F.SG. the.girl WITH + us days OR ten}
\textit{ʾahar telek}
\textit{THEN go-PC.2M.SG.}

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

\textsuperscript{15} The lone attestation of ʾḥr in inscriptive Hebrew in line 12 of the third letter of the Lachish correspondence functions similarly (Pardee et al. 1982, 81-89).

\textsuperscript{16} Genesis 18:5; 24:55; Numbers 31:2; 32:22; Joshua 2:16; Judges 7:11; 15:7; 19:5; 1 Samuel 10:5; Job 18:2; Psalms 68:26; Hosea 3:5; Zechariah 2:12. A textual problem with Ezekiel 20:39 is obscuring the proper place of this example in this taxonomy.

\textsuperscript{17} Leviticus 14:8, 19, 36; 15:28; 22:7; Numbers 5:26; 6:20; 12:14; 19:7; 31:24; Deuteronomy 21:13. The example found in Proverbs 20:17, though not a casuistic law proper, fits best this category.

\textsuperscript{18} Genesis 10:18; 30:21; 33:7; 38:30; Exodus 5:1; Numbers 12:16; Joshua 24:5; Judges 1:9; 1 Chronicles 2:21; 2 Chronicles 35:14; Job 19:26.
Once she is clean from her hemorrhaging, then she must wait seven days; afterwards she will be clean. Leviticus 15:28

I sent Moses and Aaron and struck the Egyptians ... afterwards I brought you out. Joshua 24:5

2.3.1.3 Grammaticalization of ʼahar

Having categorized the functions of ʼahar in BH, 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 (§1.6), 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).

2.3.1.3.1 Noun ('back') > PREP (BEHIND)

The semantics of original nominal ʾaḥar denote the rear of the body and by metaphorical extension the locality which is at one's back when facing the sunrise (§2.3.1.2.1). Anatomic nouns, used first with animate objects and then with inanimate objects, commonly acquire such 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 ʾaḥre 'back; behind' (§2.3.2), Mishnaic Hebrew Ṿḥore 'back; behind' (Segal 1927, 141), Punic ẓd 'back; behind', Aramaic (l')hwry 'behind', Arabic xalfa 'back; behind' (Esseesy 2010, 153-162), Argobba gunž 'back; behind', Ge’ez kawalā 'hind part; behind' (Leslau 1956, 242-243), and Akkadian kutallu 'back; behind', warkī 'rear; behind' (Brockelmann 1913, 421-424).
The nominal use of ʾaḥar in the construct state likely provided the structural context for the grammaticalization. No case is attested in BH, however, which could provide an explicit context of this change into the locative function.\(^\text{19}\)

2.3.1.3.2 \textbf{PREP (BEHIND) \textgreater\ 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.\(^\text{20}\) Spatial notions commonly grammaticalize to time markers (Haspelmath 1997, 54-63) as a "part of a more extended chain \textit{BACK > BEHIND > AFTER}" (Heine and Kuteva 2004, 52-53, Svorou 1994, 158-159). In addition to several of the \textit{LOCATIVE} examples noted above which also serve as temporal markers (Hebrew ʾaḥ’re 'behind, after', Aramaic \textit{lḥwr} 'behind, after', Amharic \textit{ḥʷala} 'behind, after', Akkadian \textit{kutallu} 'behind, after', \textit{warkî} 'behind, after'), one should note the functional shift from spatial BEHIND to temporal

\(^{19}\) An example of the parallel change with ʾaḥ’re is outlined in section 2.3.2.

\(^{20}\) 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).
AFTER even where the original nominal is not detectable. Examples of this type are observable with Arabic ba‘da ‘after’, Tigre ḥaqo ‘afterwards, after’, gerra ‘behind, after’, and Akkadian dāt ‘behind, after, then’.

Two examples of contexts in the BH corpus where this change could have occurred are evidenced. In both Example (36) and Example (37), the verb BWʾ 'enter' is modified by a preposition phrase headed by ʾaḥar. These modifiers could be construed as spatial designations or temporal settings for the verbal action which combines movement through space and time. Such ambiguities in the function allowing for multiple interpretations provide environments in which new grammatical functions may be acquired and extended.

(36) יָּׁוַיִקַחָּׁרֹמַחָּׁבְּי דוָֹּׁוַי בֹאָּׁאַחַרָּׁאִישׁ־יִשְׂרָּׁאֶל־הַקֻּבּ הָּׁוַיִדְקֹרָּׁאֶת־שְׁנֵיהֶם
wayyiqaḥ take-WCPC.3M.SG. romah spear byardo IN + hand + his
wayyoḥboʾ ʾaḥar ʾiš-yišrē’el ʾel-haqquḇbo enter-WCPC.3M.SG. BEHIND/AFTER man.of + Israel INTO + the.tent
wayyiḏqor ʾeṯ-šnehem 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. Numbers 25:7-8
Ehud thrust the sword into his stomach so that even the hilt went in behind/after the blade. Judges 3:21-22

The adverbializer function of ʿahar appears to be emergent from the temporal preposition since the relational semantics are nearly identical. As such, the syntactic expansion from [ʾahar]prep + NP to [ʾahar]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 ʾahar, but they are commonly attested with several other independent and compound Hebrew prepositions—אֶל ‘el ‘toward’ (e.g. 1 Chronicles 15:12), כְּמוֹ kmo ‘like, as’ (e.g. Isaiah 26:18), מִן min ‘from’ (e.g. Deuteronomy 33:11), עַד ‘ad ‘until’ (e.g. Genesis 38:11), בְּעָל ‘al ‘on account of’ (e.g. Ezra 3:11), בַּעֲבַר bur ‘because of’ (e.g. Micah 2:10), כְּעַל kʿal
'according to' (e.g. Isa 59:18), מִנְנֵגֶד 'before' (e.g. Deuteronomy 32:52), and מִיתַח 'below' (e.g. Isaiah 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 Leviticus 14:46 and 1 Samuel 25:15).

(38) הָּׁתְּחִלָּתְּלַת דְּבַרְרִיהָתְּ הָּׁבְּהוֹשֵּׁת

thillat
dibber-YHWH
beginning.of

bhošeac

speak-SC.3M.SG.+PN
WITH+PN

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

Second, the intra-clausal relation could have developed from the coordination of the preposition and the embedding particle, [ʾaḥar]PREP [ʾašer]REL + S, as in Example (39). The adverbializer, then, would represent a shortening of the [ʾaḥar]ADVZ + S construction.
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. Ezekiel 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, this constituent 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.
Some commentators have further differentiated a comitative function for ʾaḥar, a development not unknown in typological studies (Svorou 1994, 156-157). Following the earlier assertion of Scott (1949), Dahood claims that "in a number of texts ʾaḥar denotes 'with' rather than 'after'" (1962, 363-364). 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, 353-354).

(40) וְשָׁמַעְתִּי אֶחָר הָגִּגֶּשֶׁם
wšɔm ʼahar haggɔšem
CJ+ return-SC.3C.PL. the.clouds COM/AFTER the.rain
The clouds return with/after the rain. Ecclesiastes 12:2

Dahood (1962) further asserts that the use of the Ugaritic cognate ʾaḥr 'after' in Example (41) parallels the comitative function word ʾm 'with' and confirms this observation.

(41) ʿmn nkl ḫtny // Ᾱhr nkl yrḥ ytrḥ
With Nikkal is my marriage, with Nikkal will the Moon enter into wedlock. CTA 24:32-33 [Dahood's translation]
Pardee suggests rather that Ugaritic āḥr 'after; afterwards' may be read as a temporal adverb "to connote 'immediately after'" (1976, 252), whence his translation of this passage: "Avec Nikkalu sera mon mariage! Ci-après Yariḫu s'acquiert Nikkalu pour épouse" (2010, 26). In light of this option, it may be concluded that Dahood's suggestion is not substantiated by this example and does not provide sure evidence of a shared usage in Ugaritic and Hebrew.

For this BH 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, 139-140). It is not altogether impossible to see a similar change in BH 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 indicate the actualization of this change.
Whoever does not follow (after) Saul and Samuel, thus it will be done to his oxen. 1 Samuel 11:7

2.3.1.3.4 PREP (BEHIND) > PREP (ACCORDANTIVE)

The change from spatial relations to the accordantive function is not well defined in typological studies; though Svorou's BENEFACTIVE notion (1994, 158) 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 sēcundum 'behind, after' developing into 'according to' and the Akkadian noun pittu 'side, region' to (ina) pitti 'according to'. No context of change can be elicited internally from the BH evidence.
Prepositions often grammaticalize into subordinators in the world's languages (Hopper and Traugott 2003, 184-190). These clause linkers may develop from a wide range of expressions relaying time, place, and manner to mark hypotactic relationships. Heine and Kuteva (2004, 205) only provide examples of locative prepositions which can be employed as clause subordinators. Svorou, however, recognizes this development in three languages where "POSTERIOR uses also had an AFTER use ... [which] requires that situations be conceptualized as objects" (Svorou 1994, 160). 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 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" (2004, 49). A similar change may be posited in Semitic for Ge‘ez kawalā 'rear, hind' and Akkadian warkatu 'backside, rear' as well as in Middle Egyptian with the temporal subordinator r-s3 'after' which may be derived from r-s3 '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 context of change is accessible in BH. 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 shortening of the commonly attested, clause-initial preposition phrase, אַחַר הַבָּרִים ‘aḥar haddōrim ha‘elle 'after these things'. The function of the phrase is equivalent to a conjunctive adverb. It marks a sequential link in the narrative between what precedes

21 See Genesis 15:1; 22:1; 39:7; 40:1; 1 Kings 17:17; 21:1; Ezra 7:1; Esther 2:1; 3:1. Similarly, the usage at 1 Kings 13:33 provides evidence of the singular formation, אַחַר הַזֶּה ‘aḥar haddōr hazze 'after this thing'. The simplified phrase, אַחַר הְזֶה ‘aḥar ze 'after this', is found only once (2 Chronicles 32:9).
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 הָּׁדְּבַר יִהָּׁוְה אֵלֶּׁה י הָּׁדְבַר־יְהוּ הָּׁאֶל־אַבְרָּּׁם בָּּמַחֲזֶה**

AFTER the.things these *YHWH* said *Abraham*

After these things, Yahweh spoke to Abram in a vision. Genesis 15:1

(44) **וַיְהִיָּׁאַחַר הָּׁדְּבַר יִהָּׁוְה אֱלֹהִיםָּׁוְה אֱלֹהִיםָּׁנִס הָּׁאֶת־אַבְרָּּּם בָּּמַחֲזֶה**

be.WCPC.3M.SG. AFTER the.things these *God*

After these things, God tested Abraham. Genesis 22:1

(45) **וּוְאַחַר הָּׁדְּבַר יִהָּׁוְה אֲבָּרָּּם בְּמַלְכַּת־אַרְתָּּחְשַׁסְתַּא ... הוּא עֶזְר אָּּׁו ל הָּׁמִבּ בֶָּּׁבָּּל**

CJ+the.god test+SC.3M.SG. DOM+PN

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

**2.3.1.4 Mapping the Grammaticalization Trajectories of 'ahar**

In this section, the multifunctional usages of *'ahar* are mapped sequentially according to relative time. Based on the external and internal data, it may be plausibly
suggested that the noun first developed into the locative preposition (BEHIND) which further was used as the ACCORDANTIVE and TEMPORAL/ADVERBIALIZER (AFTER).

The CONJUNCTIVE ADVERB (THEN) likely developed from the temporal function of the preposition phrase. These shifts are represented in Figure 2-A below. Hopper (1991) refers to this phenomenon of multiple, coexisting functions as "layering".

Figure 2-A: Functional Developments of ʾḥar

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

Using the Overlap Model (Heine 2004), the semantic layers of ʾḥar may be schematized as in Figure 2-B. 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 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 BH situation where all four semantic relations and the originating noun are evidenced.

Figure 2-B: Overlap Model for ‘aḥar

<table>
<thead>
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<th>III</th>
<th>IV</th>
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</thead>
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<td>'back'</td>
<td>'back'</td>
<td>'back'</td>
</tr>
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<td>BEHIND</td>
<td>BEHIND</td>
<td>BEHIND</td>
<td></td>
</tr>
<tr>
<td>PREP/ADVZ</td>
<td>AFTER</td>
<td>AFTER</td>
<td></td>
<td></td>
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<tr>
<td>PREP</td>
<td>ACCRD</td>
<td>ACCRD</td>
<td></td>
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</tr>
<tr>
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<td>(THEN)</td>
<td>(THEN)</td>
<td>THEN</td>
<td></td>
</tr>
</tbody>
</table>

2.3.2 ʾaḥ’re

2.3.2.1 Morphology of ʾaḥ’re

As noted above (§2.3.1.1), ʾaḥ’re is likely the long biform of an original *qattal nominal pattern with the expanding 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—*ʿ, ʾ, ḫ, or ḥ (sometimes *ḥ)—changes to two open syllables by adding a secondary hurried, or ultrashort, vowel after the second consonant (Ø > ⱀ / v₁G_Cv), as in נחלו.
nahlo 'wadi' from *nahl with locative he (Bauer and Leander 1922, 210-211). Whereas both reconstructed forms, *'aḥṭaray and *'aḥḥray, are equally possible morphologically, the former is preferred in the present study because of the existence of and semantic overlap with the short biform 'aḥar (< *'aḥḥar).

The origin of the suffix on the preposition, 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 Semitic feminine ending (Tropper 2000, 282-284)—is speculative, at best, as only a handful of BH attestations exist (Böttcher 1866, 415), and these are primarily extant in proper nouns (Layton 1990, 241-245).

First, the PS *-ay suffix was discussed above in the context of Group I prepositions and is found with several adverbs (Kienast 2001). In addition to the independent prepositions—*de, *le, *le, and once *qadme 'before'
(Proverbs 8:23)—the affix is found on suffixed prepositions, such as תַּחְתֵּיהֶם taḥtehem
(< *taht + ay + humū), with adverbs יָזַay (biform of az 'then', with interrogative adverbs מַה māhay 'when?' and אֲזַיʾ azay 'where?', and attached to the exclamations: אַחֲלַיʾ aḥlay 'would that!', אַלְלַיʾ allay 'woe!', and איֵל ʾui 'may it be'. Also, one finds evidence of an expanding suffix *-ay in other NWS languages: Aramaic 'zy (later 'dyn) 'then', nmy 'also', qwmy 'before'; Syriac kay 'indeed', blay 'not'; and Ugaritic ʾaky (< *ʾaykaya) 'how', ly (< *laya) 'to'. This morpheme seems to provide the most likely origin of not only the Hebrew suffix ofʾah’re but the Semitic examples. The question remains, however, whether the suffix was productive in proto-Hebrew or merely a vestige of a PS morpheme lexicalized with certain BH forms.

Second, the original anatomic noun may well have been conceived of as a duality or a plurality, thus declined as such. Driver suggests that the original form is indeed dual referring to "the two sides (... of the buttocks" (1937, 346, 1933, 377-378). Elsewhere, it is claimed to be a plural noun probably meaning hintere Gegenden (Gesenius and Kautzsch 1896, §103o). Moreover, if ʾahar coexisted in the proto-
language with the long form, the short form would reflect at the very least a singular form and the dual in BH which is persevered for several dual body parts (*viz.* עַיִן ‘eye’ ~ עֵינִים ‘two eyes’; יָּּד ‘hand’ ~ יָּדֵים ‘two hands’; etc.).

Although this appears to be the most parsimonious solution, it is not without difficulty. Particularly on account of the rarity of nominal examples in BH, the grammatical number of the referent is obscured. In addition, this morpheme preservation would not account for the BH long forms of the Group I prepositions or the presence of the /e/ linking vowel on the prepositions in Ge’ez.

Third, following the suggestion of Barth (1888, 356), Bauer and Leander (1922, 645) propose that the form אַחֲרֵי ‘aḥre developed from the singular noun with suffixes on analogy to its antonym לִפְנֵי ‘before’. Thus, one finds two antonymic pairs—על ‘above’ parallel with תָּחַת ‘below’ and לִפְנֵי ‘before’ with ’אַחֲרֵי ‘behind’—which have the expanded pronominal forms, עֲלֵיהֶם and תַּחְתֵיהֶם תַּחְתֵיהֶם and אַחֲרֵיהֶם. This 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 taḥat (‘alehem : taḥtehem :: ‘al : X = taḥat) and its presence with ’āḥ’re (liḥnehem : ’āḥ’rehem :: liḥne : X = ’āḥ’re). All that being said, even this hypothesis remains lacking as several peculiarities are unaccounted for, such as, the independent long form ʿāle and the preservation of or shorting to ’āḥar.

2.3.2.2 Usage of ’āḥ’re

The following subsections describe the usages of ’āḥ’re in BH. In addition to the original nominal meaning 'back', four grammatical functions are differentiated—

LOCATIVE (BEHIND), TEMPORAL/ADVERBIALIZER (AFTER), CAUSE (SINCE), and PARTICLE.

2.3.2.2.1 Noun ('back')

The Hebrew Bible evidences several usages of the noun ’āḥ’re.22 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 (46) and Example (47). Provided that the

22 Deuteronomy 11:30; Judges 18:12; 2 Samuel 2:23 (2x).
landmarks in these cases are objects without a clear front-back orientation, the usage likely refers to the direction 'west' as a location and not merely a spatial metaphor.

(46)  

hinne ʾahre qiryat ʾyɔrm
EXIST west.of Kiriath-jearim

It was west of Kiriath-jearim. Judges 18:12

(47)  

helo-hemmo b’eḥer hayyarden
Q + NEG + they-M. ON + opposite.side.of the.Jordan ʾahre derek mbo haššemeš
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? Deuteronomy 11:30

The noun ʾahre refers to the rear part of an inanimate object in Example (48a), and a metonymic usage for the body part may be assessed in Example (48b). In the instances found in Example (48), the author uses a wordplay, constructed on what was probably an archaic meaning of ʾahre with the phrase b’ahre haḥnit '[he struck him] with the back of the spear' placed in parallel with the paraprosdokian phrase haḥnit meʾahrɔw 'the spear [came out] from his back'. This meaning of the compound with the preposition min- is unique. Elsewhere, meʾahre
designates the compound relation SOURCE + BEHIND. 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. Excepting this context and the uses as a cardinal direction, the more than five hundred other instances of 'ahâ’re in BH are function words.

(48) a. 

\[
\begin{align*}
\text{wayyakkehu} & \quad \text{ʾabner} \\
\text{strike-WCPC.3M.SG.} & \quad \text{PN} \\
\text{b’ahâ’re} & \quad \text{hah’niț} \quad \text{ʾel-haḥomeš} \\
\text{INSTR + back.of} & \quad \text{the.spear-F.} \quad \text{TOWARD + the.stomach} \\
\end{align*}
\]

b. 

\[
\begin{align*}
\text{watteše’} & \quad \text{hah’niț} \quad \text{me’ahâ’raw} \\
\text{come.out-WCPC.3F.SG.} & \quad \text{the.spear-F.} \quad \text{SOURCE + back + his} \\
\end{align*}
\]

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

2.3.2.2.2 PREP (BEHIND)

The locative function denoting BACK-REGION (BEHIND) is identified in 275 contexts. This functional meaning is used as a verbal modifier in Example (49) and as the predicate of a verbless clause in Example (50).

They have cast your Torah behind their back.\(^{25}\) Nehemiah 9:26

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

### 2.3.2.2.3 PREP/ADVZ (AFTER)

The second most frequent usage of `אִּשָּׁרֶ (231 occurrences) is as the temporal function AFTER.\(^{26}\) In Example (51), it is exemplified as a verbal modifier.

---

\(^{25}\) This idiom "to cast something or someone behind one's back" refers to the refusal to take notice of that entity (1 Kings 14:9, Isaiah 38:17 and Ezekiel 23:35).

Moab rebelled against Israel after the death of Ahab. 2 Kings 1:1

In BH, there are five examples where 'ah're heads a finite verbal clause that functions as a temporal modifier for a clause.²⁷ Example (52) demonstrates an adverbial clause headed by this adverbializer usage in the preverbal position, and in Example (53) the modifier is postverbal.

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A third grammatical function of ʾaḥ́re is found expressing cause or grounds in an adjunct phrase. The most straightforward instance is found in Example (54), where the ʾaḥ́re phrase is clause-initial and reflects the grounds (ʾאַחֲרֵיָּׁהוֹדִיעַָּׁאֱלֹהִיםָּׁאוֹתְךָָּׁאֶת־כּ ל־זָֹּׁ את ʾaḥ́re hodīʾ ʿelōhim ʾotkə ʾet-kol-zot, 'since God revealed to you all of this'), for the following statement (ʾאַחֲרֵי הָּׁבְּשִׁים קַמְתָּא קְנַה ʾen-nahon whōkam kəməkə 'there is none as perceptive and wise as you').
Since God revealed to you all of this, there is none as perceptive and wise as you. Genesis 41:39

2.3.2.2.5 Prepositional-Verb Particles

Twenty-five examples of 'ah're may be categorized separately as combining with certain verbs to yield specialized multi-word verb constructions referred to as phrasal or prepositional verbs. The designation "multi-word verb" which encompasses prepositional verbs (English think about), phrasal verbs (English put down), and phrasal-prepositional verbs (English look up to) is broadly defined as a "unit which behaves to some extent either lexically or syntactically as a single verb" (Quirk et al. 1985, 1150). While certain syntactic criteria may be used to designate the close relationship between the verb and particle, multi-word verbs are identified primarily by the production of new semantic meanings, which are not detectable from the sum of the parts.
Two multi-word Hebrew verbal idioms have socio-religious meanings—MLʾ + ʾaḥre 'to follow faithfully after (deity)' and ZNH + ʾaḥre 'to fornicate with'. The semantics of the Piel verb MLʾ 'to fill' (transitive) when combined with the function word ʾaḥre denote faithful obedience to the verbal 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 as found in Example (55).

(55) מִלְּא הַאֲחַרְיָהוּ
milleʾ ʾaḥre YHWH
fill-SC.3M.SG. PTCL PN
He was faithful to Yahweh. Deuteronomy 1:36

A second example of a Hebrew prepositional verb serves as the semantic opposite of MLʾ ʾaḥre. Hebrew ZNH ʾaḥre (literally 'to prostitute after') denotes the act of participating in sexual activity with someone or metaphorically as the act of idolatry with a divinity other than Yahweh. In all seventeen occurrences, the Qal-stem of the verb ZNH exhibits a complement structure with ʾahre as exemplified by Example

28 Numbers 14:24; 32:11, 12; Deuteronomy 1:36; Joshua 14:8, 9, 14; 1 Kings 11:6.
A usage in Example (57) could be taken as the lone example of ZNH taking an object complement without \(^{\text{a}h^\text{re}}\). However, a better explanation of this clause is that the constituent in question should be understood as an adjunct, that is, the adverbial phrase, \(\text{re}^\text{im rabbin}' \text{with many lovers}', modifies the verb and is not the verbal complement.

(56) \(\text{wayyiznu} \quad ^{\text{a}h^\text{re}} \quad \text{habb'elim}
\)
prostitute-WCPC.3M.PL. PTCL the.baals
They fornicated with the baals. Judges 8:33

(57) \(\text{w'att} \quad ^{\text{zni}t} \quad \text{re'im} \quad \text{rabbim}
\)
CJ + you-F. prostitute-SC.2F.SG. companions-M. many-M.PL.
You have prostituted yourself with many lovers. Jeremiah 3:1

The passive clause in Example (58) demonstrates the status of this construction as a single lexical unit and not merely a verb modified by a preposition phrase. The clause-initial \(^{\text{a}h^\text{re}}\) marks the patient of the de-agentified, or the so-called impersonal-

\(^{29}\) Exodus 34:15, 16 (2x); Leviticus 17:7; 20:5 (2x), 6; Numbers 15:39; Deuteronomy 31:16; Judges 2:17; 8:27, 33; 1 Chronicles 5:25; Ezekiel 6:9; 20:30; 23:30; 16:34.
passive, verb. As is well-known 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). Passive verbs whose patients are designated by a complement marker may be found in Exodus 10:8 (wayyušab ’et-moše w’et-’ah’ron 'Moses and Aaron were brought back') and Deuteronomy 12:22 (ye’okel ’et-hassbi w’et-ho’ayyol 'the gazelle and the deer are eaten'). In examples such as these, the object marker ’et functions as the marker of the logical subject of the passive verb (Joüon and Muraoka 1991, §128).

(58) ַּוְּאָהַרְיִיק ַלַּא ֹּזַעְנַו
w’ah’rayik lo’ zunnɔ
CJ + PTCL + you-F. NEG be.prostituted-SC.3M.SG.
You were not solicited for sex. Ezekiel 16:34

2.3.2.3 Grammaticalization of ’ah’re

Based on typological comparisons, language-specific usage patterns, and internal diachronic evidence, a preliminary trajectory of change for ’ah’re will be outlined as

Noun ('back') > LOCATIVE (BEHIND) > TEMPORAL (AFTER) > CAUSE (SINCE).
Subsequent cases of secondary grammaticalization of the LOCATIVE are suggested to be the origin of the prepositional-verb particles.

2.3.2.3.1 Noun ('back') > PREP (BEHIND)

This change is outlined from a noun referring to the body part 'back' to a prepositional meaning BEHIND from a denotative meaning to a locative grammatical function that can be characterized etymologically 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 (§2.3.1.3.1) discussing the parallel change of ʾaḥar.

As observed previously, grammaticalization occurs in contexts which may be interpreted in more than one way. Such 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 ʾaḥre could be a noun or a preposition: אחֲרֵי מֹשֶׁה ʾaḥre

moše may be construed as the NP 'the back of Moses' or as the PP 'behind Moses'.

(59) whibbiṭu ʾaḥre moše
CJ + look-SC.3C.PL. back.of /BEHIND PN
ʿaḍ-boʾo haʾohol
UNTIL + enter-INF + him the.tent

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

2.3.2.3.2 PREP (BEHIND) > PREP/ADVZ (AFTER)

Secondarily, the locative function was extended to temporal contexts. This progression is noted by Heine and Kuteva as "a more general process whereby body parts are grammaticalized to spatial concepts which again are used to also express
temporal concepts" (2004, 47). This process is supported by constructions in BH where the locative and temporal could be confused providing the context for this grammaticalization. Example (60) from the Book of Ruth demonstrates a situation where ʾaḥre may be construed as a locative or a temporal. Was Ruth being told the ___________________

30 Also see Genesis 16:13; 32:19.
location *where* she was to 'follow behind the women', or the occasion *when* she should 'go after the harvesters'? Such constructions denoting movement or ordered progression could lead speakers to infer that the preposition marks not merely locative but temporal notions (Svorou 1994, 158-159). Six examples where there is ambiguity between the LOCATIVE and TEMPORAL functions are identified in BH.\(^{31}\)

(60) עֵינַיִי בַּשֶּׁה אָשֶׁר־יִקְצֹרוּן וְהָלַכְתָּּּׁ אַחֲרֵיהֶן

'enayik baššode ʿešer-yiqṣorun

eyes + your ON + the.field REL + glean-PC.3M.PL.

whəlakť ʿah\(^\star\)rehen

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

Typological examples of the change to an adverbializer have been reviewed previously, including the parallel change witnessed for ʿah\(^\star\)ar (§2.3.1.3.2).\(^{32}\) Three morphosyntactic contexts of the change from the temporal preposition to the adverbializer are plausible. First, the coordination of the preposition and the relative,

\(^{31}\) Genesis 41:3, 19, 27; Ruth 2:9; 1 Kings 19:20; 20:15.

\(^{32}\) The grammaticalization of LOCATIVE to SUBORDINATOR is also common cross-linguistically (Heine and Kuteva 2004, 205).
אַחֲרֵיָּּׁאֲשֶׁר ʾaḥre ʾəšer, as in Example (61), may have been shortened to only the preposition. However, there is no supporting diachronic evidence of this change.

Second, ʾaḥre followed by a clause could be reconstructed in the proto-language on analogy to the Semitic construction where a noun is found in construct with a verb as found with Example (62).³³ 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) בַּּאֲשֶׁר אַחֲרֵיָּּּׁאֲשֶׁר הֵיטִיבָּּּׁל כֶּּמָּּּׁ vəʾəšer-heṭišl-ləḵem
vanquish-WCSC.3M.SG. dom+you-M.PL. ʾaḥre ʾəšer-heṭišl болезн
AFTER REL+do.good-SC.3M.SG. TO+you-M.PL.
He will vanquish you after he benefited you. Joshua 24:20

(62) בַּּאֲשֶׁר אַחֲרֵיָּּּׁ יִּהוֹ שֵׁשׁ ָּׁתְּחִ לַתָּּּׁדוֹרְוֵהּ יִּהוֹ שֵׁשׁ
beginning.of spoke-SC.3M.SG.+PN bhoše’ac
thillatā dibber-YHWH bhoše’ac
When Yahweh first spoke to Hosea. Hosea 1:2

³³ See also Leviticus 14:46 and 1 Samuel 25:15.

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The priest shall investigate the infection after it is cleaned. Leviticus 13:55

In addition, some have suggested an adversative usage of ʾahāre (Williams 1976, 61). This function could be an extension of the LOCATIVE, but is difficult to assess as it is exceedingly rare and may not be differentiable from idiomatic uses.

2.3.2.3.3 PREP (AFTER) > PREP (CAUSE)

On the temporal and causal interface one finds a handful of examples reflecting the early stages of the change TEMPORAL to CAUSE. According to Heine and Kuteva (2004, 291-293) 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

____________________

34 2 Kings 19:21; also see 1 Kings 14:10; 21:21.
that again may develop into markers for more abstract grammatical relations" (2004, 48). In addition to Hebrew 'ahir, 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 'ahre which may be reinterpreted as causal from an original temporal meaning. In Example (64), the phrase אַחֲרֵי נִפְלוּ 'ahre niplo may be understood temporally, 'after he fell', or causally, 'because he fell'.

(64) ואָמַתְתֶּהוּ כִּי יָדָאָתי כִּי לֹא יִחְיֶה אַחֲרֵי נִפְלוּ

wa’amathehu ki ya’dati ki 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 Samuel 1:10

Cross-linguistically, prepositional verbs originate from the combination of verbs and particles grammaticalized from prepositions. O'Dowd defines these types of words functioning as both particles and prepositions "not as syntactic or semantic elements, but as pragmatic, discourse-orienting elements" (1998, 10). This orienting function goes beyond simply adding spatial connotations to verbal actions; rather, it 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 (185).

Moreover, Brinton and Traugott (2005) discuss this type of change as the blending of grammaticalization and lexicalization. Grammaticalization would map the shift of the original preposition to a particle marking the verbal complement, and lexicalization would explain the addition of the prepositional verb to the cognitive lexicon.
In BH, the locative preposition ʾahre grammaticalized in constructions with certain verbs acquiring the function of a complement marker. As a result, the reanalyzed environment, VERB + [ʾahre]prep + NP]pp, developed into a phrasal-verb of the form [VERB + [ʾahre]ptcl]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 or usage patterns are amended.

2.3.2.4 Mapping the Grammaticalization Trajectories of ʾahre

As explained in section 2.3.2.3, the functional changes can be mapped as in Figure 2-C or according to the overlap model (Figure 2-D). At Stage II of the overlap model, the noun 'back' was extended to contexts where it was reinterpreted as the LOCATIVE (BEHIND). 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 2-C: Functional Developments of ʾahre

Noun ('back') > PREP (BEHIND) > PREP/ADVZ (AFTER) > PREP (CAUSE) > PARTICLE
Figure 2-D: Overlap Model for ʾaḥāre

<table>
<thead>
<tr>
<th>Stage</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
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<tbody>
<tr>
<td>Noun</td>
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<td>'back'</td>
<td>'back'</td>
<td>'back'</td>
</tr>
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<td>PREP</td>
<td>BEHIND</td>
<td>BEHIND</td>
<td>BEHIND</td>
<td></td>
</tr>
<tr>
<td>PREP/ADVZ</td>
<td>AFTER</td>
<td></td>
<td>AFTER</td>
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<td></td>
<td></td>
<td></td>
<td>CAUSE</td>
</tr>
</tbody>
</table>

2.3.2.5 Comparison of ʾaḥar and ʾaḥāre

As described in the introduction to ʾaḥar (§2.3.1), the present study preferences the semantic differences over the etymological relationship of these two lexemes. This final section, however, will compare the similarities and differences between the usages of ʾaḥar and ʾaḥāre. In general, the majority of the cases of both lexemes may be categorized within the locative and temporal functions; nonetheless, each word is found with specialized functions and variant frequencies.

The anatomic noun BACK is evident with ʾaḥar and ʾaḥāre as well as the grammaticalizations to the locative (BEHIND) and temporal (AFTER) usages. Only ʾaḥar, however, demonstrates the prepositional usage of ACCORDING TO and the
conjunctive adverb AFTERWARDS. On the other hand, the usages as a preposition CAUSE and a particle in multi-word verbs are found exclusively with ʾahāre.

Statistical frequency demonstrates further differences between the usage of ʾahār and ʾahāre. In Table 2-2, the number of each function is provided, where the value in parentheses represents the examples from the Late Biblical Hebrew dataset. Overall, the instances of ʾahāre outpace that of ʾahār by more than five times. The loss of the less common functions is not statistically significant for either lexeme. Regarding the more well-attested semantic usages, the ratio of the locative to temporal function of ʾahāre is nearly one-to-one (275:235); whereas, the locative use of ʾahār is found only half as much as the TEMPORAL (17:32). Semantically speaking, this difference indicates that ʾahār is the more abstracted relation, whereas ʾahāre appears to be more conservative in its usage patterns.

Table 2-2: Usage Comparison of ʾahār and ʾahāre

<table>
<thead>
<tr>
<th></th>
<th>BACK</th>
<th>BEHIND</th>
<th>AFTER</th>
<th>CAUSE</th>
<th>ACCRD</th>
<th>CJ ADV</th>
<th>PTCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ʾahār</td>
<td>1 (0)</td>
<td>15 (0)</td>
<td>31 (6)</td>
<td>0 (0)</td>
<td>2 (0)</td>
<td>37 (2)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>ʾahāre</td>
<td>4 (0)</td>
<td>275 (15)</td>
<td>231 (41)</td>
<td>1 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>25 (1)</td>
</tr>
</tbody>
</table>
In addition, this supposition is evident from the diachronic evidence. In Late Biblical Hebrew, 'aḥar is not attested with the locative function at all. In this same corpus, the temporal usage of 'aḥere is much more frequent than that of the locative. This change may be understood as analogous to the earlier evolution of 'aḥar in SBH. Therefore, the semantic space vacated by the prepositions 'aḥar and 'aḥere provides for the emergence in Post-Biblical Hebrew of an innovative locative function BEHIND from the body part noun ʾāhore 'back'.

2.3.3 אֵצֶל ʾeṣel

2.3.3.1 Morphology of ʾeṣel

The vocalic pattern of אֵצֶל ʾeṣel fits, for the most part, into the morphological category of *qitl base nouns on the pattern of סֵפֶר ʾeṣel 'scroll' and שֵׁבֶט ʾeṣel 'rod; tribe'. The forms with pronominal suffixes, however, have an initial seghol-vowel, אֵצְלָו ʾeslo, instead of the more frequently witnessed hireq-vowel (e.g. סִפּר sīpro; שֵׁבֶט šībto). The opening and centering of the vowel /i/ is attested elsewhere in similar phonological environments (Bauer and Leander 1922, 207-208)—an unaccented, closed
syllable with an initial glottal stop: אֵבֶל *ʾeḥel 'mourning'; אֶבְלֵךְ *ʾehlek 'your morning'; אֵגֶל *ʾeḡel 'dew-drop'; אֶגְלֵי־ט ל *ʾeḡleṭl 'drops of dew'; אֶהְיֶה *ʾehye 'I am'; אֶל־ (< *ʾil) 'toward'; אֶת־ (< *ʾitt) 'with'; but notably not אֶמֶר *ʾemr 'word'; אֶמְרוֹ *ʾimro 'his word')

The primary semantics and root of *ʾeṣel are manifest from the comparative Semitic evidence. Suggested nominal cognates include Syriac *yaṣilb 'joint, elbow', Hebrew אַצִיל *ʾaṣṣil 'joining; joint', Punic *yšt 'joint', and Arabic wiṣlun 'limb, side' as well as mawṣil 'joint'. A related noun appears in a broken context, בֶּלֹ הֹמֲשֶׁל[b] 'on the side of the tomb', in Byblian Phoenician. It may be reasonably assumed that the original nominal referenced a 'joint' or 'side'.

The verbal root is found with Ugaritic *ṢL '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 weakening of the glide to glottal stop is not a regular sound
change (Blau 2010, 103-104). However, a few examples of this weakening may be observed with certain verbal roots (Wright 1890, 71). Variation between these consonants is seen with the Arabic root 'LP and WLP, meaning 'to do frequently', which should likely be connected etymologically with Hebrew 'LP 'to learn'. Also, Hebrew 'ZN 'to weigh, test' provides an additional phonological example based on the more conservative Arabic root WZN 'to balance, weigh'. This connection, though, remains dubious as it relays upon a seemingly ad hoc sound change in NWS.

2.3.3.2 Usage of 'ešel

BH witnesses three functions of 'ešel: 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.
2.3.3.2.1  PREP (BESIDE)

The function word ḫesl may designate a locality 'next to' or 'beside', specified as the SIDE-REGION (Svorou 1994, 237), where nothing intervenes between.\(^{36}\) 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)  תַּנָחַ בָּדַּה אֶצֶל
wattannah biḏo ḥeṣl
place-WCPC-3F.SG. clothing + his BESIDE + her
She put his garment beside her.  Genesis 39:16

(66)  וּמַצֵב הָאֵצֶל־גְּבוּל
umaṣṣeḥ ħeṣl-ḥulḥ
CJ + stele BESIDE + border + its
A stele will be beside its border.  Isaiah 19:19

\(^{36}\) Genesis 39:10, 15, 16, 18; Leviticus 1:16; 6:3; Deuteronomy 16:21; 1 Samuel 5:2; 1 Kings 2:29; 10:19; 13:24 (2x), 25, 28, 31; 2 Kings 12:10; 2 Chronicles 9:18; Nehemiah 2:6; 3:23, 35; 8:4; Proverbs 8:30; Isaiah 19:19; Jeremiah 35:4; Ezekiel 1:15, 19; 9:2; 10:6, 9 (3x), 16; 33:30; 39:15; 43:6; Amos 2:8.
2.3.3.2.2 **PREP (NEAR)**

The locality designated by ʾešel can also specify the proximity to a place without reference to a relative direction, metaphorical or not. This relationship is used for indicating the general topographical nearness of one entity relative to another in Example (68) and Example (69).

**Example (68)**

wattbo′ lḥem haššemesh ʾešel haggib′c
enter-WCPC.3F.SG. FOR + them the.sun-F. NEAR Gibeah

The sun went down when they were near Gibeah. Judges 19:14

---

37 Deuteronomy 11:30; Judges 19:14; 1 Samuel 20:19; 1 Kings 1:9; 4:12; Nehemiah 4:6; Proverbs 7:8, 12; Jeremiah 41:17; Ezekiel 43:8; Daniel 10:13.

123
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. Ezekiel 43:8

2.3.3.2.3 PREP (TOWARD)

Two instances of the function word designate the direction, or goal, toward which the movement expressed by the verb occurs. These cases reflect the initial stages of the later expansion evidenced in Mishnaic Hebrew in which 'esel replaces 'el as the regular marker of the allative function with verbs of motion (Segal 1927, 142).

38 Daniel 8:7, 17.

124
The first example describes the scene of the divine messenger Gabriel being sent to Daniel to explain the vision of chapter eight of the Book of Daniel. The passage in Example (70a) relays that Gabriel came toward the place where Daniel was standing.

In response to this advance Daniel fell prostrate in fear as found in the subsequent clause with Example (70b).

(70) a. וַי בֹאָּׁאֵצֶלָּׁע מְדִי
wayyɔ́ɔ’ enter-WCPC TOWARD location + my
b. וּבְבֹאוָֹּׁנִבְעַתִּיָּׁו אֶפְּל הָּׁעַל־פּ נ י
u  oʾo ni ʿatti CJ+WHEN+entering+his be.fearful-SC.1C.SG.
וְכַפְּלָּׁא ʿal-panic
fall-WCPC.1C.SG. UPON + face + my

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

Earlier in the eighth chapter, this usage is again 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 eastward in Example (71a), toward the ram which symbolized the kings of Media and Persia in Example (71b). Motivated by passionate anger, he quickened his advance
headed for the enemy in Example (71c). Then, Daniel observed the goat approaching the ram (ʾesel hɔʾayil), becoming enraged, and striking it in Example (71d).

(71)a. ... 
whine  s̱īr-hɔʾizzim  bɔʾ  min-hamm̲₄arɔḥ  ...  
CJ + PRS  male + goat  entering-PTCP  FROM + the.west  

b. ... ʾad-hɔʾayil  ...
enter-WCPC.3M.SG.  UNTO + the.ram  

c. ʾelōw  bahʾmaṭ  koḥo  
run-WCPC.3M.SG.  TOWARD + him  WITH + wrath.of  strength + his  

d. ʾelōw  maggiac  ʾesel  hɔʾayil  
CJ + see-SC.3M.SG. + him  attaining  TOWARD  the.ram  
wayyiṭmarmor  ʾelōw  
be.enraged-WCPC.3M.SG.  TOWARD + him  
wayyaḥ  ʾeṭ-hɔʾayil  
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. Daniel 8:5-7

2.3.3.3 Grammaticalization of ʾesel

The individual changes in the meanings of ʾesel will be traced 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). This semantic change coincides with the structural shift from the noun to the preposition. The typological evidence for these changes and internal attestations of ambiguity of individual cases will be presented in the following subsections.

2.3.3.3.1 *Noun ('side') > PREP (BESIDE)

Nouns designating body parts often grammaticalize as relational grammatical notions in the world's languages (Heine and Kuteva 2004, 271-272). The well-attested change in English beside has been suggested to have obtained from OE be sidan 'by the side' (Svorou 1994, 72, 255-256) or possibly later in ME (Rissanen 2004). In Semitic, analogous changes yielding the locative function may be observed with Akkadian aḫu 'side, flank; beside' (CAD aḫu B), lētu 'cheek; beside', and Aramaic sttr 'side; beside'.

No clear transitional example in BH exists to elucidate the possible context of this change; however, Example (72) may provide a potential illustration. Just as the workers kept their weapons 'fastened to their loins' according to Example (72a),
Nehemiah stated that the war-trumpeter with a shofar was kept ֶתְּלִי ʾɛṣli, namely, at 'my side' or 'beside me' in Example (72b). Such ambiguity may well have led to the development of the locative semantics and the functional change.

(72) a. rophevôm ʾiš haḥarbo
whabbonim each sword+his
CJ+the.builders-PTCP.M. each sword+his
3a surim ‘al-mɔnɔw ubonim
fastened-PP.M.PL. UPON+loins+his CJ+building-PTCP.M.PL.

b. โร่ห์อก่ำ ʾתוק🥓 ʾɛṣli
whattoqe ʾc ʾbaššɔpɔɾ ʾɛṣli
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. Nehemiah 4:12

2.3.3.3.2  PREP (BESIDE) > PREP (NEAR)

The grammatical morpheme marking general proximity is oft times derived from lexemes meaning 'side' (Heine and Kuteva 2004, 272-273) through the generalization of locative relations (Svorou 1994, 73, 136, 156-157, 260). Example (73) demonstrates one plausible context for the transition to a generic proximal. With the emergence of the second set of seven lean cows from the river in Example (73a), the geographic relation of the two groups is ambiguous. Does each lean cow take its position beside a
corresponding fattened cow as in Example (73b)? 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 'ēṣel.39

(73) a. ... ḫaḇeš ṣeḇaʿ pərōṯ ʾāḥerōṯ
   whinne Ševaṯ pərōṯ ʾāḥerōṯ
   CJ + PRS seven cows other-F.PL.
   ʿoḥloṯ ʾahṛēhem min-hayʾor ...
   coming.out-PTCP.F.PL. AFTER + them FROM + NP

b. ṭeṣwam ḥeṣel ḥappərōṯ ʿal-špāt hayʾor
   wattaʿmoḏn ṣeḇaʿ ʾāḥerōṯ ʿal-špāt hayʾor
   stand-WCPC.3F.PL. BESIDE/NEAR the.cows ON + the.shore.of NP

There were seven more cows coming out of the Nile after them. They stood beside the cows at the edge of the Nile. Genesis 41:3

2.3.3.3.3 PREP (BESIDE) > PREP (TOWARD)

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

39 Other examples include: Genesis 41:3; Leviticus 10:12; 1 Kings 21:1, 2.
point of view" (Rissanen 2004, 162). Example (74) provides a possible mediating step along this pathway of change from locative to directional functions. As with Example (70) above, ’eṣel is used in conjunction with the verbal root BW. Unlike this earlier example, however, the exact grammatical relationship is ambiguous. The modifying phrase, ἡ ἑσέλ ἂν άχες ᾀήμ 'to their family' (vs. 15), placed in clear reference to the preceding description of transmigration, ἡ ἑσέλ ἂν άχες ᾀήμ 'you deported [them] from their family' (vs. 11), could describe the repatriation locality or the directionality (goal) of the conveyance.

(74) ἡ ἑσέλ ... ἂν άχες ᾀήμ

wayβίγμ ... yreρο (…) bring-WCPC.3M.PL + them Jericho ’eṣel ἂν άχες BESIDE/TOWARD brothers their

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

2.3.3.4 Mapping the Grammaticalization Trajectories of ’eṣel

The functional developments of the usage of ’eṣel may be mapped as found in Figure 2-E.
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 BH, the anatomical meaning 'side' was almost certainly lost yielding a situation not too unlike Stage IV in the Overlap Model as seen in Figure 2-F.

**Figure 2-F: Overlap Model for 'ešel**

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>'side'</td>
<td>'side'</td>
<td>('side')</td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>BESIDE</td>
<td>BESIDE</td>
<td>BESIDE</td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>NEAR</td>
<td>NEAR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>TOWARD</td>
<td>TOWARD</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2.3.4 *

**bayin**

**2.3.4.1 Morphology of *

bayin

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 (*בָּין bayn > abs. *בּּיִין ~ cstr. ben-) are witnessed in BH with forms in the construct state: בָּין ben, בִּינוֹת benot; dual: בִּינוֹת benayim; pronominal: בֵּין ben, בֵּינָךְ benek, בֵּינָה beno; and with plural pronominal suffixes where the plural ending -(ot)e- is added: בֵּינֵה benenu (masculine-type) and בֵּינֵות benotenu (feminine-type). Joüon and Muraoka (1991, §103n) suggest that the addition of the plural-type endings is analogical to עֲלֵי a'le (§94b). This hypothetical is improbable, since the expanding particle -(ot)e- is found only with the plural pronominal suffixes and not the independent forms.40 Alternatively, Blau explains that this analogy is partial as it "has not yet been completed" (2010, §5.1.4).

Cognate nominals and function words are common throughout West Semitic—Phoenician bn 'between', Ugaritic bn 'between', Nabataean byny 'between'; Syriac baynay (also baynāt) 'between'; Arabic ab-baynun 'the separating space' or the abstract 'disunity; enmity'; OSA b(y)n 'between'; and Ge'ez bayna 'between'. The verbal root is fully

40 The singular form, בֵּינָךְ benek, in Genesis 16:5 is likely a textual error as indicated in the MT (Yeivin 1980, §79).
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 Hebrew, Ugaritic, Palmyrene, Mandaic, Syriac, OSA, and Ge'ez.

2.3.4.2 Usage of *bayin

After a brief overview of the previous scholarship on the semantics of BH *בַּיִן bayin, the various functions are described and illustrated. 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). Outlining its usage further, van der Merwe, Naudé, and Kroeze detail three basic construction types: 1) one occurrence with one complement, ben NP, 2) one occurrence with two complements, the second marked by the preposition l-, ben NP₁ (w)l-NP₂, and 3) two (or more) occurrences with two (or more) complements, ben NP₁ uben NP₂ (uben NP₃). 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

In contrast, Waltke and O'Connor 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" (1990, §11.2.6). Following Brockelmann (1913, §254), Blau designates the feminine-type plural form בֵּינוֹתֵינֵי benotenu 'between us' as "having [an] inclusive sense," whereas the masculine-type plural form בֵּיןֵינֵנוּ benenu 'between us' is "exclusive" (2010, §5.1.4n). Barr criticizes such an arrangement of inclusive and exclusive usage as an external and unwarranted distinction:

[I]t 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 (1978, 12-22).
He suggests instead that *ben NP₁ (w)l-NP₂ designates the NPs 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* and those with *ben...ben* form mutually exclusive classes" (p. 7).

This situation is further complicated by BH diachronic variation which provides evidence suggesting that there is a temporal distinction between the construction *ben NP₁ (w)l-NP₂* being "newer" and *ben NP₁ uben NP₂* "older" (Hannemann 1975-1976, Hurvitz 1982, 113-115). Barr (1978, 9-12) finds further support for this differentiation in the attestations from the later documents of Ben Sira and the DSS, 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 *bayin*.

While the attested cases appear to suggest an increase of the NP₁ (w)l-NP₂ pattern in LBH, no clear semantic differences may be assessed based on diachrony alone. However, several connections may be suggested correlating the structural and semantic usage. Evaluating only the unambiguous instances of four functions of *ben* as
defined in the following sections, Table 2-3 presents the relationship between these functions and the three basic patterns. The percentages indicate the ratio of usage tokens for each structural type. The primary usage of the ben-NP construction is as a locative function. Also, this pattern is the only one attested with the temporal function. The sequence ben-NP (w)l-NP, on the other hand, designates most prominently a separative relation. Finally, ben-NP w-ben-NP may relate locative, separative, or reciprocative notions.

Table 2-3: Semantic Distribution of ben Usage Patterns

<table>
<thead>
<tr>
<th></th>
<th>ben-NP</th>
<th>ben-NP (w)l-NP</th>
<th>ben-NP w-ben-NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATIVE</td>
<td>56 (63%)</td>
<td>3 (11%)</td>
<td>78 (33%)</td>
</tr>
<tr>
<td>SEPARATIVE</td>
<td>16 (18%)</td>
<td>22 (78%)</td>
<td>59 (25%)</td>
</tr>
<tr>
<td>TEMPORAL</td>
<td>11 (12%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>RECIPROCATIVE</td>
<td>6 (7%)</td>
<td>3 (11%)</td>
<td>103 (43%)</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>28</td>
<td>240</td>
</tr>
</tbody>
</table>

2.3.4.2.1 Noun ('interval')

The originating noun meaning 'interval, space between; distinction' is recognizable in only a small number of examples. Two constructions likely preserve this nominal sense: Example (75) 'אִישׁ-הַבֵּנַיִם ʾiš-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), and Example (76) מיבנה ל- 'the space between'. Constructions of the type PREP + NP + PREP will be further discussed in Chapter Three.

(75) ייש חבדים מביניהם ופלשתים כלים שמו מגד
wayyeš ʾiš-habbenayim mimmahonoṯ plištim
come.out-WCPC.3M.SG. man.of + the.space-DU. FROM + camps.of PN
golyoṯ ʾšmo miggaṯ
PN name + his FROM + Gath

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

---

41 See also the later use of the term for general infantry in the DSS: שלושה חצבייל שלוש חצבייל 3šlyḥ dgly bnym ‘three divisions of light infantry’ (1Q33 VI:1).

42 The former is found in 1 Samuel 17:4, 23; the latter in Ezekiel 10:2 (2x), 6 (2x), 7. Several constructions with other preposition combinations may also be included here: Isaiah 44:4, Ezekiel 10:7; 19:11; 31:14 (see below 2.3.4.3.1).
Take fire from the area between the wheels, that is, from the area between the cherubs. Ezekiel 10:4

2.3.4.2.2 PREP (BETWEEN)

The word *ben* may have a locative or spatial function. This function relates an object or verbal action to the area between two (or more) entities. The locative usage

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43 Genesis 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; Exodus 8:19 (2x); 13:9, 16; 14:2 (2x), 20 (2x); 16:1 (2x); 30:18 (2x); 40:7 (2x), 30 (2x); Numbers 11:33; 17:13 (2x); Deuteronomy 1:1 (2x); 6:8; 11:18; 14:1; 33:12; Joshua 3:4 (2x); 8:9 (2x), 11 (2x), 12 (2x); 18:11 (2x); 22:25 (2x); 24:7 (2x); Judges 4:4, 5; 5:16, 27 (2x); 13:25 (2x); 15:4; 16:25, 31 (2x); Ruth 2:15; 1 Samuel 7:12 (2x); 14:4; 17:1 (2x), 3, 6; 20:3 (2x); 26:13; 2 Samuel 18:9 (2x), 24; 1 Kings 7:28, 29, 46 (2x); 18:42; 22:34 (2x); 2 Kings 9:24; 25:4; 1 Chronicles 21:16 (2x); 2 Chronicles 4:17 (2x); 18:33 (2x); Nehemiah 3:32; Job 24:11; 30:7; 34:37; 41:8; Psalms 68:14; 104:10; Proverbs 26:13; Song of Songs 1:13; 2:2 (2x), 3; Isaiah 22:11; Jeremiah 34:18, 19; 39:4; 52:7; Lamentations 1:3, 17; Ezekiel 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); Daniel 8:5, 16, 21; 11:45; Joel 2:17; Obadiah 4; Zechariah 1:8, 10, 11; 3:7; 5:9 (2x); 13:6.

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is found in phrases of the three types detailed previously: *ben* NP in Example (77), *ben* NP *(w)*-NP in Example (78), and *ben* NP *uben* NP in Example (79).

(77) ַּּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּy

(78) ַּּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּיִּוְּy

(79) ַּּוְּy

He put [two foxes] tail-to-tail and tied a torch between each pair at the middle.

Judges 15:4

He will set up his palatial tents between the sea and the glorious holy mountain.

Daniel 11:45

He lived between Kadesh and Shur.

Gen 20:1
2.3.4.2.3   PREP (SEPARATIVE)

Using *ben* to mark the divarication of two entities is quite frequent in BH. 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* *nah*l*al*ō* 'to apportion by lot' in Example (81) and *ŠLH* *ru*ḥ *rɔ* 'to send an evil spirit' in Example (82). A fourth innovative construction type (*ben* NP *l-ben* NP), a fusion of types two (*ben* NP *l-NP*) and three (*ben* NP *uben* NP), is witnessed with Example (83) with the verb *BDL* 'to separate'.

(80)  ישנו עם אรถย מופר בין העמים בכל מודעות מלכותה

yeš̄no ʿam-*rah*ḥ mʊzzɔr umpɔrɔṭ
Exist nation+one be.dispersed PTCP CJ+be.dispersed
*ben* ḫ̄ɔʾammim b̄kol m̄dinɔt m̄alḳuṭekɔ
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. Esther 3:8

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44 Genesis 1:4 (2x), 6, 7 (2x), 14 (2x), 18 (2x); 3:15 (4x); Exodus 9:4 (2x); 11:7 (2x); 26:33 (2x); Numbers 26:56; 31:27 (2x); Judges 5:11; 9:23 (2x); 11:10; Ruth 1:17 (2x); 1 Samuel 14:42 (2x); 2 Samuel 14:6; 2 Chronicles 14:10; 19:10 (2x); Esther 3:8; Job 40:30; Proverbs 6:19; 18:18; Isaiah 59:2 (2x); Jeremiah 25:16, 27; Zechariah 11:14 (2x); Malachi 2:14 (2x).
Each inheritance will be apportioned by lot to the largest and the smallest [tribes] (literally, between the numerous and the few). Numbers 26:56

God sent an iniquitous spirit between Abimelec and the citizens of Shechem. Judges 9:23

But your sins are separating you from your God. Isaiah 59:2

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

(84) נָּפְּקָיְהוּ בֵּן שְׁנֵינוּ
wyokĩhu ben šnenu
CJ + decide-PC.3M.PL. EVAL two.of + us
Let them decide between the two of us. Genesis 31:37

(85) וְנַתַּתּ לְעַבְדְךָ לְשָׁמְעָלָָּׁאֶת־עַמְךָ בִּין־טוֹבָּלְר ע
wnɔtɔ ləʌbdəʌ leb šome-EC
give-WCSC.2M.SG. TO + servant + your heart.of listening
lišpɔt \ˈɛt-ˈammkɔ lhəbìn
TO + judge-INF. DOM + people + your TO + discern-INF.
ben-τοβ lrɔ
EVAL + good TO + evil
May you give your servant an understanding mind to judge your people [and] to discern between good and bad. 1 Kings 3:9

(86) יִשְׁפֹּטָּיְהו הָּׁבֵּי יְהוָה בֵּין בֵּי נְכָה
yišɔt YHWH beni ubenɛŋkɔ
judge-PC.3M.SG. PN EVAL + me EVAL + you
May Yahweh judge between you and me. Genesis 16:5

45 Genesis 16:5 (2x); 31:37, 53; Exodus 18:16 (2x); Leviticus 27:12 (2x), 14 (2x), 33; Numbers 35:24 (2x); Deuteronomy 1:16 (4x); 17:8 (3x); Judges 11:27 (2x); 1 Samuel 24:13 (2x), 16 (2x); 2 Samuel 19:36; 1 Kings 3:9; Isaiah 2:4; 5:3 (2x); Ezekiel 22:26; 34:17, 20 (2x), 22; 44:23 (2x); Micah 4:3; Malachi 3:18 (2x).
2.3.4.2.4  PREP (RECIPROCATIVE)

The antithesis of the separative function is the reciprocative function [RCPR], linking two or more mutually related entities.\textsuperscript{46} 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).

\[\text{ешבשת יהוה תהיה بين שניהם}(87)\]
\[
\begin{array}{llll}
\text{שְׁבֻעַתָּיְהו}{\text{H}} & \text{YHWH} & \text{tihye} & \text{ben} \ \text{šnehem} \\
\text{oath.of-F.} & \text{PN} & \text{be-PC.3F.SG. RCPR} & \text{two.of+ them}
\end{array}
\]

The oath to Yahweh will be between the two of them. Exodus 22:10

\textsuperscript{46} Genesis 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); Exodus 22:10; 31:13 (2x), 17 (2x); Leviticus 26:46 (2x); Numbers 30:17 (2x); Deuteronomy 25:1; Joshua 22:27 (3x), 28 (2x); Judges 4:17 (2x); 1 Samuel 7:14 (2x); 20:23 (2x), 42 (4x); 2 Samuel 3:1 (2x), 6 (2x); 21:7 (3x); 1 Kings 5:26 (2x); 14:30 (2x); 15:6 (2x), 7 (2x), 16 (2x), 19 (4x), 32 (2x); 22:1 (2x); 2 Kings 11:17 (5x); 2 Chronicles 13:2 (2x); 16:3 (4x); 23:16 (3x); Job 34:4; Proverbs 14:9; Jeremiah 7:5 (2x); Ezekiel 18:8; 20:12 (2x), 20 (2x); Zechariah 6:13.
He shall execute true justice between people. Ezekiel 18:8

This rock pile is a witness between you and me today. Genesis 31:48

The temporal function designating 'twilight', that is, the time between sunset and nightfall, is denoted by the phrase בֵּיןָּׁה עַרְבּ יִם 'between the two evenings' (90). This idiom is found eleven times exclusively in the priestly literature.47

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

2.3.4.3 Grammaticalization of *bayin

The putative lexical and semantic changes of *bayin will be traced in this section. The initial change 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.

2.3.4.3.1 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 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" (2004, 64). As such, they designate the change from 'center, middle' to LOCATIVE
(BETWEEN) (p. 63). Elsewhere in Semitic, an analogous extension to a locative relation occurred with Akkadian biritu 'space; between'.

A sequence of BH examples from the book of Ezekiel demonstrates 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 to compare the height of the vine to that of the treetops. In Example (92), ben governed by ʾel- TOWARD is the location at which the top of the tree resides. Finally, Example (93) locates the arborary apex with ben without employing a preceding function word. Whereas the second example possibly could be construed as a transitional state, the last demonstrates a syntactic situation in which the expansion to a locative preposition may have occurred.

(91) wattiḥbah qomoṭo ʿal-ben ʾōḥoṭim be.high-WCPC.3F.SG. height-F. + his ABOVE + space.of branches Its height reaches above the treetops. Ezekiel 19:11
wayyitten ṣammarto ʿel-ben ʾamām ʾābbātim
put-WCPC.3M.SG. top-M. + his TOWARD + space.of/BETWEEN branches
He set its zenith in amongst the branches. Ezekiel 31:10

uḇen ʾamām ḥawṭ ṣammarto
CJ + BETWEEN branches be-SC.3M.SG. top-M. + his
Its top was among the branches. Ezekiel 31:3

2.3.4.3.2  PREP (BETWEEN) > PREP (SEPARATIVE)

The preposition acquired additional grammatical meanings beyond 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 space, then, may provide the separative function. This function is exhibited in instances with certain verbs. Elsewhere in Semitic, a similar transition may be seen with Tigrinya bāyn 'alone; apart from' (Leslau 1987, 116).

In BH, this separative function may have derived from contexts where the locative preposition was used to separate two geographic entities as with Example (94) or two individuals as with Example (95). It is also plausibly a derivative of the idea of
mediation wherein an arbiter separates between two individuals, be they human such as Example (96) or divine such as Example (97).\textsuperscript{48}

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

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

\textsuperscript{48} Note also the situation in Genesis 42:23 where an interpreter acts as the individuation entity.
There is no intermediary between us [who] might set his hands upon us.  Job 9:33

I was standing between you and Yahweh at that time to relay to you his message.  Deuteronomy 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 YD 'to know' forms an idiom which requires a religious and moral evaluation of the prepositional objects as in Example (99).

(98) הַבְּדַּלְתֶּםָּׁ בֶּין־הַבְּהֵמ הָּׁהַטְהֹר הָּׁלַטְמֵא הָּׁוּבֵין־ה עוֹףָּׁהַט מֵאָּׁלַט הֹר
wiḥdaltem  ben-habbhemo  haṭṭhoro  laṭṭme'ɔ
separate-WCSC.2M.PL.  SPRT/EVAL + the.animal  the.clean  TO + the.unclean
uḥben-hɔ'ɔp  haṭṭme'  laṭṭohor
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. Leviticus 20:25

(99) לא־י דַעָּׁבֵּין־יְמִינְו  הָּׁלַטְמֵא הָּׁוּבֵין־ה עוֹףָּׁהַט
loʾ-yɔda'  ben-ymino  lišmo'lo
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

2.3.4.3.3 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. The connective function has a particular manifestation in Hebrew 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 Ge‘ez, where the etymologically similar compound babayna- may mean 'between', 'among', or 'to one another' (Leslau 1987, 116).

The connection between these two functions may be 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, benotenu 'between us' could express the locative function or the logical separation between the two groups.

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

2.3.4.3.4 PREP (BETWEEN) > PREP (TEMPORAL)

The temporal function of ben is likely to have been derived in Hebrew from a spatial metaphor. This typologically common shift from spatial to temporal notions is
well documented in the world's languages (Svorou 1994) and may be demonstrated by

Example (101) in BH. The location in time of these events is שׁוֹרָּׁאֶח דָּׁצֹאןָּׁשֵׁשׁ־בְּרֻרוֹתָּׁוְצִפֳּרִיםָּׁנַעֲשׂוּ־לִיָּׁוּבֵיןָּׁעֲשֶׂרֶתָּׁי מִיםָּׁבְּכ ל־יַיִןָּׁלְהַרְבֵּה ה' שׁוֹרָּׁאֶח דָּׁצֹאןָּׁשֵׁשֶׁשׁ־בְּרֻרוֹתָּׁוְצִפֳּרִיםָּׁנַעֲשׂוּ־לִיָּׁוּבֵיןָּׁעֲשֶׂרֶתָּׁי מִיםָּׁבְּכ ל־יַיִןָּׁלְהַרְבֵּה

which may be understood adverbially as a TEMPORAL denoting 'during ten days'.

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

2.3.4.4 Mapping the Grammaticalization Trajectories of *bayin

The linking of the attested pathways of change produces a trajectory map of these functional developments (Figure 2-G). 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 2-H.
2.3.5.1 Morphology of \textit{ba'ad}

The word \\textit{ba'ad} may be classified as the absolute form of the *qat\textit{l} pattern from the root \textit{B'D}. In general, this analysis is secure; however, a few morphosyntactic difficulties should be noted. First, the absolute state form \textit{ba'ad} is only attested in three instances as part of the construction \textit{mibba'ad l-} \textit{(Song of Songs 4:1, 3; 6:7)}. In the more typical construct state, the primary accent is lost yielding the form \textit{b'ad}, which occurs with a conjoining \textit{maqqef} or conjunctive accent (Bauer and
Leander 1922, 573-574). Second, the pronominal form is construed most commonly without additional suffixes as with בָּעַד, בָּעַד-3M.SG., בָּעַד-2M.SG. (pausal בָּעַד בָּעַד), בָּעַד-1C.SG., et cetera. However, alternative verbal and plural-type suffixed forms of the first person forms, singular בָּעַדְנֵי and plural בָּעַדְנֵי, are attested in Psalm 139:11 and Amos 9:10. An analogous paradigm is found with תַּחַת tahat (§2.3.12.1). These plural forms may well demonstrate the early stages of incorporation of this lexeme into the -e (<*-ay) paradigms discussed previously with regard to 'ah're (§2.3.2.1) and ben (§2.3.4.1).

Establishing the root poses a problem in that no related Hebrew lexemes witness the underlying consonantal structure of B'D. However, similar lexemes and verbs are attested throughout West Semitic. Function words derived therefrom are witnessed

49 The single attestation of a homophonous noun בָּעַד 'price' does not appear to be related; however, Driver (1954, 244) speciously postulates an unattested original noun "ba'ad change, exchange, price" as a derivative of this selfsame B'D root.
by Ugaritic $b^d$ 'behind; for',\(^{50}\) Aramaic $b^d$ 'after', Arabic $ba^d$u 'after', and OSA $b^d(n)$ 'after'. Ge‘ez, OSA, and Arabic attest cognate nouns meaning 'strange; alien; different', 'deaf', and 'distant; remoteness', respectively. Additionally, verbal roots from $B^D$ are known from OSA ('to take, carry away'), Ge‘ez ('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 over a century ago aptly pointed out:

Die Grundbegeutung der Wurzel $בעד$ [$B^D$] 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 (1905, 8-9).

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.

\(^{50}\) Note, also, the Ugaritic adverb $b^d$n 'behind' found at RS 2.[014] iii:33.
2.3.5.2 Usage of *baʿad*

The grammatical relations expressed by *baʿad* are discussed in this section including the functions proposed by several Hebrew grammarians. Building on the work of Hoch de Long, the term is claimed to have arisen from the original meaning of 'distance' and 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 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' (1990, §11.2.7a). This scheme is limited to the locative and the benefactive senses by others (van der Merwe, Naudé, and Kroeze 1999, §39.8, Williams 1976, §354-6).

Three main functions are differentiated in the present study that are not too unlike those suggested previously but provide better coverage for nearly all of the
attested contexts.\textsuperscript{51} These 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.

### 2.3.5.2.1 PREP (THROUGH)

The relation \textit{b’ad} may be schematized as a dynamic concept. Such dynamic relations can exhibit movement along a path or through space. This 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, 180-185). 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, 217-218). Thirteen examples of \textit{ba’ad} may be categorized as such.\textsuperscript{52} The most common Hebrew usage of this function designates the action of looking \textit{through} a bounded

\textsuperscript{51}Two examples, Isaiah 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).

\textsuperscript{52}Genesis 26:8; Joshua 2:15; Judges 5:28 (2x); 1 Samuel 19:12; 2 Samuel 6:16; 20:21; 2 Kings 1:2; 9:30; 1 Chronicles 15:29; Job 22:13; Proverbs 7:6; Joel 2:9.
entity, such as a window in Example (102), or exacting judgment through a dark cloud as with Example (103).

The relation "look through the window" may also designate a parabolic motion as Example (107) where a head is expelled from a besieged city. The PATH designated by $ba\acute{a}d$, 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 through a window as in Example (104). Example (105) similarly specifies a fall therefrom. In Example (106), the trajectory of the motion is reversed. The relation marked by $ba\acute{a}d$ may also designate a parabolic motion as Example (107) where a head is expelled from a besieged city.
Michal lowered David through the window. 1 Samuel 19:12

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

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

His head will be thrown to you over the wall. 2 Samuel 20:21
2.3.5.2.2 PREP (BEHIND)

A locative notion designating the BACK-REGION, that is, the rear of the landmark, may also be expressed by ba‘ad.53 This function typically marks the separation of an entity from another, which is located behind the complement, by means of an intermediary, most commonly a door as in Example (108) but also a wall in Example (109) or even in a single case body-fat with Example (110).

(108) יִשָּׁוֹוּ הָּּׁוַיִּוֹסְגֹּרָּּׁדַּלְתוֹתָּׁה עַלִי הָּׁבַּעֲד
wayyisgor dalṭoḥ hɔalïyyɔ ba‘aɗo
shut + WCPC.3M.SG. doors.of the.upper.chamber BEHIND + him
He closed the doors of the upper chamber after him. Judges 3:23

(109) בְּהָּּׁוַיִּיְוֹוּאָּּךְ לֶאָּּוַלְוָּל הָּּׁוַוֹוּא ָּוַלְוָּוַל הָּּׁוַוֹוּא
goḍar ba‘aɗi wlo’e sese’e
wall.up + SC.3M.SG. BEHIND + me CJ + NEG come.out-PC.1C.SG.
He has walled me in so that I cannot escape. Lamentations 3:7

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

2.3.5.2.3 PREP (FOR)

The largest number of instances of ba’ad can be categorized as marking the intended recipient of the particular action. In English, this function is commonly conveyed by the preposition 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 toward a recipient. Hence, one may pray for someone as with Example (111) or make atonement for a

54 Genesis 20:7, 18; Exodus 8:24; 32:30; Leviticus 9:7 (3x); 16:6 (2x), 11 (2x), 17 (3x), 24 (2x); Numbers 21:7; Deuteronomy 9:20; 1 Samuel 1:6; 7:5, 9; 12:19, 23; 2 Samuel 10:12 (2x); 12:16; 1 Kings 13:6; 2 Kings 19:4; 22:13 (3x); 1 Chronicles 19:13 (2x); 2 Chronicles 30:18; 34:21 (2x); Job 1:10 (3x); 2:4 (2x); 3:23; 6:22; 9:7; 42:8, 10; Psalms 3:4; 72:15; 138:8; 139:11; Proverbs 20:16; 27:13; Isaiah 8:19; 37:4; Jeremiah 7:16 (2x); 11:14 (3x); 14:11; 21:2; 29:7; 37:3; 42:2 (2x), 20; Ezekiel 22:30; 45:17, 22 (2x); Amos 9:10; Zechariah 12:8.
group in Example (112), but also Yahweh is said to restrain wombs from becoming pregnant in Example (113).

(111) בַּאֲדַּקָו

wyt\(\text{palle}l\)  \(\text{ba'ad}k\)\(\text{o}\)
pray-WCPC.3M.SG.  FOR + you

He prayed for you. Genesis 20:7

(112) בַּאֲדַּמ

wk\(\text{apper}\)  \(\text{ba'ad}m\)
CJ + atone-IMPV.M.SG.  FOR + them

Make atonement for them. Leviticus 9:7

(113) בַּאֲדַּר לְבֵיהַּאֲבִימֶלֶך t

ki-\(\text{or} t\)  \(\text{ar} t\)  \(\text{YHWH}\)
CAUS + restrain-INF.  restrain-SC.3M.SG.  PN
b\(\text{a'd} t\)  k\(\text{ol-reh}t\)  \(\text{b}t\)  \(\text{bim}le\)\(\text{ek}\)
FOR  every + womb  AT + house.of  PN

Because Yahweh withheld every womb in Abimelech's household. Genesis 20:18

2.3.5.3 Grammaticalization of \(ba'ad\)

The grammaticalization pathways of \(ba'ad\) 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 typological shifts from...
one function to another. Nevertheless, one may postulate using what is known about other changes that the original noun may plausibly have been extended to the locative or spatiodirectional function first and subsequently extended to mark the recipient of the verbal action. Thus, a hypothetical, even though unsubstantiated by the present data, continuum of change could be outlined as Noun \( \rightarrow \) [LOC, PATH] \( \rightarrow \) INTENDED RECIPIENT. A parallel change may be sited with the well-known typological shift from the allative to the dative (Heine and Kuteva 2004, 32-33). Such a change is attested in Semitic from Akkadian (von Soden 1995, §67). However, it must be recognized that this hypothesized pathway of change is based almost entirely upon analogy.

2.3.6 הֵלֶף ħeleph

2.3.6.1 Morphology of ħeleph

Only two instances of the lexeme הֵלֶף ħeleph are attested in BH, both in the eighteenth chapter of the book of Numbers. A *qitl nominal pattern of the root HLP accounts well for the morphological forms of ħeleph (Bauer and Leander 1922, 459-460).

The two verbal roots in BH that show the consonants of HLP may be divided by the
etymology of the initial-root consonant, that is, betweenḥ andḥ—the velar [x] and pharyngeal [h] voiceless fricatives—even though they are heteronyms.

The first root HLP, from which this *hilp 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 Ge’ez. The Hebrew *qatilat noun meaning 'replacement, exchange' is related as well. The second alternative HLP is unlikely correlated as the semantics are disparate in the Hebrew verb 'to pierce (through)' (Joshua 5:26; Job 20:24), Syriac verbal root 'to pierce', and Arabic noun ḥalifun 'sharp spear-head'.

2.3.6.2 Usage of ḥelep

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. Thus, in exchange for their cultic service in Example (114), they were given the tithe of the people of which ninety percent was theirs to keep as with Example (115). In both of these clauses, ḥelep
serves to designate the exchanged commodity, that is, †‘בּּוּדַת 'service' to the cultus.

וְלִבְנֵיָּׁהִנֵהָּׁנ תַתִּיָּׁכּ ל־מַעֲשֵׂרָּׁבְּיִשְׂרָּׁאֵל לָּלְנַחֲל הָּׁחֵלֶףָּׁעֲבֹדַת
wli ne lewi hinne nɔṭatti
CJ + TO + sons.of PN PRS give-SC.1C.SG.
kəl-маšer byišɔ’el ɪnaḥ̄lɔ helep ɔbodɔtom
every + tithe IN + PN FOR + inheritance EXCHANGE service + their
I gave the Levites the entire tithe of Israel as an inheritance for their service. Numbers 19:21

כִּי־שׂ כ רָּׁהוּאָל כֶּםָחֵלֶףָּׁעֲבֹדַתְכֶםָּׁבְּאֹהֶלָּׁמוֹעֵד
ki ɔ ru hul ɔm
CAUS + payment-M. that-M. FOR + you-M.PL.
helep ɔbodɔtkem b’ohel mo’ed
EXCHANGE service + your-M.PL. IN + tent.of meeting
For that is your payment for your service in the Tent of Meeting. Numbers 19:31

2.3.6.3 Grammaticalization of helep

As with the previous example, the paucity of transitional data precludes a sure analysis of the grammaticalization trajectory of helep. However, two data point to the likely change of nominal to function word, Noun ('change') > PREP (EXCHANGE).

First, the morphological form of the helep can only be explained as originating from a
nominal pattern, and the semantics of the related Hebrew word חֲלִיפוֹת ha’lifot 'change (of clothes)' (Judges 14:12, 13, 19) indicate 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' often acquire the meaning of EXCHANGE.

2.3.7 יַעַן

2.3.7.1 Morphology of ya’an

Two basic etymologies—one nominal and one verbal—have been suggested for the morphological form of יַעַן ya’an (< *ya’n). The originating morphological structure from which it derives remains somewhat controversial. After reviewing various proposals, Mulder concludes: "Die Etymologie des Grundstammes dieser Partikel muss jedoch dunkel genannt warden" (Mulder 1973, 49-51). The basic explanations of the originating form may be summarized as either nominal or verbal.
In his seminal work on noun patterns, Barth suggested that \( ya'an \) be classed with a handful of Hebrew examples exhibiting an archaic Semitic nominal prefix \( y- \) (Brockelmann 1908, §191-194, Kienast 2001, §109).

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 (Barth 1889, 226).

Along with \( yish\text{"or} \) 'oil', he derives \( ya'an \) from a \( *yaqtal \) pattern \( (*ya'nayu \rightarrow *ya'\text{"ane}) \), connecting it further with Arabic \( ma'nan \) 'meaning; sense' and Hebrew \( lma'an \) 'so that' (p. 230, Joüon and Muraoka 1991, §170f, n. 1). The proper names \( yish\text{"aq} \) and \( yish\text{"or} \) would also attest this pattern (Layton 1990, 11). The only other yod-prefix, common nouns in BH (Bauer and Leander 1922, 487-488) consist principally of the patterns \( *yaqtul \) (\( yahmur \) 'roebuck', \( yalqut \) 'pouch', \( yan\text{"up} \) 'heron') and \( *yuq\text{"il} \) (\( ybul \) 'produce'; \( yqum \) 'substance').

The alternative etymology requires that \( ya'an \) be derived from an original verb. Torczyner suggests that it was semantically cognate to the Arabic idiom \( ya'ni \) 'das heißt, bedeutet', which he claimed: "Ich selbst hörte es mehrmals geradezu in der Bedeutung
von hebr. יֵעַנ 'weil" (1912, 391). Further, Bauer suggests that יָאָן developed from *יָאָני, the third-person "aorist" form of יֵעַנ 'to have in mind' (1913, 241, Bauer and Leander 1922, §81b), and elsewhere it is derived from the homophonous verb 'to answer' (Waltke and O'Connor 1990, §38.4.a).

This second verbal explanation may be preferred because of the uniqueness of the form and the general rarity of y-prefix noun patterns in Hebrew. In addition the stress and sound changes required for a nominal origin would require special pleading as they are uncharacteristic of BH phonology. Such changes are evidenced with the third-weak verbal paradigm, that is, with the short prefix conjugation of the root יָנַי 'to answer': יָאָן 'he answered' (< *yānay).

2.3.7.2 Usage of ya'an

Although the morphology of ya'an is somewhat tentative, the semantic meaning and usages in BH are certain. Some have suggested elaborate usage patterns based on form-critical analysis (Gowan 1971), but, at bottom, the lexeme simply marks a 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).

However, 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 variation in usage, yaʿan cannot be accounted as a sure case of grammaticalization.

2.3.8 נֶגֶד neged

2.3.8.1 Morphology of neged

The morphological derivation of נֶגֶד neged is anything but certain. In contrast with the normal paradigms of *qvtl-type nouns, the forms with a singular suffix obscure the original base by preserving a realized seghol vowel in the first syllable—נֶגְּדִי negdī, נֶגְּדְּוֹ negdvō, נֶגְּדָו negdō, and נֶגְּדוּね negdō (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 neked 'progeny' (נֶכְדִּי nekdi) and יֶשַׁח yešah 'filth' (ךָיֶשְׁחֲ yešḥa). The nominal pattern of neged, then, may be reconstructed as *qatl or *qitl from the root NGD (Bauer and Leander 1922, 567g), although the transcription data from the Hexapla allows a preference for the latter (Brønno 1943, 242-243).

Regarding the root of neged, there is no question as to its consonant structure; however, its meaning is less transparent. Hebrew itself witnesses a verbal root NGD meaning 'to announce, inform' and a noun נָגִיד nagi'd designating a 'ruler'. Elsewhere in Semitic, Syriac witnesses a cognate noun naggid 'guide' which appears to be related to the extant 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 Ge‘ez, the noun የጎልል የጎልวล 'foreigner' is related to the verb nagada 'to travel, journey'; however, the etymologically similar noun nagad 'tribe; progeny' should plausibly be connected with the Hebrew semantic cognate נֶכֶד neked '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 nağl '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. The lack of clear nominal usages of neĝed in BH and the variation in verbal meanings witnessed across the Semitic languages make it difficult to ascertain with any degree of certainty the original semantics of the root.

2.3.8.2 Usage of neĝed

Despite claims to the contrary in several lexica, no definitive nominal usage is found in BH. 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 unwitnessed.55 It is not too

55 The form found twice in Psalm 116 (vv. 14, 18) in the phrase נֶגְדַּנְו לֵלֵי-עַמּוֹ neĝd-nn lv-‘ammo '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).
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. However, it is important to note that no such usage is known and the comparative data do not provide a definite picture of what the original meaning of such a lexeme would be. The taxonomy of neğed usages 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) or FRONT-REGION designating the frontal orientation of the corresponding complement (van der Merwe, Naudé, and Kroeze 1999, §39.16). 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, 156-169). For the most part, the FRONT-BACK spatial relationship is clear 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-אָמְמֹךָ אַתָּשֶׂה נֶפֶלָּה
neged kol-'ammokha yaseh nefelah
LOC all.of+nation+your do-PC.1C.SG. miracles
In front of all of your people, I will do wonders. Exodus 34:10

(117) וַיִּחַן-שׁם שִּׂרְאֵל נֶגֶד הָרָּה
wayyihan-sham yisra'el neged harah
camp-WCPC.3M.SG.+DEM PN LOC the.mountain
Israel encamped there in front of the mountain. Exodus 19:2

The locative sense may also be extended metaphorically. It is used to indicate that which is epistemologically known in Example (118), and not just what is seen corporally.

(118) כִּי-פְשׁ עָּוְחַט אתִיָּׁנֶגְדִּיָּׁת מִיד
ki-šay yahati nege dniim
CAUS+offence+my I know-PC.1C.SG.
whatstati negdi tomid
CJ+sin+my LOC+me continually
For I know my transgressions, and my sin is constantly before me. Psalm 51:5

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The relationship between this locative function and other similar functions, such as לִפְנֵי liḥne, is not entirely transparent. It may be posited that when used in conjunction neḡɛd indicates the more distant of the two entities (see 1 Kings 8:22 [2 Chronicles 6:12]; Psalm 23:5). Nevertheless, when two distal relations are indicated, they need not be spatially equal-distant whether the function word is repeated with each landmark (e.g. 1 Samuel 12:3; 15:30; Ezekiel 42:1, 3) or not (e.g. Nehemiah 8:3).

2.3.8.3 Grammaticalization of neḡɛd

On account of the paucity of evidence for the originating element, a full picture of the grammaticalization pathways of neḡɛd cannot be ascertained. Additionally, the present data do not support any obvious changes in the grammatical relations of the lexeme within BH. Thus, there appear no detectable shifts in functional usage to be mapped.
2.3.9 nokh

2.3.9.1 Morphology of nokh

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

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

Two uses of nokah are found in BH: 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 (§3.2.10).

2.3.9.2.1 Noun ('front')

The noun nokah marks geographical locations or denotes a direction. A polysemous anatomical source may be plausibly suggested (Svorou 1994, 84-85) but is not evidenced in BH. Construed within a preposition phrase, the noun may indicate 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 עד נוכח הָמָׁת 'ad-nokah lbo 'h'mat 'to the point opposite the entrance of Hamath'. The locative PREP 'ad 'unto' is combined with

.................................................................

56 Numbers 19:4; Joshua 15:7; Ezekiel 47:20.
the noun *nokhaš* to form the first of two prepositional clauses which describe the
western boundary of the land allotments of the twelve tribes of Israel.

(119)

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

2.3.9.2.2 PREP (BEFORE)

The most common usage of *nokhaš* is as a preposition expressing the locative relation situating an entity directly 'in front of' or 'before' another. 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, *nēḥaš lakotel*.

57 Exodus 26:35; 40:24; Joshua 18:17; Judges 18:6; 19:10; 20:43; 1 Kings 20:29; 22:35; 2 Chronicles 18:34; Esther 5:1 (2x); Proverbs 5:21; Jeremiah 17:16; Lamentations 2:19; Ezekiel 14:3, 4, 7, 2; 46:9

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nokḥ lma'ale ḏummim 'the point opposite to the ascent of Adummin',

describing the place which is opposite Gilgal where Judah's northern border extended;

whereas, נֹכַחָּׁמַעֲלֵהָּׁאֲדֻמִים nokḥ ma'ale ḏummim 'in front of the ascent of Adummin'

in Example (121) expresses almost the exact same notion to describe the northward
extent of Benjamin's allotment using the grammaticalized preposition with the
complement phrase.

[The border] turns northward toward Geliloth (a.k.a. Gilgal) which is in front of the ascent of Adummin. Joshua 15:7

[The border] turns north going toward Geliloth (a.k.a. Gilgal) which is in front of the ascent of Adummin. Joshua 18:17
2.3.9.3 Grammaticalization of nokah

The grammaticalization change witnessed by Hebrew nokah 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. As has been seen in several previous instances, locative function words frequently originate from nouns with spatial connotations. Specifically, nokah 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 by several Semitic prepositions with the locative function BEFORE, including Ugaritic qdm 'before', Aramaic qbl 'opposite to', qdm 'before', Arabic ʿamāma 'before, in front of', Ge'ez fašma 'before, in opposition (to)', and Akkadian mahra 'before'.
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. Numbers 19:4

One example in the Hebrew corpus provides a probable context of change. In the purification rite of Numbers 19, the priest was commanded to slaughter a red heifer (vv. 1-3). The drained blood was to be brought to the tent of meeting to be applied to the entrance. The verbal idiom (הִזּ הָּׁאֶל־ hizz ʿel-NP 'sprinkle towards', see also Leviticus 14:51) designates the action of spraying something in the direction of an entity. In Example (122), the entity spattered is the described as נֹכַחָּׁפְּנֵיָּׁאֹהֶל־moʿe the front.of tent.of meeting PART + blood + her seven times. The use of nokah and pne 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 red heifer in the direction of the entrance to the tent of meeting.

2.3.9.4 Mapping the Grammaticalization Trajectories of nokah

In sum, the function word derived 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 2-I, or it may alternatively be outlined in the Overlap Model of Figure 2-J. The BH situation is represented as Stage II with the coexisting functions of the relation noun 'front' and the locative function BEFORE.

Figure 2-I: Functional Developments of nokah

Noun ('front') > PREP (BEFORE)

Figure 2-J: Overlap Model for nokah

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>'front'</td>
<td>'front'</td>
</tr>
<tr>
<td>PREP</td>
<td></td>
<td>BEFORE</td>
</tr>
</tbody>
</table>
2.3.10 \( \text{סְבִיב} \) 

2.3.10.1 **Morphology of \( \text{סְבִיב} \)**

The basic morphological form of \( \text{סְבִיב} \) is unremarkable; however, some variance in its derived forms should be noted. From the verbal root \( \text{SBB} \) meaning 'to surround; turn around', the widely-attested Semitic nominal pattern \( *qatil \) accounts for the morphological structure (Fox 2003, 187-196). In BH this pattern is realized as \( s\text{ɔ}b\text{i}b \) with an irreducible /i/ vowel (Bauer and Leander 1922, 470-471).

Both feminine and masculine plural constructions are found with the construct form (fem. \( \text{סְבִיבָּׁת} \); masc. \( \text{סְבִיבָּׁי} \)) and with suffixes (fem. \( \text{סְבִיבָּׁתְו} \), \( \text{סְבִיבָּׁתְוָּות} \); masc. \( \text{סְבִיבָּׁ} \), \( \text{סְבִיבָּׁה} \)). The feminine-type is more common, making up 86% 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 2-4). For instance, in the Book of Jeremiah a disproportionally high percent are of the masculine-type (78%); whereas, the feminine-
type form is used exclusively in the Book of Ezekiel. On the other hand, the two forms
are used in poetry to avoid homophony in parallel lines, as found with סְבִיבָה סְבִיבֻיָה in Psalm 89:8-9.

Table 2-4: Comparison of Feminine- and Masculine-type plurals of סְבִיבָה

<table>
<thead>
<tr>
<th></th>
<th>feminine-type</th>
<th>masculine-type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torah</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Joshua - Kings</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Chronicles</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Ezra - Nehemiah</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Job</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Psalms</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Ecclesiastes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Jeremiah</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Lamentations</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Ezekiel</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Daniel</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Zechariah</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>71 (86 %)</td>
<td>12 (14 %)</td>
</tr>
</tbody>
</table>

2.3.10.2 Usage of סְבִיבָה

The lexeme סְבִיבָה functions as a noun, adverb, and function word in BH. Each of
these usages is examined below.
2.3.10.2.1 Noun ('environs')

The geographic noun meaning 'environs; vicinity; circumference' is evident from several examples in the biblical corpus. 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)

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. Jeremiah 32:44

---

58 Exodus 7:24; 1 Chronicles 11:8; Psalms 44:14; 79:4; Ecclesiastes 1:6; Jeremiah 17:26; 32:44; 33:13; Ezekiel 16:57; 28:26; 34:26; 48:35; Amos 3:11.
You have made us the disgrace of our neighbors,
The derision and mockery of those around us. Psalms 44:14

2.3.10.2.2 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, 118-121, 160).^59^

^59^ Genesis 23:17; Exodus 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; Leviticus 1:5, 11; 3:2, 8, 13; 7:2; 8:15, 19, 24; 9:12, 18; 14:41; 16:18; 25:31; Numbers 3:26, 37; 4:26, 32; 16:27; 32:33; 34:12; 35:4; Deuteronomy 12:10; 25:19; Joshua 21:44; 23:1; Judges 2:14; 8:34; 20:29; 1 Samuel 12:11; 14:21, 47; 31:9; 2 Samuel 5:9; 7:1; 24:6; 1 Kings 3:1; 5:4, 11, 18; 6:5 (2x); 7:12, 18, 20, 23 (2x), 24, 35, 36; 2 Kings 11:8, 11; 25:1, 4, 10, 17; 1 Chronicles 10:9; 11:8; 22:9, 18; 2 Chronicles 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; Psalms 3:7; 12:9; 31:14; 97:3; Isaiah 42:25; 49:18; 60:4; Jeremiah 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; Lamentations 2:3, 22; Ezekiel 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), 29 185
2.3.10.2.3 PREP (AROUND)

Used as a function word, סַבּּ ל  expresses the spatiodirectional relation AROUND (O'Dowd 1998, 91-92). The grammatical status of the lexeme may be observed most clearly in Example (125) where it is used to modify the nominal כִּכּ ר kikkɔr with a similar original meaning of 'environs, vicinity'. In Example (126), the PP headed by סַבּּ ל serves as the predicate of a verbless clause.
The singers—those both from the vicinity around Jerusalem and from the villages of the Netophoth—gathered. Nehemiah 12:28

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

2.3.10.3 Grammaticalization of *səbib*

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, 122-123) 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 witnessed from the Akkadian nominal *itâtum* 'circumference, vicinity; all around', and Ge‘ez ʿawd '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. 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 סְבִּיבוֹת יְרוּשָׁלָיִם 'the environs of Jerusalem' which could have been reinterpreted as indicating the spatial location 'around Jerusalem'.
For the singers had built villages for themselves around Jerusalem. Nehemiah 12:29

The grammaticalization of *sbiḥ* is represented by the functional development chart of Figure 2-K and the overlap model of Figure 2-L.

Figure 2-K: Functional Developments of *sbiḥ*

- Noun ('environs') > PREP (AROUND)

Figure 2-L: Overlap Model for *sbiḥ*

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>'environs'</td>
<td>'environs'</td>
</tr>
<tr>
<td>PREP</td>
<td></td>
<td>AROUND</td>
</tr>
</tbody>
</table>

2.3.11 עֵקֶב (*eqeb*)

2.3.11.1 Morphology of *eqeb*

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

2.3.11.2 Usage of ‘eqeb

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

2.3.11.2.1 Noun ('end')

The noun may mean 'end' or 'reward' as in Example (128). This usage is limited
to six contexts in the Psalter and the Book of Proverbs.61

2.3.11.2.2 PREP/ADVZ (CAUSE)

The grammatical function of ‘eqeb designates a causal relationship either heading a NP as a preposition or with a following verb as an adverbializer. Example (129) demonstrates that the preposition may be followed by a noun. In the majority of the cases, however, the function word is construed with an embedded clause with the relative ʾašer found with a complement structure as with the usage in Example (130).

(129)

מַצְדִיקֵיָּר שׁ עָּׁעֵקֶבָּׁשֹׁ
mašddiqe ʾeqeb ʾašer maʿatɔ bqoli
acquitting-PTCP.M.PL. evil CAUSAL bribe
[Woe to] those exonerating the wicked as a consequence of a bribe. Isaiah 5:23

(130)

וְהִתְבּ רֲכוָּּׁבְזַרְעֲךָָּׁכֹּּלָּׁגּוֹיֵיָּׁה א רֶץָּׁעֵקֶבָּׁאֲשֶׁרָּׁשׁ מַעְתּ ָּׁבְּקֹלִי
whiˈtɔrances ʾeqeb ʾašer kol goye hɔɛɾɛs
be.blessed-WCSC.3C.PL. IN + seed + your all.of nations.of the earth ‘eqeb ʾašer ɔmaˈtɔ bqoli
CAUSAL REL listen-SC.2M.SG. TO + voice + my
Every nation on earth will be blessed in your seed because you heeded my voice. Genesis 22:18

62 Genesis 22:18; 26:5; 2 Samuel 12:6, 10; Amos 4:12; Isaiah 5:23.
63 Numbers 14:24; Deuteronomy 7:12; 8:20.

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In three instances the causal function word takes a verbal complement. 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 as the following clauses serve clear subordinating functions. Each expresses a causal relation to the main verb as found in Example (131).

(131) כֵּן תֹּהֶדְנָּה לֵאָּׁ תְּשִֹמַּעְּךָּו בֵּעֵקֶּּלְּתִי שְּמִּיָּו הָּאְלֹהֵיכֶם
ken tohe dun ‘eqeb lo tišm‘un
thus perish-PC.2M.PL. CAUS NEG listen-PC.2M.PL.
bqol YHWH ᵇโยהֶקֶם
to + voice.of PN god-your
Thus you will perish because you did not heed the voice of Yahweh your God.
Deuteronomy 8:20

2.3.11.3 Grammaticalization of ‘eqeb

No clear context for the shift of ‘eqeb from a noun to CAUSE is attested in BH. Nevertheless, nouns connoting CAUSE, AIM, or the idea of telos are well known to grammaticalize into causal markers. Further, the syntagmatic use of ‘eqeb with the
relatives likely led to the intra-clausal subordinating function as found with the
adverbializer usage of ʾaḥre (§2.3.2.2.3).

2.3.12תַּחַת taḥat

2.3.12.1 Morphology 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, 139-140) 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 well-known throughout the West Semitic
languages and establish the presence of the underlying root denoting a spatial
depression. Phoenician and Punic tht 'under' is prepositional. In Amarna Canaanite, a
form with suffix is found as ta-ḥaτ-ta-μu 'under them' (EA 252:26). The Ugaritic
language demonstrates a locative preposition thτ denoting 'under' and an adjective thτy
'lower'. Along with an anatomical noun thτ 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 \textit{thet} (with nouns) and \textit{thut} (with suffixes) 'below, under', an adverb \textit{taht} 'downward', adjectives \textit{tahtyo} 'lower', and various nouns (\textit{tahtyuto} 'descent' and \textit{mtahtyuto} 'humiliation') as well as a de-nominal verb \textit{tahtti} 'to abase, bring low'. Arabic \textit{tahta} is a locative preposition but may be used as an adverbial phrase \textit{min tahtu} 'beneath', and \textit{tahtaniyyun} is an adjective 'lower; inferior'. The verb \textit{tehta} 'be humble' is found in Ge‘ez as well as nouns, prepositions, adverbs, and adjectives built from the same root. Finally, Sabaic \textit{tht} 'below' is a function word, and \textit{thty} 'lower part(s)' is a noun.

The Hebrew forms with pronominal suffixes, like several of the related Semitic function words, witness some morphological variation. For the most part, the suffixed forms pattern after the plural nouns (Table 2-5), similar to those with \textit{‘ahre} (§2.3.2.1). Unlike \textit{‘ahre}, however, there is no witnessed independent form, which according to G. R. Driver "ought (...) to be \textit{t‘hatayy}" (1937, 346). Moreover, four suffix variants have been described as following the verbal paradigm (Gesenius, Kautzsch, and Cowley
1910, §103d) as previously seen with בְּעַדנָי baʿadnai (§2.3.5.1).\textsuperscript{64} For the analogous Ugaritic prepositions with the enclitic particle -n, a development from the energetic 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 ‘mn ‘with’ (an alloform of ‘m), hln 'here', and āpn 'then', demonstrate a productive enclitic particle or merely an vestigial suffix. Further, it has been noted that the third-person feminine singular suffix is formally analogous to the Hebrew verb with the nun energicum (e.g. נִכְלָה nikkalāh to’k’le’nna), the negative existence particle נִי ה enen, and the durative adverb וֹדְנָה odena (Gesenius, Kautzsch, and Cowley 1910, §100o).

Brockelmann (1899, 347, n. 1) has suggested 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 נִמְנָה nimmanah 'from her' (< \*[minmin]_{PREP} + [hā]_{3F.SG.}) to [mimm]_{PREP} + [en]_{3F.SG.} as seen with נִמְנָה nimma 'from you' (= [mimm]_{PREP} + [kō]_{2M.SG.}).

\textsuperscript{64} The third-person masculine singular and plural forms could alternatively be explained as patterning after the singular nouns with pronominal suffixes.

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Although this internal analogy may be explanatory for some forms, it does not account for the non-duplicated nun forms, like \( taḥteni \) and \( ba\text{ḥ}\text{deni} \), which may better be explained as preserving a frozen expansion particle as in Ugaritic.

Table 2-5: Nominal and Verbal Suffixed Forms of \( taḥat \)

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Plural Noun-type (instances)</th>
<th>Verbal-type (instances)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1C.SG.</td>
<td>( tahtay (1) ) ( tahtcy ) [pausal] (8)</td>
<td>( taḥteni (3) )</td>
</tr>
<tr>
<td>1C.PL.</td>
<td>( taḥtenu (2) )</td>
<td></td>
</tr>
<tr>
<td>2M.SG.</td>
<td>( taḥtɛ (9) )</td>
<td></td>
</tr>
<tr>
<td>2M.PL.</td>
<td>( taḥteɛm (2) )</td>
<td></td>
</tr>
<tr>
<td>3M.SG.</td>
<td>( taḥto (4) )</td>
<td></td>
</tr>
<tr>
<td>3M.PL.</td>
<td>( taḥtehɛm (5) )</td>
<td>( taḥtɛm (11) )</td>
</tr>
<tr>
<td>3F.SG.</td>
<td>( taḥteho (16) )</td>
<td>( taḥtɛnɛ (1) )</td>
</tr>
<tr>
<td>3F.PL.</td>
<td>( taḥtehɛn (1) )</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137 (88%)</td>
<td>19 (12%)</td>
</tr>
</tbody>
</table>

2.3.12.2 Usage of \( taḥat \)

The majority of the instances of \( taḥat \) in BH 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.
2.3.12.2.1 Noun (‘place’)

The usage of taḥat as the noun ‘place’, that is, a physical location or an abstract position, may be assessed in several contexts. In Example (132), taḥat denotes the locality where the diseased stones were previously dislodged from the walls of a house and new stones were placed. The replacement stones are said to be brought אֶל־תַּחַתָּׁה ʾאֲבַנִים 'el-taḥat hoʾabnim 'to the place of the stones'. This string is best analyzed as the directional preposition 'el 'to(ward)' heading the noun phrase, taḥat hoʾabnim 'the location of the stones'.

(132)

They shall take other stones and put [them] in the place of the [diseased] stones.

Leviticus 14:42

2.3.12.2.2 Adverb ('below')

While the usual adverbial expression for BELOW is מִתַּחַת mittaḥat l- (see Exodus 20:4), in two poetic lines the independent form taḥat is used equivalently.66

This adverbial usage of taḥat is seen in Example (133) where the phrase תְּהוֹם רָבֶצֶת thom robešet taḥat 'the deep lying down below' is in parallel to שְׁמֵיִם me’ol 'the heavens above'.

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He will bless you with the blessings of the heavens above,  
With the blessings of the deep lying below.  Genesis 49:25

2.3.12.2.3  PREP (UNDER)

The locative relation designating that the trajector is located spatially  
subordinate to the landmark is expressed by *taḥat.* This expression is the usual idiom

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67 Genesis 7:19; 18:4, 8; 21:15; 24:2, 9; 35:4, 8; 47:29; Exodus 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; Leviticus 15:10; 22:27; Numbers 6:18; 16:31; 22:27; Deuteronomy 2:25;  
Judges 1:7; 4:5; 6:11; Ruth 2:12; 1 Samuel 14:2; 22:6; 31:13; 2 Samuel 18:9 (2x);  
22:10, 37, 39; 1 Kings 5:5 (2x); 7:44; 13:14; 14:23; 19:4, 5; 2 Kings 9:13; 16:4, 17;  
17:10; 1 Chronicles 10:12; 17:1; 29:24; 2 Chronicles 4:15; 28:4; Nehemiah 2:14; Job  
20:12; 26:8; 28:5, 24; 30:7, 14, 16, 20; 37:3; 40:12, 21; 41:3, 22; Psalms 10:7; 18:10,  
37, 39; 66:17; 91:4; 140:4; Ecclesiastes 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 of Solomon 4:11; 8:3, 5; Isaiah 14:11; 25:10; 57:5 (2x); Jeremiah 2:20; 3:13;  
38:12; 52:20; Lamentations 3:34; Ezekiel 1:23; 6:13 (2x); 10:8, 20, 21; 17:6, 23; 24:5;  
31:6; 32:27; Daniel 9:12; Hosea 4:13; Joel 1:17; Amos 2:13; Obadiah 7; Jonah 4:5;  
Micah 1:4; 4:4 (2x); Habakkuk 3:7, 16; Malachi 3:21.
for locating an entity below another as with Example (134). This function may be further differentiated from the spatial noun where it is conjoined with a following noun phrase specifying a location, masṣaḥ raḡle hakkōnim '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) וַיִקַּחְוֶּנֶּוָּׁגְּדוֹל הָּּׁוַיְקִימֶה ָּׁשִּתַּחַתָּׁה אַל הָּּׁוַיְקִימֶה
wayyiqqaḥ ḥeḥen gdolc
take-WCPC.3M.SG. stone-F. large-F.
wayqimhec ʾom ṭaḥaṭ hoʿallc
erect-WCPC.3M.SG. + her there UNDER the.oak-tree
He brought a large stone and erected it there under the oak. Joshua 24:26

(135) ושְׁתֵּיםָּׁעֶשְׂרֵהָּׁאֲב נִיםָּׁהֵקִיםָּׁיְהוֹשֻׁעַָּׁבְּתוֹךְָּׁהַיַרְדֵּןָּׁתַּחַתָּׁמַצַבָּׁרַגְלֵיָּׁהַכֹּהֲנִים
uštem ʿesre ḥeqim yhošuʾc
CJ + two ten stones set.up-SC.3M.SG. PN
bṭok hayyarden ṭaḥaṭ masṣaḥ raḡle hakkōnim
IN + midst.of the.Jordan UNDER place.of feet.of the.priests
Joshua erected twelve stones in the middle of the Jordan River where the priests stood. Joshua 4:9

(136) וְהַחִוִּיתַּחַתָּׁחֶרְמֹןָּׁבְּאֶרֶץָּׁהַמִצְפּ ה
whaḥiwwi ṭaḥaṭ hermon bʾereṣ hammīṣpoc
CJ + PN UNDER Hermon IN + land.of the.Mizpah
The Hivites were [dwelling] at the foot of Mount Hermon in the land of Mizpah. Joshua 11:3
2.3.12.2.4  PREP (INSTEAD)

The function word may express the substitutive relation similar to English

*instead* or French *au lieu de.*\(^68\) This term denotes the succeeded priest (e.g. Deuteronomy 10:6), king (e.g. 2 Samuel 10:1), progeny (e.g. Genesis 4:25), or substitutionary sacrifice (e.g. Genesis 22:13). It may also be used with an inanimate to explicate the replaced entity—most famously in the so-called "law of retaliation" or *lex talionis* (137).

He shall give life for life, eye for eye, and tooth for tooth. Exodus 21:23-24

2.3.12.2.5  PREP (CAUSE)

A causal function may also be differentiated with several usages of taḥat + NP.69

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) may even be used clause-initially in parallel with a כי ki clause further delimiting the CAUSE of the proposition.

May Yahweh repay you with good on account of what you have done for me this day. 1 Samuel 24:20

Should not Shimei be executed for this, because he cursed Yahweh's anointed? 2 Samuel 19:22

2.3.12.3 Grammaticalization of taḥat

The grammaticalization changes of taḥat from original noun to function words will be traced with the potential contexts of change and similar cross-linguistic shifts of meaning.

2.3.12.3.1 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 may be further characterized using Svorou's "surface under object" type of environmental landmark which is identified in several languages including Bihari, Basque, and Yagaria (1994, 79-83, 254). A similar change may be elucidated with a Semitic example in Akkadian where the regular expression of UNDER is expressed by the term šaplānu which may be derived from a noun meaning 'the lower or underneath part' (von Soden 1995, §115g). Leslau (1956, 244) has outlined a parallel change with cognates of the term tahat in several Ethiopic dialects including Ge’ez, Tigre, Tigrinya, Harari, and Amharic.

The potential situation of change may be observed in extant Hebrew contexts wherein ambiguous cases could be 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 נתְחַת רָגְלוּ tahat raḡlow refers to what is underneath God's feet either as a noun indicating the place/area or as a locative function for UNDER.
[The elders] saw the God of Israel—something like sapphire pavement was beneath his feet. Exodus 24:10

Additionally, the term may be used in conjunction with several entities to denote subordination or control. A similar extension is found with Akkadian šap lum 'underside' being understood as UNDER or 'under the charge of'. In Hebrew, this supervisory function appears to have evolved from the idiom תחת יד ta hat y ed '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 תחת יד ta hat y edko '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

70 Genesis 16:9, 41:35; Leviticus 27:32; Numbers 5:19, 20, 29; Judges 3:30; 1 Samuel 21:4, 9; 2 Samuel 22:40, 48; 1 Kings 5:17; Job 9:13; Psalms 8:7; 18:40, 48; 45:6; 47:4 (2x); 106:42; 144:2; Isaiah 3:6; 10:4 (2x), 16; Ezekiel 20:37.
animate complements, in particular persons (e.g. Isaiah 10:4) or manifestations of the
divine (e.g. Isaiah 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 הַשְּׁבֵט haššəbət 'the staff'. Whether this usage is indeed a separate
function from UNDER or simply a metaphorical extension is difficult to ascertain;
however, it may be included herewith until further study may help determine whether
or not it has an independent status.

יָאָוָי נִשְׁפָּה הֲתַחֲתִי תַחְתִּי הֲנִיתָי־פֹּהָי־דְוָי־דְוָי הֲנִיתָי־כֵּלָי־לֹא קַחְי הֲנִיתָי

wʾin yeš-po tahat yoḥḵe hʾnit ṣo-horeḥ
CJ + INTR EXIST + here UNDER hand + your spear OR + sword
ki ḡam-ḥarbi wḡam-kelay
CAUS also + sword + my CJ + also + weapons + my
loʾ-ḵqaḥti byḏi
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 Samuel 21:9
As for every tithe of cattle or flock which should enter the care of shepherds, every tenth animal is to be dedicated to Yahweh. Leviticus 27:32

2.3.12.3.2 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, 239-240). In Semitic, Akkadian pittu(m) 'region, area' came to mean 'instead of' in Neo-Assyrian texts. A proposed context of change in Hebrew may be suggested in Genesis 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 תַּחְתֶּנ ה taḥtennō either designating the locality of the sealed wound or marking the substitutive relation of flesh for rib.
An additional shift may further delimit the grammatical function EXCHANGE.

In Example (144), Rachel offers Leah, her rival wife, a sexual encounter with their husband in exchange for a philter. Examples of this usage are rare in the biblical corpus (elsewhere only at 1 Kings 21:2) and are not known in later dialects of Hebrew.

Therefore, he may sleep with you tonight for your son's mandrakes. Genesis 30:15

2.3.12.3.3 PREP (UNDER) > PREP (CAUSE)

Examples of the change from 'place' to CAUSE and from LOCATIVE to CAUSE are witnessed in the typological data. The former may possibly include an additional locative step according to Heine and Kuteva (2004, 239). Two Semitic examples of
causal relations, Ge‘ez hayyanta ‘instead of; because of’ and Akkadian kīma ‘in place of; because’, may be related to INSTEAD; however, the originating terms of each are obscured.

In BH, 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 taḥat '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 are those causing the circumstances.

(145)

The earth is defiled under/because of its inhabitants, for they contravene instructions, transgress statutes, and break enduring covenants. Isaiah 24:5
2.3.12.4 Mapping the Grammaticalization Trajectories of *taḥat*

The grammaticalization changes are mapped using two methods. Figure 2-M 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. The second model (Figure 2-N) 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.

Figure 2-M: Functional Developments of *taḥat*

Noun (‘place’) > PREP (UNDER) > PREP (CAUSE) > PREP (INSTEAD)
2.3.13 Other Prepositions

Several other nouns have been suggested to express functional relations in BH (Olshausen 1861, §223). Four of these expressions are briefly overviewed in this section, although the rarity of their usage prohibits a definitive analysis. Each section discusses the suggested grammaticalizations, typological parallels, and originating forms.

2.3.13.1 בֵּית bet

Three instances in BH suggest that the construct noun בֵּית bet 'house' may have functioned to mark a locative notion.\(^71\) The eighth chapter of the book of Proverbs provides the most evident example of the grammatical usage as a LOCATIVE. In a

\(^{71}\) Ezekiel 41:9, Job 8:17; Proverbs 8:2.
threefold sequence locating the place from which personified Wisdom beckons, the
third adverbial modifier is בֵּיתָּׁנְתִיבוֹת bet nṭibot 'along the paths' in Example (146).

Other locative functions with the noun nṭibot are expressed in Proverbs with b- (7:25),
btok (8:20) and ablative min- (1:15); elsewhere in BH poetry l- (Psalm 119:105) and ‘al
(Job 19:8) are used.

[Wisdom] stands on top of the heights, upon the roadway, (and) along the paths.  
Proverbs 8:2

Such a shift ('house' > LOCATIVE) is well-known cross-linguistically (Heine and  
Kuteva 2004, 176-177). 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).

2.3.13.2 missat

Only a single instance of missat is witnessed in BH at Deuteronomy 16:10.

From the context of the clause in 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). However, the paucity of BH data does not allow for a reliable analysis of potential changes.

You shall perform the Feast of Weeks to Yahweh your God with a freewill offering. Deuteronomy 16:10

2.3.13.3 פֶּתַח petah

Lambdin has suggested that the noun פֶּתַח petah 'opening' may also be used as a preposition denoting "at the opening of" (1971, 185). The usage of this noun phrase as a preposition, however, is difficult to separate from the adverbial usage of the locative phrase in BH. No clear instance of prepositional extension is detectable in the present
corpus. Yet it cannot be dismissed that such an expansion may be seen as in an early
stage of change.

2.3.13.4 ק ב ל qbl

A lone attestation of ק ב ל qbl 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 ק ב לוֹ qbl-lo in Example (148) could be understood as an
adverbial modifier designating the location before which Shallum struck down the
king. 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,
qbllo 'his battering ram' (Ezekiel 26:9), is also attested; however, the precise
etymological relationship is uncertain (Bauer and Leander 1922, 582). As an
alternative, some commentators follow a Greek tradition in which this expression is
reread as the toponym bybl'm 'Ibleam' (Gray 1977, 620).
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wayyakkehu ָּׁ והוָּּׁק ָּׁ לְָּׁ ע ָּׁם
strike-WCPC.3M.SG. + him BEFORE + people
He struck him before the people. 2 Kings 15:10

2.4 Overview of Simple Prepositions

This chapter has presented the examples of BH nouns being grammaticalized into functions. In each case, the different usages of the noun and resulting grammatical relations were outlined along with a detailed accounting of the semantic layering and proposed contexts of change. The morphosyntactic contexts consist of the noun in a genitive construction with a follow NP which expanded its semantic notion into a grammatical function as a preposition. Similar trajectories of change were examined from cross-linguistic data with particular attention given to analogous Semitic examples.

The outcomes which grammaticalized from nouns are outlined in Table 2-6 organized according to the functional outcome and original source. 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 example demonstrates the change to a particle in a particle-verb construction.

Table 2-6: Grammatical Outcomes from Nouns

<table>
<thead>
<tr>
<th>Function</th>
<th>Outcome</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATIVES:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AROUND</td>
<td>סbióḅ</td>
<td>&lt; sbióḅ 'enirons (of)'</td>
</tr>
<tr>
<td>BEFORE</td>
<td>נגẹגד</td>
<td>&lt; נגẹגד 'opposite (of)'</td>
</tr>
<tr>
<td>BEFORE</td>
<td>nokah</td>
<td>&lt; nokah 'front (of object)'</td>
</tr>
<tr>
<td>BEHIND</td>
<td>ʾahar</td>
<td>&lt; ʾahar 'back (of)'</td>
</tr>
<tr>
<td>BEHIND</td>
<td>ʾahare</td>
<td>&lt; ʾahare 'back of'</td>
</tr>
<tr>
<td>BEHIND</td>
<td>בעד</td>
<td>&lt; *baʿad 'distance (of)'</td>
</tr>
<tr>
<td>BESIDE</td>
<td>ʾesel</td>
<td>&lt; *ʾesel 'side (of)'</td>
</tr>
<tr>
<td>BETWEEN</td>
<td>*ben</td>
<td>&lt; *bayin 'space between'</td>
</tr>
<tr>
<td>*IN</td>
<td>bet</td>
<td>&lt; bayit 'house'</td>
</tr>
<tr>
<td>NEAR</td>
<td>ʾesel</td>
<td>&lt; ʾesel BESIDE</td>
</tr>
<tr>
<td>UNDER</td>
<td>tahat</td>
<td>&lt; tahat 'place'</td>
</tr>
<tr>
<td>DIRECTIONALS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THROUGH</td>
<td>baʿad</td>
<td>&lt; baʿad 'distance'</td>
</tr>
<tr>
<td>TOWARD</td>
<td>ʾesel</td>
<td>&lt; ʾesel BESIDE</td>
</tr>
<tr>
<td>TEMPORALS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFTER</td>
<td>ʾahar</td>
<td>&lt; ʾahar BEHIND</td>
</tr>
<tr>
<td>AFTER</td>
<td>ʾahare</td>
<td>&lt; ʾahare BEHIND</td>
</tr>
<tr>
<td>BETWEEN</td>
<td>*ben</td>
<td>&lt; *ben BETWEEN (LOC)</td>
</tr>
<tr>
<td>THEN</td>
<td>ʾahar</td>
<td>&lt; ʾahar AFTER</td>
</tr>
</tbody>
</table>

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In the following chapter, the changes to polymorphic expressions in BH will be discussed and exemplified. The functional shifts of the complex prepositions resulting in new relations are examined. As in the present chapter, the focus will be on the component lexemes and the changes that yield grammatical functions. The grammaticalization trajectories will likewise be presented along with the typologically similar changes.

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CHAPTER THREE

3 Introduction to Complex Prepositions

A multi-word preposition is a combination of more than one discrete sequential morpheme that functions prepositionally as a single linguistic unit, for instance, English out of or in front of. There are several types of these polymorphic expressions including compound, complex, and compound-complex prepositions. Compound prepositions consist of the combination of two or more prepositions, such as English into (< in + to).

The semantics of compound prepositions is characteristically an aggregate of the constituent functions. The blending of a preposition and noun phrase, as in English in front of, is designated as a complex preposition. These sequences are typically interpreted as a single grammatical meaning and may be near semantic equivalents of other function words. An example is found with English before as compared with in front of—both the simple and the complex preposition may be used to express a locative relation denoting the FRONT-REGION. A compound-complex preposition, lastly, consists of a composite of multiple consecutive prepositions and noun phrases.
(e.g. English *from in front of*). This type serves to denote several prepositional functions in a single string as an aggregate, similar to compound prepositions.

### 3.1 Complex Prepositions and Grammaticalization

Of these multi-word expressions, complex prepositions provide the clearest examples of grammaticalization. These strings undergo gradual change to their semantics and 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. 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 innovative grammatical functions, that is, grammaticalization, and rebracketing of the sequence, that is, syntactic reanalysis. An example is observable with English *in front of* which originated as a preposition phrase, $[\text{in}_{\text{PREP}} \left[\text{front of the house}\right]_{\text{NP}}]_{\text{PP}}$. In Modern English, the
sequence has become a complex preposition with the structure, \[ [in\ front\ of]_{\text{PREP}} [the \ house]_{\text{NP}} \]_{\text{PP}}, which may be used in certain contexts as akin to the locative meaning of \textit{before}.

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 as a sequence of independent lexemes but as a chunk. According to Newell, "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" (1990, 7). 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 proposes that chunking is triggered by repetition:

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 (2010, 34).

This connection to repetition may provide the evidential link between the high frequency words and the evolutionary extension from polymorphic expressions. At
bottom, this syntagmatic change to complex prepositions may be best explained as chunking and provides an integral component for the grammaticalization of these sequences. The transformation is likely activated by the increased frequency of the unit. This is further supported by the observation that the grammaticalized tokens are typically more common than the lexicalized strings.

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 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 denotative usage may still be analyzable and not the actualization of the grammaticalization. That is to say, the expansion of the construction to innovative grammatical functions is independent of
the depravation of the semantic value of the original string. Thus, determining the
collectivity 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).

It must be noted further that BH constructions of the form PREP + NP produce
a particularly difficult situation for a clear assessment of the string on account of the
fact that many instances may not be differentiated with certainty as a preposition
phrase or complex preposition. The ambiguity of the linguistic formation may not
allow for an absolute determination in every instance of use. As noted above, however,
ambiguity, while allowing for difficulty in classifications, provides contexts for the
expansion of meaning. The definitive test used to establish the post hoc change, then, is
the addition of innovative functional uses. Any additional depravation of meaning or
structural realignment is understood as a result of changes, which are not directly related necessarily to grammaticalization (see §1.3.1 above).

3.2 Biblical Hebrew Complex Prepositions

The following sections examine the discernible examples of grammaticalization in the multi-word prepositions of BH on the basis of their functional changes. Whereas some Semitic complex prepositions evidence elision that may obscure the originating constituent parts, for example Ugaritic bd 'for' (< b 'in, at' + yd 'hand') and Aramaic btr 'after' (< b 'in' + tr 'place'), no BH examples demonstrate this type of detectable phonological reduction. According to the taxonomy of prepositions presented in Chapter Two, polymorphic prepositions are grouped in Category III (see Table 2-1 in §2.2; reproduced in part as Table 3-1, below). This categorization included six basic composite types of prepositions which are attested in BH as a combination of multiple PREPs and/or NPs (Lambdin 1971, 109-110).
Table 3-1: Category III Prepositions

| III: | 1. מֵאֵת me‘et ’out of, from’ | *min + ʾit(t) | PREP + PREP |
|      | 2. מֵעַל me‘al l- ’above’ | *min + ʿal + IV- | PREP + PREP + PREP |
|      | 3. בִּגְלַל bigal ’because of’ | *bV + galal- | PREP + NP |
|      | 4. מִלְמַט ה millmatṭ ’from below’ | *min + IV + maṭṭ + at | PREP + PREP + NP |
|      | 5. מִבֵּיתָל mibbet l- ’from within’ | *min + bayt + IV- | PREP + NP + PREP |
|      | 6. אֶלָּׁמִחוּץָּל ’el mihūṣ l- ’to the outside of’ | ʾil + min + ḥūṣ + IV- | PREP + PREP + NP + PREP |

No clear examples of grammaticalization are detectable with any aggregated BH strings except for those of the form PREP + NP. One cannot absolutely determine that these other types did not undergo similar semantic shifts, but only the third group of complex prepositions evidence semantic changes and the needed expansion to new contexts that provide for the clear assessment of innovative grammatical functions. Of the strings of this type, twenty-one BH examples demonstrate grammatical usages which may be separated from their original denotative meanings. These prepositional examples are listed in Table 3-2.
Table 3-2: Complex Prepositions

III.3 1. **בִּגְלַל** (because of) *bV + galal- PREP + NP
2. **בְּיוֹם** (when) *bV + yawm PREP + NP
3. **בְּיָמָה** (because of) *bV + 'abūr PREP + NP
4. **בַּעֲרוּב** (within) *bV + qirb PREP + NP
5. **בְּקֶרֶב** (within) *bV + qirb PREP + NP
6. **בְּתוֹנָה** (inside) *bV + tawk PREP + NP
7. **כְּפִי** (according to) *kV + ī PREP + NP
8. **לְבַד** (by oneself) *lV + badd PREP + NP
9. **לְיַד** (near) *lV + yad PREP + NP
10. **לְמַעַן** (so that) *lV + maʿn PREP + NP
11. **לְנֹכַח** (before) *lV + qutl PREP + NP
12. **לְפִי** (according to) *lV + ī PREP + NP
13. **לִפְנֵי** (before) *lV + panay PREP + NP
14. **לִקְרַאת** (toward) *lV + qaraʾ + t PREP + INF
15. **מִיָּמִים** (since) *min + yawm PREP + NP
16. **מִפְּנֵי** (because of) *min + panay PREP + NP
17. **בְּאֶפֶס** (without) *bV + 'aps PREP + NP
18. **בְּעֵת** (when) *bV + 'īnt PREP + NP
19. **לִנְמַת** (beside) *lV + 'umm + at PREP + NP (?)
20. **מִשְׁאָד** (beside) *min + šad PREP + NP

In the following sections, an examination of the morphology, denotative and grammatical usages, and grammaticalization trajectories are outlined for each of these BH complex prepositions. The first seventeen examples provide ample linguistic
evidence for a change resulting in a grammatical function. The last four cases, however, provide some characteristics indicative of grammaticalization, but each is deficient in some way—either on account of a limited number of tokens and/or an indeterminate etymology. As such, these final examples are treated in a separate section at the end of this chapter (§3.2.18).

3.2.1 biḡlal

3.2.1.1 Morphology of biḡlal

The compositional morphology of biḡlal includes the preposition b- ‘in, on’ and *galal ‘matter’, a noun in the construct state requiring a following independent or suffixed complement. The noun *gɔlɔl 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 CPA 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 

*bgl 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 ʾašer 'as, according to; when', תַּחַת taḥat ʾašer 'because', and ʿaḏ ṣe- 'until').

### 3.2.1.2 Usage of *bīglal*

Only the prepositional usage of the causative function is evident from the ten BH occurrences of *bīglal*.¹ Example (149) exemplifies the usage with an inanimate complement, בִּגְלַל הַדּ ב רָּׁהַזֶָּּׁ haddōḥer hazze '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.

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You should surely give to him (…) for, because of this matter, Yahweh your God will bless you in all your work. Deuteronomy 15:10

3.2.1.3 Grammaticalization of biğlal

Assuming that the meaning of the Arabic cognate may be reconstructed in Proto-Hebrew, the originating construction would have shifted from the preposition phrase,

\[ [b]_{\text{PREP}} [gll + \text{NP}]_{\text{NP}} \]  

‘on (the) matter (of)’, to the complex preposition, \[ [[b]_{\text{PREP}} [gll + \text{NP}]]_{\text{PP}} \]  

‘because of’, with a causative function. Similar grammaticalization changes are witnessed in the world's languages and Semitic in particular. Heine and Kuteva (2004, 210-211) provide several cross-linguistic examples of nouns with a similar semantic range ('matter', 'thing', 'case', or 'affair') which grammaticalize into causative prepositions. In Semitic, Syriac provides two examples of multi-word prepositions—

*men ‘ellat* 'because of' and *k‘ellat* 'because of'. Both of these causative complex
prepositions likely derived from the noun ‘ellɔp ‘cause; affair, thing’, which was combined together with a preposition.

3.2.1.4 Mapping the Grammaticalization Trajectories of biğlal

The reconstructed grammaticalization to the causative complex preposition could then be represented as \([\text{IN}_{\text{PREP}} + \text{‘matter’}_n]_{\text{PP}} > \text{PREP}\). The situation leading up to the earliest Hebrew examples would be represented by Figure 3-A. Stage III represents the state of BH where only the causative function is extant.

Figure 3-A: Overlap Model for biğlal

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>*PREP + N</td>
<td>IN + ‘matter’</td>
<td>IN + ‘matter’</td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>CAUSE</td>
<td>CAUSE</td>
<td></td>
</tr>
</tbody>
</table>

3.2.2 byom

3.2.2.1 Morphology of byom

The compound בְּיוֹם byom is a composite of the preposition ב- ‘in, on' and the singular noun in the construct state, yom ‘day (light)’. In BH, this primary noun follows
two basic patterns: the singular/dual is *yawm (e.g. לֵיָּם yom 'day' and לֵיָּהָם yomayim 'two days') and the plural *yam (e.g. לֵיָּהָם yamim 'days') (Garr 1985, 39).

3.2.2.2 Usages of byom

The BH sequence byom is found in sequences with 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, \([b]_{\text{PREP}} [[yom]_{\text{N,CSTR}} + \text{NP}]_{\text{NP}}\)P. The situation with some infinitives and finite clauses, on the other hand, evidences the grammaticalization to a complex preposition with the structure, \([byom]_{\text{PREP}} + \text{INF/S}\).

3.2.2.2.1 PREP (IN) + N ('day')

The most typical usage of byom in BH is as the head element of an adjunct phrase preceding a definite or indefinite NP. In these cases, the nominal meaning of

\[\text{byom}\]

2 In the extra-biblical Siloam Tunnel Inscription dating from the eighth-century BCE, however, the form ym is evidenced which may be suggestive of a dialectal leveling of the plural nominal form *yam or an alternative analysis as coming from the original form *yām (Cross and Freedman 1952, 50).
yom 'day' remains. Example (150) demonstrates the construction where the meaning of byom may undoubtedly be assessed as 'on the day of', on account of its placement in juxtaposition with מִמְחָר 'from the day after' and יומ הָּשָּׁלֶשְׁי yom haššliši 'the third day'.

---

3 Genesis 35:3; Exodus 31:15; 35:3; Leviticus 5:24; 7:15; 14:2,57 (2x); 19:6; 24:8 (2x); 25:9; Numbers 6:9; 10:10; 15:32; 25:18; 28:9, 26; Deuteronomy 9:10; 10:4; 18:16; 1 Samuel 20:19; 2 Samuel 22:19; 23:20; Nehemiah 10:32; 13:19; Job 20:28; Psalms 18:19; 77:3; 86:7; 110:3, 5; Proverbs 27:10; Ecclesiastes 8:8; Song of Solomon 3:11 (2x); Isaiah 13:13; 17:11; 58:3, 13; Jeremiah 17:21, 22, 24, 27; 18:17; Lamentations 1:12; 2:1; 21, 22; Ezekiel 1:28; 7:19; 13:5; 16:56; 27:27; 30:9; 32:10; 33:12; 46:1 (2x), 4, 6, 12; Obadiah 12 (2x), 13 (3x); Zephaniah 1:8, 18; 2:3; 1 Samuel 13:22; Nehemiah 10:32; Psalms 20:2; 27:5; 41:2; 50:15; 78:9; 140:8; Proverbs 6:34; 11:4; 24:10; 25:13, 19, 20; 27:15; Ecclesiastes 7:14 (2x); Isaiah 27:8; 30:25; 49:8; Jeremiah 16:19; 17:17; 36:6; 51:2; Ezekiel 22:24; 34:12; Hosea 5:9; 10:14; Amos 1:14 (2x); 8:9; Obadiah 12, 14; Nahum 1:7; 3:17; Zechariah 14:3.
[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.

Leviticus 19:6

### 3.2.2.2 PREP/ADVZ (WHEN)

Sixty-five instances of *byom* are followed by an infinitive.⁴ Two of these examples (Leviticus 7:16; Obadiah 12), are best analyzed as the ungrammaticalized preposition phrases, 'in the day of', analogous to the usage with a NP. This usage may be 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 בַּיוֹם הַהָוָא bayyom hahu 'in that day' designates the future day in which the prophecy will be fulfilled. It is followed immediately by the sequence byom 'when', demonstrating further what will transpire in that temporal setting.

הַאֲמַסֵנֵיר אֵז נֶדֶרָּׁא וָֹּׁנְָּׁ ד ב הָּׁזֶבַחָּׁק רְבּ נוָֹּׁבְּי וָֹּׁאֶתָּׁ זִבְחוָֹּׁיֵא כֵָּׁוָּׁ בַּיוֹםָּׁהַָּׁ קְרִיב וָֹּׁאֶתָּׁ מַהוָָּׁיֵא כֵָּׁ ל מָּׁיֵא ל (151)

wʾim-ne dever ʾo noenḥo zeḥā qorbano
CJ + IF + vow OR freewill.offering sacrifice.of offering + his
byom haqribo ʾet-zibḥo yeʾqkel
IN + day.of offer-INF + his DOM + sacrifice + his be.eaten-PC.3M.SG.
umimməḥrət whannoṭr mimmennu yeʾqkel
CJ + TEMP + following.day CJ + the.remainder FROM + it be.eaten-PC.3M.SG.
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.
Leviticus 7:16
On that day, when Gog enters into Israel, declares the Lord Yahweh, my fury will be aroused with my anger. Ezekiel 38:18

The string bayom may also be used as a subordinated clause linker or adverbializer, immediately preceding a clause. The semantic value of this clause linker is identical to that of the complex preposition. There are thirteen examples of this usage.⁵ A single verse from Psalm 102 contains two usages with verbal and non-verbal complement clauses. The second and third cola of Example (153) begin with the repeated sequence of bayom as an adverbializer signaling the temporal setting of the following main clause. The first instance is combined with the nominal clause, צַרָּלִי I am distressed, the second instance by the verb, אֶקְרִי ʾɛqrī ʾ 'I call out'. In each

⁵ Exodus 6:28; Leviticus 7:35; Numbers 3:1; Deuteronomy 4:15; 2 Samuel 22:1; Psalms 18:1; 56:10; 59:17; 102:3 (2x); 138:3; Lamentations 3:57; Zechariah 8:9.

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case, the main clauses consist of an imperative verb, countering positively what the initial colon suggests in the negative.

Do not hide your face from me:
When I am troubled, bend your ear to me;
When I cry out, answer me quickly. Psalm 102:3

3.2.2.3 Grammaticalization of byom

The grammaticalization to the complex preposition may be traced to contexts where the meaning of byom is generalized beyond a specific day, that is, where the meaning necessitates an unspecified length of time. A plausible first step 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

byom ҳиммосҳо ҳото '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 byom even though multiple days are in view.

(154)

This is the summary of the altar dedication at the time of its anointing.
Numbers 7:84

(155)

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. Numbers 6:13

Many cross-linguistic examples may be 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 BH ‘ad and Ugaritic ‘d 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 ṣama '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 a likely expansion from the temporal preposition to the clause linker. The context for the change, however, is not at all evident. Previously (§2.3.1.3.2), 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 earlier in the context of similar changes (§2.3.1.3.2), the expansion of the prepositional complement to include clauses on analogy to nominal complementation likely is the most plausible suggestion.
3.2.2.4 Mapping the Grammaticalization Trajectories of *byom*

The mapping of the grammaticalization of *byom* may be outlined via a simple linear development. The nominal meaning expanded to the temporal functions. In Figure 3-B, the overlap model for *byom* suggests the probable evolutionary stages of the functions, the second of which is the situation in BH where both the complex preposition and the preposition phrase are found.

Figure 3-B: Overlap Model for *byom*

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP + N</td>
<td>IN + 'day'</td>
<td>IN + 'day'</td>
</tr>
<tr>
<td>PREP/ADVZ</td>
<td>WHEN</td>
<td></td>
</tr>
</tbody>
</table>

3.2.3 *ba"a*bur

3.2.3.1 Morphology of *ba"a*bur

The string *ba"a*bur consists of the simple preposition *b-* and the construct state noun *"a*bur. The noun is connected to the root ‘BR with the nominal pattern *qutūl* (Bauer and Leander 1922, 473). The verbal semantics of this root denotes the action of traversing, that is, 'passing by' someone or 'crossing over' someplace. Several
nouns with the related Hebrew root include: עֶבְרָה 'region beyond; side', עַבְרָה 'region beyond; side', עֲבְרָה 'produce, yield, gain', and ma'ab'ra 'passage (way)'. The word עֶבְרָה 'outburst, rage' may plausibly be derived from the same root or may suggest the existence of a second homonymous root meaning 'to be angry'.

The morphological pattern *qutul is a broken plural pattern in Arabic (Fox 2003, 209-210). Some have suggested that this pattern may be classed as having a collective sense in Hebrew (Gordon 1991). BH examples of this collective sense include: גְּבָּלִים 'boundary, border' (a group of mountains), גֶּדֶד 'troop, band', גֶּומֶל 'benefit, recompense', זְבֻעַ 'flies', זְבֻל 'high place' (elevated dwelling places), זָכָר 'male populous', יִבֲּל 'harvest yield', לַבָּשׁ 'clothing', and רַכְשִׁים 'property, goods'. To this list may be added עִבֵּר 'produce, yield' (< *ubur) which could plausibly be the originating lexeme of the complex preposition.
3.2.3.2 Usage of *ba‘*bur

3.2.3.2.1 Noun ('produce')

Two occurrences of the noun *‘abur* ‘produce' are found in consecutive verses of Joshua chapter five (Joshua 5:11, 12). Both designate the product of harvesting crops after the Israelites entered the land of Canaan. Example (156) demonstrates one of these usages where the noun *‘abur* 'produce' is preceded by the SOURCE preposition מִן *min* 'from'.

(156)

| יִישְׁבֶּהֱהוּ מִמְּנַהֲגַת בֵּאֵכָלֶל מַעְנָבּוֹר הָאָמְרִי | wayyišboṯ hammɔn mimmɔḥɛrɔt |
| cease-SC.3M.SG. the.manna FROM+next.day |
| בִּהְמִלְכָּם | me‘*b*ur harɔrɛs |
| WHEN+eat-INF.+them FROM+produce.of the.land |

The manna ceased on the following day when they ate from the harvest of the land. Joshua 5:12
3.2.3.2.2  PREP (CAUSE)

The most common usage of baֱּכֶּבֶר, occurring twenty-five times in BH, is as a preposition with the causative function. The construction is found with both pronominal and nominal complements, typically following the modified clause. This use is seen in Example (157). The preposition phrase, בַּעֲבוּרָּׁשְׁמ וָֹּׁהַגּ דוֹל baֱּכֶּבֶר šmo haggodol 'because of his great name', serves to designate the basis or grounds for God's fidelity to his chosen nation.

(157)

לֹא־יִטֹשָּׁׁיְו ה נֶעָּּׁ לָּּהוֹ אֶת־עַָּׁ אֶמ מֶּעָּּׁו בַּעֲבוּרָּׁשְׁמ וָֹּׁהַגּ דוֹל

loʾ-iyṭṭoš YHWH ᵃʾeṯ-ʾammo
NEG + abandon-PC.3M.SG. PN DOM + people + his
baֱּכֶּבֶר šmo haggodol
CAUS name + his the.great

Yahweh will not forsake his people because of his great name. 1 Samuel 12:22


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The function of the complex preposition appears twice with the context of pecuniary exchange in the book of 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 בַּעֲבוּרָנַעֲל יִם 'for a pair of sandals' is parallel to בַּכֶּסֶף 'in exchange for money'. Thus, a functional equivalence between these two verbal modifiers—בַּעֲר and the b- of exchange—is obligatory.

7 Amos 2:6; 8:6
...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

3.2.3.2.4 PREP (PURPOSE)

Lastly, the complex preposition may function to designate purpose or result.

Each of the four examples is found with an infinitive-construct complement. Example (159) demonstrates this usage, בַּעֲבוּרָּׁהַזְכִּירָּׁשְׁמִי 'for (the purpose of) commemorating my name'. This phrase modifies the initial main clause, אֵין־לִיָּׁבֵן 'I do not have a son'.

אֵין־לִיָּׁבֵן בַּעֲבוּרָּׁהַזְכִּירָּׁשְׁמִי (159)

ינ ־לי בן בַּעֲבוּר הַזְכִּיר הַשְּׁמִי
NOT.EXIST + TO + me son PURP commemorate-INF name + my
I do not have a son to make known my name. 2 Samuel 18:18

8Exodus 9:16; 2 Samuel 10:3; 18:18; 1 Chronicles 19:3.

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3.2.3.3 Grammaticalization of $ba\text{‰}hur$

Assessing the trajectory of change for the grammaticalization of this complex preposition is difficult on several accounts. First, although the noun $\text{‘}chur$ '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 within BH allows for the connection of one function to another. Third, the relative infrequency of the particle provides a limited picture of its usage in BH.

In spite of these limitations, several cross-linguistic correlations may be provided regarding the suggested origin of the preposition and its functional expansion. The Akkadian synonym $n\text{é}melum$ 'profit' may be connected to the causative function of $n\text{é}mel$ 'because' suggesting, at a minimum, the possibility of an analogous development of Hebrew $\text{‘}chur$ 'produce' to a causative preposition. Less plausible is Gesenius' semantic correspondence of Greek $\upsilon\text{β}\text{ε}\rho$ 'over' and Hebrew $\text{‘}al$ 'upon' with $ba\text{‰}hur$. Such a connection would be apt if the development arose from the spatial semantics of the verbal root, but no clear evidence supports this suggestion. Finally, a similar
cluster of meanings (CAUSE, PURPOSE, EXCHANGE) has been attributed to the Medieval Welsh preposition ER 'front' (Jones 2003, 133-134), 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 BH 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 posit that PURPOSE precedes CAUSE, but also they admit that "there is no conclusive historical evidence to support this hypothesis" (2004, 247). Thus, the development remains suggestive in the absence of more conclusive internal or external evidence of this change.

3.2.4 בְּקֶרֶב \textit{bqereb}

3.2.4.1 Morphology of \textit{bqereb}

The string בְּקֶרֶב \textit{bqereb} is composed of the \textit{b-} 'in, on' preposition and a noun קֶרֶב \textit{qereb} 'innards, entrails; inward part(s)' in the construct state. The absolute form of the
noun, *qereb* 'entrails', may be found at Exodus 29:13, and the suffixed form *qirbo* 'its innards' at Exodus 12:9. The latter suggests that the BH 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 Leviticus 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, OSA, Arabic, Aramaic, Ugaritic, and various dialects of Canaanite.

### 3.2.4.2 Usage of *bqereb*

Three main uses of *bqereb* are distinguishable in BH. 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 temporal function.
3.2.4.2.1  
**PREP (IN) + N ('inward part(s)')**

The construction where the noun *qereb* means 'inward part(s)' is attested twenty-nine times in BH. The nominal component may refer to various internal anatomic elements from the vicinity of the abdomen to the chest: 'belly' (Micah 6:14), 'innards' as the place of emotions/thinking (equivalent to the לֵב *leb* 'heart/mind'; 1 Samuel 25:37), and the interior container of the רוּחַ *ruḥ* 'spirit' (Zechariah 12:1).

3.2.4.2.2  
**PREP (WITHIN)**

The most commonly occurring use of *bqereb* in BH is as a locative preposition indicating the MEDIAL-REGION of an entity, that is, 'within'. The landmark may be a

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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 זִמְנֶה 'trouble, distress'; Psalm 138:7).

In Example (160), the fifty righteous individuals are viewed as being located בקירבה 'within her [the city]'. This meaning is likewise specified by the functionally parallel phrase in the previous clause, בתוכה יר btok 'ir 'inside of the city'.

\[
\text{Will you not be favorably disposed towards this place for the sake of fifty righteous within it? Genesis 18:24}
\]

3.2.4.2.3 PREP (THROUGHOUT)

Two instances of the phrase בקירוב שלושים bqereb šonis '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), however, the construction may be best understood as 'through the years' reflecting an expression of chronological duration without resorting to an emendation or an unevidenced metaphorical interpretation.

גֶּקֶרֶב תְּנִים חַיֵּיהוּ (161)

bqereb шֹנִים הַיֵּהוּ דִּי

bqereb шֹנִים הַיֵּהוּ דִּי

THROUGHOUT years revive-IMP.M.SG. + him
toši

THROUGHOUT years make.known-PC.2M.SG.

Throughout the years, revive it;
Throughout the years, make it known. Habakkuk 3:2

3.2.4.3 Grammaticalization of bqereb

The grammaticalization of bqereb 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 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" (2004, 182-183). 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* may be construed as a complex preposition designating the locative function 'inside'. Likewise, Moabite demonstrates the use of *bqr* 'in the midst of' on the Mesha Stele (line 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 בְּקֶרֶבָּלִי *bqer* ɛrɛ 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'.
The revelation of wrongdoing is for the wickedness within my heart. Psalm 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 ʾahar (§2.3.1.3.2), ʾah*re (§2.3.2.3.2), and *bayin (§2.3.4.3.4).

3.2.4.4 Mapping the Grammaticalization Trajectories of bqereḥ

The grammaticalization pathways for bqereḥ cannot be mapped any more closely than a three stage Overlap Model of Figure 3-C. 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 BH situation is represented by Stage III.

Figure 3-C: Overlap Model for bqereḥ

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP + N</td>
<td>IN + 'innards'</td>
<td>IN + 'innards'</td>
<td>IN + 'innards'</td>
</tr>
<tr>
<td>PREP</td>
<td>WITHIN</td>
<td>WITHIN</td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>(THROUGHOUT)</td>
<td>THROUGHOUT</td>
<td></td>
</tr>
</tbody>
</table>

3.2.5 ךְוֹת בְּתַכ

3.2.5.1 Morphology of בְּתַכ

The locative preposition b- 'in, on' and noun *tawk 'half; middle' make up the constituent parts of the compound preposition ךְוֹת בְּתַכ. The absolute state of the noun ךְוֹת תָּק 'middle' is attested twice (Judges 16:29 and Jeremiah 39:3) with the expected Masoretic phonological realization including the epenthetic vowel. When unaccented, the noun exhibits monothongization (*aw > o) to ךְוֹת tok- both with the construct state and the suffixed forms which are extant at 1 Kings 8:64 and Ezekiel 15:4, respectively.
The etymology is obscured by the scarcity of related Semitic cognate terms which include only function words and derivatives thereof. In Ugaritic, *tk* either with or without the preceding preposition *b* marks a locative relation (Tropper 2000, 772, 775-776). 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 Qumranic Hebrew, הָלְכוּן תִּיכוֹן *tikon* 'middle, center' (in later Hebrew, תִּיכוֹנ ה תִּיכוֹנ) is likely derivative exhibiting regressive vowel dissimilation on account of the suffix -*on* (Bauer and Leander 1922, 215). No associated middle-weak verbal root is attested in any Semitic language.

3.2.5.2 Usage of *btok*

The string *btok* is found in BH used as a preposition phrase and a complex preposition functioning to mark locative, temporal, and comitative relations. A fourth prepositional function as PATH (THROUGH) has been suggested but remains nascent.
3.2.5.2.1 PREP (IN) + N ('midst, center')

Five examples demonstrate the original preposition phrase in BH. Each instance is found in situations where the nominal component is marked as definite, that is, בָּתַּי bati 'in the middle'. The noun indicates the middle of an animal (Genesis 15:10), the location of a city respective of its surrounding farmland (Numbers 35:5), the interior of an army (Joshua 8:22), and the place between two entities or individuals (Isaiah 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, it is said that the hero Sampson affixed the torch between the tails of a pair of foxes, which is further specified as בָּתַּי bati 'at the middle'.

Sampson put [two foxes] tail-to-tail and tied a torch between the (two) tails at the middle. Judges 15:4

3.2.5.2.2 PREP (INSIDE)

The locative preposition marking an INTERIOR- or INSIDE-REGION is found three hundred times. It serves to designate the location 'within; inside' an entity,

location, or group. In Example (164), the location of a structure is designated as being 

בתווכיהר '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 Chronicles 32:5).

(164)

A strong tower was inside the city [of Thebez]. Judges 9:51

The abstract nature of the locative function is demonstrated in Example (165) in a 

context without reference to a corporeal situation. The emblematic location of the 

settlement is described metaphorically as בתווכינרא 'inside lies', that is, 

locating it in opposition to the knowledge of God.

50:37; 51:47; 52:25; Ezekiel 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; Micah 2:12; 3:3; 7:14; 

Zephaniah 2:14; Haggai 2:5; Zechariah 2:8, 9, 14, 15; 5:4, 7; 8:3, 8.

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As your dwelling is amid lies within lies, they have refused any knowledge of me. Jeremiah 9:5

3.2.5.2.3 PREP (DURING)

Two examples demonstrate the use of the complex preposition בְּתַּוק as a temporal marker.\(^\text{13}\) Example (166) displays this function to mark time corresponding to Svorou's INTERIOR-TEMPORAL relation (1994, 239). The expression, בְּתַּוק הַלַּיְלָה 'in the midst of the night', situates the time of the verbal activity within the hours of darkness.

\(^{13}\) 1 Kings 3:20; Isaiah 16:3.
Numerous difficulties in defining the comitative function have been recognized in Semitic (Goldenberg 1998) and elsewhere in the world's languages (Stassen 2000, Lehmann and Shin 2005, Stolz, Stroh, and Urdze 2006, Nedjalkov 2007). Using the typological categorization as the pluralization of a participant, however, Arkhipov defines the comitative as "a morphosyntactic construction used to express a non-obligatory participant set" (2009, 224). 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 בְּּותָקְו functions as a comitative function according to Arkhipov's definition. The comitative construction, בְּּותָקְו אֲחֵיהֶם 'with their brothers', introduces an additional object participant. The plural pronominal suffix, that is, the verbal complement, is the pluralized participant.
without a repeated VP, and it is designated by a different structural rank (i.e. as an
adjunct rather than a complement).

He desisted and did not kill them with their brothers.  Jeremiah 41:8

3.2.5.2.5  PREP (THROUGH)

In BH three examples of bṭok suggest a shift from a locative function to the
movement relation THROUGH.\(^{14}\) 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 ‘BR ‘cross over’ is followed by two
parallel phrases each headed by bṭok. These two adjuncts mark the movement through
the location where the messenger is commanded to pass. What's more, the PATH

\(^{14}\)Ezekiel 9:4 (2x); 2 Chronicles 23:20.

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function stands in clear contrast with the LOCATIVE, or INTERIOR-REGION relation, found at the end of the clause with לְחָוֲךָ b'tokḥ ‘within it [the city]’.

Example (169), also, provides an instance of b'tok 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 הֶלְיוֹן b'tok-ša‘ar h'elyon ‘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.

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.
Ezekiel 9:4
He was brought down from the Temple of Yahweh, and they went through the upper gateway to the king’s palace. 2 Chronicles 23:20

3.2.5.3 Grammaticalization of *btok*

The origin and functional changes to *btok* may be tracked by examining semantic ambiguities and similar changes in other languages. The first subsection demonstrates the change from a preposition phrase into a complex preposition denoting a location. Second, the subsequent grammaticalization from the locative function to the COMITATIVE is presented. Internal Hebrew evidence for the origin of the temporal and PATH functions is lacking, however. In the world’s languages, temporal relations often originate from functions expressing the LOCATIVE or INTERIOR-REGION (Heine and Kuteva 2004, 183, 205-206). In contrast, Heine and Kuteva suggest that the comitative relation may provide the origin of temporal function

3.2.5.3.1 **PREP (IN) + N ('midst, center') > PREP (INSIDE)**

The grammaticalization from a noun meaning 'midst, center' to the locative or spatial preposition denoting the 'inside' or 'within' an entity 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, 257-258) similarly establishes several origins for this locative relation including body parts and environmental features.

In Semitic, this change is well attested. Syriac witnesses *mṣa‘tɔ* 'middle (part)' as the locative grammatical meaning with and without a preceding locative preposition, *(b)meš‘at* 'inside, within'. Elsewhere in early Aramaic, the constructions *bgw* and *lgw* 'inside, within' function as 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', surrum 'interior, heart', libbum
'inner body; heart', and qerbum 'center; interior'. In OSA, b-wsšt 'inside, within' is
construed from the b- 'in, on' preposition and a noun meaning 'middle'. Ge'ez māʾkal
'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 btok 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 BH cosmology, הָּׁוְּעֵץָּׁהַחַיִםָּׁבְּתוֹךְָּׁהַגּ The tree of life was in (the center of) the garden. Genesis 2:9

Let there be a dome in the midst of the waters. Genesis 1:6

3.2.5.3.2 PREP (INSIDE) > PREP (COMITATIVE)

Typological studies demonstrate 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." As such, Svorou claims, "The physical participation of the second person, then is only a step away" (1994, 140). Some evidence in Semitic appears to parallel this suggested connection. For example, the locative relation OSA $b-s,n$ 'in front of' can also denote the comitative function 'with'.

One finds several BH examples of $b\dot{t}ok$ which may be understood as having either a locative formation or the comitative function. In Example (172), Saul is said to have met a group of prophets. Enthused by the Spirit of God, the narrative states that Saul prophesied $b\dot{t}ok\dot{m}$ 'among (the group of) them'.

(172) יָּֽטְנַבֵּא בְּתוֹכָם
wayyiṭnabbe$^3$ $b\dot{t}ok\dot{m}$ prophesy-WCPC.3M.SG. INSIDE/COM + them [Saul] prophesied among them. 1 Samuel 10:10

$^{15}$ 1 Samuel 10:10; Proverbs 27:22; Jeremiah 12:16; 40:1.

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This usage could be understood as a locative relation denoting the location 'within the group of prophets'. Alternatively, it may be read as the COMITATIVE designating the pluralization of the subjective participant. Saul may be seen as prophesying as one of the group of prophets, namely 'together with them'. This latter formation appears to motivate the incredulous response and the proverbial saying: הָגָם שֵׁאָול בַּנְבִּים 'Is Saul among the prophets?' (vs. 12). This designation seems to suggest more than a location in the midst of a group but the extension of the identification with the primary characteristic of that group, namely prophecy.

3.2.5.4 Mapping the Grammaticalization Trajectories of בִּטּוּק

The trajectories of change for בִּטּוּק are outlined in this section. The first diagram (Figure 3-D) demonstrates a developmental continuum starting with the preposition phrase. The locative relation grammaticalized therefrom. Subsequent to the LOCATIVE, the comitative, temporal, and PATH functions obtained; however, the exact expansion may only be suggested. The stages of this semantic multiplicity may also be represented in the Overlap Model in Figure 3-E. The originating nominal phrase
expanded to the LOCATIVE in Stage Two. The third stage, then, represents the usages as found in BH.

Figure 3-D: Functional Developments of בָּטּוּק

\[
\text{PREP (IN) + N ('middle, center')} > \text{PREP (INSIDE)} > \text{PREP (COMITATIVE)} \\
> \text{PREP (DURING)} \\
> \text{PREP (THROUGH)}
\]

Figure 3-E: Overlap Model for בָּטּוּק

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP + N</td>
<td>IN 'middle'</td>
<td>IN 'middle'</td>
<td>IN 'middle'</td>
</tr>
<tr>
<td>PREP</td>
<td>INSIDE</td>
<td>INSIDE</td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>COMITATIVE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>DURING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>(THROUGH)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2.6 בּותֵי

3.2.6.1 Morphology of בּותֵי

The string בּותֵי is a combination of the preposition ב- 'like, as' and an anatomic noun. The noun, פֶּה '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 פֵי (Bauer and Leander 1922, 620, von Soden 1995, §65i).
3.2.6.2 Usage of קְפִי

In BH, קְפִי is used as a preposition phrase, a complex preposition, and an adverbializer.

3.2.6.2.1 PREP (LIKE) + N ('mouth')

The original semantics of קְפִי denotes a preposition phrase, 'like the mouth (of)'. Five times this usage is found in BH. The metaphorical meaning of the noun פִי 'mouth' as 'opening' may be seen in Example (173). The phrase כְּפִי כֻּתּ נְתִי קְפִי kְפִי kֻתּנְתִי '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), קְפִי 'my mouth(piece)' serves as an adverbial phrase designating the positive status of being God's spokesperson as a result of faithful obedience.

(173) כְּפִי כֻּתּ נְתִי יَاַזְרֵנִי
  קְפִי kְפִי    כֻּתּנְתִי kֻתּנְתִי   יַאַזְרֵנִי ya’azreni
LIKE + opening.of tunic + my gird-PC.3M.SG. + me
It restrains me as my tunic collar. Job 30:18

κοπέ τοῦ�ν (174)  

κῦι  

κοπέ  

LIKE + mouth + my  

be-PC.2M.SG.  

You will be like my mouth(piece).  

Jeremiah 15:19  

3.2.6.2.2  

PREP (ACCORDING TO)  

As a complex preposition, the logical relation of κ_restrict 'according to' is found ten times in BH. The complement is a noun in eight of these instances. It is also an infinitive (Exodus 16:21) and a relative (Malachi 2:9). The use with a noun may be observed in Example (175). The phrase, κοπέ κοσμοι '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)  

κοπέ κοσμοι καθίσταντα  

κοπέ  

κοσμοι  

καθίσταντα  

ACCRD + his requit-PC.3M.SG. DOM + redemption.price + his  

He should pay for his manumission according to his years (of labor). Leviticus 25:52

17 Exodus 16:21; Leviticus 25:52; Numbers 6:21; 7:5, 7, 8; 35:8; 1 Chronicles 12:24; 2 Chronicles 31:2; Malachi 2:9.
3.2.6.2.3 ADVZ (CONSEQUENTLY)

In a lone example, \( k̄p̄i \) is used as an adverbializer designating a consequential relation.\(^{18}\) In Example (176), the adverbializer \( k̄p̄i \) marks the result or consequence of the initial main clause. Thus, the presentation of the conquering ones—

\( haqqr̄noq̄ \) 'the horns', that is to say, the powerful rulers—results in Judah's trepidation and fear to raise its head.

\( \text{אַלָּהּ הַקְרִינָתָהּ אֵשֶּׁר־זָרַעְתָּהּ בְּפָרְרָסִים לְדַרְשֵׁנָהּ רָאִיתָהּ (176) } \)

\( \text{ גֵלֵּ֣ל הַקְּרִינָתָּהּ אֵשֶּׁ֣ר־זָרַעְתָּהּ בְּפָרְרָסִים לְדַרְשֵׁנָהּ רָאִיתָהּ (176) } \)

\( ^{18} \text{Zechariah 2:4} \)

3.2.6.3 Grammaticalization of \( k̄p̄i \)

The trajectory of change will be outlined for each meaning presented in the previous section. For the most part, this exposition will be restricted to cross-linguistic data as examples of situations in BH where the changes may have arisen are infrequent.
Instances of grammaticalization from body part sources to logical relations are widespread in many of the world's languages. For example, the Mextec language family demonstrates a large number of grammatical relations which originated in the words for 'face' and 'foot', including locative and temporal relations as well as other logical relations, including INSTEAD, COMPARATIVE, CONDITIONAL, BENEFACTIVE, EXCHANGE, CAUSE, 'basis for', 'on behalf of', and 'about' (Hollenbach 1995).

In several Semitic languages, polymorphic syntagms with PREP + N are known to have developed the meaning 'according to'. This grammatical 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, 777-778), kî (or kima) pî 'according to' in addition to ana pî 'according to' in Akkadian (von Soden 1995, §115 t), and possibly ina pî 'according to' at Amarna (EA 81:18).
In the world's languages, clause linkers oftentimes grammaticalize from prepositions (Hopper and Traugott 2003, 184-190). This general change has been tracked previously in the BH example of ʾahar (§2.3.1). The proposed context of change for ʾpī, unfortunately, is opaque. Example (177), however, demonstrates that the reduction from the usage with the relative is, at least, one plausible solution, namely PREP + REL + S > ADVZ + S. The combination of [ʾašer]REL 'according to which' serves as a subordinating conjunction to mark the basis on which the curse in the main clause was leveled against Israel by the prophet Malachi. The deletion of the relative could have led to the innovative syntagmic function of ʾpī as an adverbializer.
Wgm-nni nattti etkm
CJ+also+I give-SC.1C.SG. DOM+you-M.PL.
nibzim ušpîm lkal-hocm
be.despised-PTCP.M.PL. CJ+humbled-M.PL. TO+all+the.people
kpi šer ūnkm šomrim et-drkay
ACCRD REL NOT.EXIST+you-M.PL. guard-PTCP.M.PL. DOM+ways+my
Thus I have made you despicable and humbled before all people, inasmuch as you have not kept my ways. Malachi 2:9

3.2.6.4 Mapping the Grammaticalization Trajectories of kpi

Based on typology, internal data, and analogical changes found in BH, one may suggest that the grammaticalization of kpi developed from the preposition phrase to the complex preposition functioning as 'according to'. The adverbializer 'consequently' was likely subsequent to the 'according to' usage. These changes are tracked in Figure 3-F via the Overlap Model.

Figure 3-F: Overlap Model for kpi

<table>
<thead>
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<th>III</th>
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</thead>
<tbody>
<tr>
<td>PREP</td>
<td>LIKE + 'face'</td>
<td>LIKE + 'face'</td>
<td>LIKE + 'face'</td>
</tr>
<tr>
<td>PREP</td>
<td>ACCORDING TO</td>
<td>ACCORDING TO</td>
<td>CONSEQUENTLY</td>
</tr>
<tr>
<td>ADVZ</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.2.7 לְבַד

3.2.7.1 Morphology of לְבַד

The string לְבַד לְבַד consists of the preposition ל- 'to, for' combined with the noun bad 'part, portion' (< *badd). The independent form of the noun is found solely in the idiom בַּד בָּד לְבַד 'part by part' (Exodus 30:34; see also 1QS iv 16, 25). The verbal root BDD is attested in several Semitic languages—Arabic badada 'withdraw, separate, apportion', OSA bdd 'distribute', Ethiopic badada, badda 'separate, detach', and post-Biblical Hebrew bad '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 lbdm 'alone' (KTU 1.2 III 20) and post-Biblical Hebrew bɔdɔd 'loneliness', lbad 'alone', and bilbad 'only'.

3.2.7.2 Usage of לְבַד

In BH, the string לְבַד functions as a preposition phrase, an adverb 'alone', and a complex preposition with pronominal suffixes 'by oneself'. Other constructions with לְבַד 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, מילבַד millbad ( < min + ḫadd), 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 ḫadd + PP where the following phrase is headed in all by one instance by min.19

3.2.7.2.1 PREP (FOR) + N ('part, portion')

A single usage of the preposition phrase is identifiable in Example (178).20 The context presents a situation in which Jacob was acquiring a share of Laban's flocks for his return to his homeland. Per their agreement, Jacob separated the animals which were striped, speckled, and spotted for his portion (לְבַד ḫaddo); whereas the remainder stayed with the flock of Laban (לֹּא צוֹאן al-ṣoʾn ḫbōn). The Authorized Version translates ḫaddo as "by themselves" (i.e. the flocks) confusing the plural entity

19 Exodus 12:37; Numbers 29:39; Deuteronomy 3:5; Joshua 17:5; Judges 8:26 (2x); 20:15, 17; 1 Kings 5:3, 30; 10:15; 2 Kings 21:16; Esther 4:11; Ezra 1:6 (খadd ʿal); 2 Chronicles 9:14.

20 Genesis 30:40.
with the clearest referent of the singular suffix, namely 'Jacob'. The ensuing clause reinforces this interpretation using the plural suffix in reference to 'the herds' and further clarifies that these animals were not added to Laban's flock.

(178)

wayyōšēt-lo  caḇōrim  lḇaddo
set-WCPC.3M.SG. + TO + him  herds-M.  FOR + part + his-M.SG.
wloʾ  šōm  ‘al-šōʾn  lḇōn
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. Genesis 30:40

### 3.2.7.2.2 Adverb ('alone')

The adverbial לָבֹד lḇōd is found without a following complement. Eighteen instances of this independent string are known in BH. Example (179) from the Book of Judges demonstrates this usage. God commanded Gideon to divide his forces according to how each warrior would drink from a spring. The one who lapped up

---

21 Exodus 26:9 (2x); 36:16 (2x); Judges 7:5; Ecclesiastes 7:29; Isaiah 26:13; Zechariah 12:12 (5x), 13 (4x), 14 (2x).
water like a dog was supposed to be set apart ֶָּׁי (lḥād) 'alone' as part of the attacking force, while the one kneeling down to drink cupping his hand was excluded.

תָּשִׁיך אָנוֹת לֹבֶד (179)

taṣṣīḵ ʾōto lḥād
set-PC.2M.SG. DOM + him alone

You shall put him alone. Judges 7:5

3.2.7.2.3 PREP (BY –SELF)

The string lḥād with a pronominal suffix is used eighty-eight times as a complex preposition with the function BY –SELF. The referent of the suffix may be reflexive as in Example (180) or designate a non-subject constituent as in Example (181). In the first example, the string designates that Jacob was alone, that is, he was 'by himself'________

(lḥaddō) or separate from his travelling group. In the second example, Abraham

separated from his flocks seven ewe-lambs לְבַדְּהֵן lḥaddhen 'by themselves' to be given
to Abimelech as a symbol of the covenant between the two men.

(180)
wayyiwwōter       yaḵqōḇ       lḥaddō
stay-WCPC.3M.SG.  PN       BY + himself
Jacob remained by himself. Genesis 32:25

(181)
wayyaṣṣeḇ       ʾaḇrōḥom       ṣeḇaʿ       kiḇṣoṭ       ḥaṣṣoʾn
set.up-WCPC.3M.SG.  PN       DOM + seven ewes.of-F.  the.flock
lḥaddhen
BY + themselves-F.
Abraham set aside seven ewe-lambs from the flock by themselves. Genesis 21:28

3.2.7.3 Grammaticalization of lḥad

Example (178) above demonstrates the nominal origins of the string which has
grammaticalized as a unit into the preposition lḥad with pronominal suffixes. The
originating structure of the string [[l]PREP [badd + PRO]NP]PP has given way to the
complex preposition [[lḥadd]PREP + PRO]PP. Moreover, the semantic shift from 'for his
part' to 'by himself' is nearly complete by the time of BH, where the independent idiom

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*lbad* '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').

### 3.2.7.4 Mapping the Grammaticalization Trajectories of *lbad*

It may be reasonably assumed that the complex preposition arose from an original PP. Without further evidence of transitional examples, however, the exact context of change is inaccessible. Figure 3-G, however, presents a probable expansion of the PP and adverb to the complex preposition (BY –SELF). The BH situation would be represented by Stage II of this Overlap Model.

**Figure 3-G: Overlap Model for *lbad***

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP + N</td>
<td>FOR + 'part'</td>
<td>FOR + 'part'</td>
</tr>
<tr>
<td>PREP</td>
<td></td>
<td>BY –SELF</td>
</tr>
</tbody>
</table>

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3.2.8 ℓְּּיַד lyad

3.2.8.1 Morphology of lyad

There is evidence in BH that the string ℓְּּיַד lyad 'to (the) hand of' has been grammaticalized as a locative complex preposition. The form lyad consists of the locative preposition ℓ- 'to; at' affixed to the construct state of the standard body-part noun for 'hand' ℰיַד yad.

3.2.8.2 Usage of lyad

There are eight occurrences of this construction in BH—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.
3.2.8.2.1  PREP (TO) + N ('hand; side')

Four examples in BH exhibit the usage of lyad as a preposition phrase.\(^{23}\) The expression with a pronominal suffix and a following NP are both found twice with this meaning. In Example (182), someone falling לְי די lyado 'into his hand' is euphemistic for manslaughter. The noun yad can also denote a more general anatomic feature such as the 'flank' or 'side'. An example of this is found with the expression, לְיַד hammelk 'at the side of the king' in Example (183), which is understood as an idiom for holding a position of status.

(182) וְה אֱלֹהִים אַנְה לְי דוֹ
who the.god cause.to.fall-SC.3M.SG. INTO + hand.of + him
God allowed [him] to fall into his hand. Exodus 21:13

(183) ובְנֵי ד וִיד לְיַד הַמֶלֶךְ
u ne -ɔ wi ʁiʾšonim ʃ ʃ lyad hammelk
CJ + sons.of + PN the.heads AT + side.of the.king
David’s sons were chief officials serving the king. 1 Chronicles 18:17

\(^{23}\) Exodus 21:13; 1 Chronicles 18:17; Nehemiah 11:24; Job 17:3.
3.2.8.2.2  PREP (NEAR)

The complex preposition designating NEAR as a contiguous locative function is detectable three times in BH.\textsuperscript{24} The phrase, לְיַדָּכֵי בִי \textit{lyad-ʾebi} '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. In Example (185), the city gates are setting where wisdom metaphorically calls out. This proximate locality, לְיַדָּשְׁעַרְיָם \textit{lyad-šərim} 'near the gates', is further specified by other relational expressions—לְפִי־קְרֶת \textit{lpi-qret} 'at the mouth of the city' and מְבוֹא פְתָחִים \textit{mboʾ ṭḥim} 'the entrance of the doorways'—that do not designate the SIDE-REGION.

\textit{Hebrew}  לְיַדָּכֵי בִּשְׂעָרֵי אַגְוָה (184)
\begin{align*}
\text{wʿomadṭi} & \quad \text{lyad-ʾebi} & \quad \text{bašsəwđe} \\
\text{stand-WCSC.1C.SG. NEAR + father + my IN + the.field} & \quad \text{I will stand near my father in the field. 1 Samuel 19:3}
\end{align*}

\textsuperscript{24} 1 Samuel 19:3; Psalms 140:6; Proverbs 8:3.

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3.2.8.3 Grammaticalization of *lyad*

This section will explore external and internal evidence for the change of *lyad* 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. Then, internal ambiguity will be explored to demonstrate the context of change within BH.

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 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" (2004, 139, 271-272). Svorou 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" (1994, 72).

This grammaticalization context is exemplified in Example (186). The phrase לְיַד־בְּנֵי אַהֲרֹן '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 denotative meaning.

(186) 

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 Chronicles 23:28

3.2.8.4 Mapping the Grammaticalization Trajectories of lyad

The trajectory of grammaticalization for lyad may be mapped using the Overlap Model as in Figure 3-H. 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 $[[l]_{\text{PREP}} [yad + NP]_{\text{NP}}]_{\text{PP}}$ to $[[lyad]_{\text{PREP}} + NP]_{\text{PP}}$. This
second stage represents the usage patterns found in BH.

Figure 3-H: Overlap Model for lyad

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP</td>
<td>TO</td>
<td>TO</td>
</tr>
<tr>
<td>N</td>
<td>'hand'</td>
<td>'hand'</td>
</tr>
<tr>
<td>NEAR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2.9 lma’an

3.2.9.1 Morphology of lma’an

The string lma’an is composed of the preposition l- ‘to, for’ and the lexeme
ma’an ($< *ma’n$). This second element is not found as an independent word in BH and
may be analyzed variously. It may be a *qatl noun of the root M’N; however, a root
M’N is not known in BH. Bauer and Leander (1922, 491-492) suggest that it is a mem-
preformative noun of the well-known third-weak root ‘NY ‘to answer’. Since *maqt-
type noun-patterns are not productive in BH 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 ma’ane 'purpose' (lm’nhw 'for his purpose' in Proverbs 16:4).

3.2.9.2 Usage of lma’an

Two functions are found in BH for lma’an. One denotes a purpose or resultative function, the other CAUSE.

3.2.9.2.1 PREP/ADVZ (PURPOSE/RESULT)

There are seventy-seven BH examples of the purpose/resultative function of lma’an as heading a noun phrase or clause.25 The complex preposition may head a noun phrase, an infinitive phrase, or a relative clause. In these contexts, the string designates the logical relation corresponding to the main clause. Example (187)


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demonstrates the use of the string with a following infinitive phrase. Two phrases present the purpose behind Yahweh's action of elevating Pharaoh to Egypt's throne.

The first phrase is headed by \textit{ba\textsuperscript{\textcircled{c}}\textsubscript{bur}} with a similar notion of PURPOSE (§3.2.3.2.4).

The second phrase, \textit{וּלְמַעַן סַפֵּר שְׁמִי בְּכָל־הָאָרֶץ}, designates a parallel semantic notion.

As seen elsewhere in BH, 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 \textit{lma\textsuperscript{\textcircled{a}n}} is evidenced 128 times heading verbal clauses\textsuperscript{26} and twice with a non-verbal clause.\textsuperscript{27} In Example (188), the

\begin{itemize}
\item \textit{ךָהֶעֱמַדְתִּי בַּעֲבוּר הַרְאֹתְךָ אֶת־כֹּחִי וּלְמַעַן סַפֵּר שְׁמִי בְּכָל־הָאָרֶץ} (187)
\end{itemize}

\begin{itemize}
\item [he\textsuperscript{\textcircled{c}ma\textsuperscript{\textcircled{d}tiko} ba\textsuperscript{\textcircled{c}bur har\textsuperscript{\textcircled{o}tiko } \textsuperscript{\textcircled{\textcircled{c}}}et-kohi}]
\item [raise.up-SC.1C.SG. + you PURPOSE show-INF. + you DOM + power + my]
\item [ulma\textsuperscript{\textcircled{a}n} sapper \textsuperscript{\textcircled{\textcircled{c}}}smi b\textsuperscript{\textcircled{c}ol-ho\textsuperscript{\textcircled{e}res}]
\item [CJ + PURPOSE tell-INF. name + my IN + all + the.land]
\end{itemize}

I have raised you up in order to show you my strength and so that my name might be proclaimed in every land. Exodus 9:16.

\textsuperscript{26} Genesis 12:13; 18:19; 27:25; 37:22; Exodus 4:5; 8:6, 18; 9:29; 10:2; 13:9; 16:4, 32; 20:12; 23:12; 33:13; Leviticus 23:43; Numbers 15:40; 27:20; 36:8; Deuteronomy

\textsuperscript{27}
result or purpose of the giving of a new heart is marked by a verbal clause headed with this string, לְמַעַן בְּחֻקֹתַי 'so that they will walk according to my statutes'. 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 מִגְר שׁ הּ 'so that her pasturelands might be plundered'.


I will give them a heart of flesh, so that they might walk according to my statutes. Ezekiel 11:19-20.

They gave my land for a possession ... so that her pasturelands might be plundered. Ezekiel 36:5.

3.2.9.2.2  PREP (CAUSE)

The prepositional use of *lma’an* with an accompanying NP or pronominal suffix functions to designate a causal relation in sixty-five BH examples.28 In Example (190),

---

28 Genesis 18:24; Deuteronomy 3:26; 1 Kings 8:41; 11:12, 13 (2x), 32 (2x), 34, 39; 15:4; 2 Kings 8:19; 13:23; 19:34 (2x); 20:6 (2x); 2 Chronicles 6:32; 21:7; Job 18:4; Psalms 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; Isaiah 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; Jeremiah 14:7, 21; Ezekiel 20:9, 14, 22, 44; 23:21; 36:22, 32; Daniel 9:17, 19.
the modifying phrase לְמַעַנְכֶם lma‘ankem 'because of you' serves as the grounds or cause of the main clause—wayyiṭ‘abber YWHW bi 'Yahweh was angry with me'.

Yahweh was angry with me because of you. Deuteronomy 3:26

3.2.9.3 Grammaticalization of lma‘an

The primary grammaticalization (FOR + 'purpose' > PURPOSE/RESULT) may be plausibly assumed based on the nominal reconstruction of the BH polymorphic expression. On analogy to other prepositional examples, lma‘an would then have been extended to be used as an adverbializer. Heine and Kuteva suggest that this type of 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" (2004, 212). Examples of this change from African languages are cited in Nama kaan 'fact, matter' > kaan-thî-câ? 'in order to' and Susu fe 'matter, affair' > -fe, -fera PURPOSE.
Because of the lack of internal transitional examples in BH, the second change to a causative function is uncertain but may likely have evolved from the original preposition phrase. Alternatively, the causative function could have developed from the resultative (Heine and Kuteva 2004, 246-247), but no BH evidence suggests such a progression.

3.2.9.4 Mapping the Grammaticalization Trajectories of *lma’an*

The expansion of the functions from the original construction to the grammatical meaning is outlined by the two figures below. In Figure 3-I, the preposition phrase, FOR + 'purpose', obtains the grammatical functions PURPOSE and CAUSE as a complex preposition. Further, the preposition was extended to clausal contexts yielding an adverbializer. Figure 3-J 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 BH situation where only the derivative functions are evidenced, then, is represented in Stage III.
Figure 3-I: Functional Developments of *lma’an

*PREP (FOR) + Noun (‘purpose’) > PREP/ADVZ (PURPOSE)
> PREP (CAUSE)

Figure 3-J: Overlap Model for *lma’an

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP + N</td>
<td>*FOR + ‘purpose’</td>
<td>*FOR + ‘purpose’</td>
<td></td>
</tr>
<tr>
<td>PREP/ADVZ</td>
<td>(PURPOSE)</td>
<td>PURPOSE</td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>(CAUSE)</td>
<td>CAUSE</td>
<td></td>
</tr>
</tbody>
</table>

3.2.10 מִנְקָח

3.2.10.1 Morphology of מִנְקָח

As discussed in the previous chapter, the morphological form of מִנְקָח consists of the inseparable preposition l- and a *qutl pattern noun of NKḤ. The nominal meaning 'front' and several morphological oddities were presented in the description of the grammaticalization of the noun (§2.3.9).
3.2.10.2 Usage of *lnokḥ*  

The three instances of *lnokḥ* are found with two different meanings in BH. The first demonstrates the aggregate notion of the originating preposition phrase, 'to the front'. The second usage indicates the grammaticalized notion of the benefactive relation.

3.2.10.2.1 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 *lnokḥ* '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 כָּנֶגֶד neḏek  'before you' (§2.3.8) providing the direction.

---

May your eyes look forward, and your eyeballs gaze straight in front of you.

Proverbs 4:25

3.2.10.2.2 PREP (BENEFACTIVE)

The sole usage in Example (192) is found with the intended recipient or benefactive function. Similar to the use of ba‘ad (§2.3.5.2.3), it designates the one for which supplication to a deity is made.

Isaac prayed to Yahweh for his wife because she was barren. Genesis 25:21

3.2.10.3 Grammaticalization of lnokāḥ

In addition to the previously mentioned shift of ba‘ad (§2.3.5.3), lnokāḥ is the second case in Hebrew of a 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 הַצֹאן ('to the front of/for the sheep'), provide the ambiguity that may have motivated the change from the prepositional phrase 'to the front of the sheep' to the benefactive function meaning 'intended for the sheep'. This ambiguity is outlined below as the result of two interpretive issues.

First, לְנֹכַח at the head of the adjunct phrase may either be a preposition phrase or a grammaticalized preposition. This word includes the preposition l- and the noun nוקה in the construct state with the following definite noun הַצֹאן 'the sheep'. Two structural analyses are possible: $[[l_{\text{PREP}} [nokah + haṣson]_{\text{NP}}]_{\text{PP}}$ and $[[nokah]_{\text{PREP}} [haṣson]_{\text{NP}}]_{\text{PP}}$. The functional dissimilarity would correspond accordingly: the former structure would be understood as a preposition phrase 'at/to the area
opposite of the sheep' and the latter represents the BENEFATIVE 'for the sake of the sheep'.

Second, the clause modified by הָשָׁנ הַשָּׁנ could be either the main clause, 

וַיַּצְגָּאֶת־הַמַּקְלוֹת wayyaṣṣeg 'et-hammaqlot 'he placed the branches', or the second embedded clause, ד אֶל־לְשֹׁת 'the sheep would go to drink'.

While the latter clause is the nearer syntactic option, its meaning would be nonsensical. With the main clause, then, either analysis suggested above for the modifying phrase could be plausible, thus exemplifying the ambiguity required for the emergence of such functional extensions.

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. Genesis 30:38
3.2.10.4 Mapping the Grammaticalization Trajectories of *lnokāḥ*

The grammaticalization trajectory of *lnokāḥ* demonstrates a linear development from TO + 'front' to a benefactive function. As with previous examples, it may be mapped according to Figure 3-K or alternatively using the Overlap Model of Figure 3-L.

**Figure 3-K: Functional Developments of *lnokah***

PREP (TO) + Noun ('front') > PREP (BENEFACTIVE)

**Figure 3-L: Overlap Model for *lnokah***

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP+N</td>
<td>TO+ 'front'</td>
<td>TO+ 'front'</td>
</tr>
<tr>
<td>PREP</td>
<td></td>
<td>BENEFACTIVE</td>
</tr>
</tbody>
</table>

3.2.11 יִפְּלִי *lpi*

3.2.11.1 Morphology of *lpi*

The string יִפְּלִי *lpi* combines the inseparable preposition ָל- 'to, for, at' together with the anatomic noun 'mouth' in the construct state. The morphology of יִפְּלִי *lpi* 'mouth' has been discussed previously (§3.2.6.1).
3.2.11.2 Usage of לֶֽפֶת

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 לֶֽפֶת.

3.2.11.2.1 PREP (TO) + N ('mouth')

There are fifty-one instances of the use of לֶֽפֶת as a preposition phrase in BH.\(^{30}\)

The meaning of the noun falls into one of three groupings—the anatomic feature 'mouth', a general 'opening; orifice', and the emblematic idiom 'edge (of a sword)'.

Example (194) demonstrates the first usage, which is found only with pronominal suffixes. In Example (195), the phrase לֶֽפֶת is used with a following noun to designate its opening. A figure of speech with the word בֵּית hereb 'sword', as in Example (196),

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\(^{30}\) Genesis 34:26; Exodus 4:16; 17:13; 28:32; 39:23; Numbers 21:24; 35:30; Deuteronomy 13:16 (2x); 20:13; Joshua 6:21; 8:24 (2x); 10:28, 30, 32, 35, 37, 39; 11:11, 12, 14; 19:47; Judges 1:8, 25; 4:15, 16; 18:27; 20:37, 48; 21:10; 1 Samuel 15:8; 22:19 (2x); 2 Samuel 15:14; 1 Kings 17:1; 2 Kings 10:21, 25; 21:16; Job 1:15, 17; 29:9; 31:27; Psalms 39:2; 119:103; 141:3, 7; Proverbs 8:3; 30:32; Ecclesiastes 6:7; Jeremiah 21:7.
designates the destruction wrought ḫɔrɛb 'at the mouth of the sword', that is, with the devouring part of a sword.

(194) שִׁית יָּהָוה שְׁמַרְי לֶפָי

set-IMP.M.SG. YHWH guard FOR + mouth + my

Set put a guard, O Yahweh, for my mouth. Psalm 141:3

(195) נִפְזְר וּעֲצָמֵנוּ לֶפֶי שָׁאוֹל

be.scattered-SC.3C.PL. bones + our AT + mouth.of Sheol

Our bones shall be scattered at the opening of Sheol. Psalm 141:7

(196) יְחַי לַפְּרִית

strike-WCPC.3M.PL. her (= city) AT + mouth.of + sword

They struck [the city] with the edge of the sword. Judges 1:8

3.2.11.2.2 PREP (ACCORDING TO)

The complex preposition is found fourteen times, where the meaning of ḥɔrɛb 'at the mouth of' is the logical relation ACCORDING TO.31 The preposition is most commonly found with a following NP as with Example (197). The representative

31 Exodus 12:4; 16:16, 18; 25:16 (2x), 51; 27:16; Numbers 9:17; 26:54; Joshua 18:4; Proverbs 12:8; 27:21; Jeremiah 29:10; Hosea 10:12.
surveyors allotted each tribe's land $\ell^\pi$$\nu$ $\ell^\pi$ $\nu$$\ell^\mu$ $\ell^\pi$ $\nu$ $\ell^\mu$ $\ell^\pi$ $\nu$ $\ell^\mu$ 'according to their inheritance'. The complement of the complex preposition $\ell^\pi$ may also be an infinitive phrase as exemplified by Example (198). In this instance from the Book of Jeremiah, the reappearance of God to Judah is envisioned as occurring $\ell^\pi$ 'according to' the culmination of the seventy years of punishment in the Babylonian Exile.

They will document (the land) according to their allotment. Joshua 18:4

Whenever the seventy years are complete (i.e. when according to the completion of the seventy years) in Babylon, I will visit you. Jeremiah 29:10

3.2.11.3 Grammaticalization of $\ell^\pi$

The grammaticalization of $\ell^\pi$ 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 $[\text{TO}]_{\text{PREP}} + [\text{['mouth']}_n}$
evidence the grammatical meaning 'according to'. These complex prepositions include:

\textit{lp} 'according to' in Punic (Friedrich and Röllig 1999, §252), \textit{l p} 'according to' in Ugaritic (Tropper 2000, 777-778), \textit{ana pî} 'according to' in Akkadian (von Soden 1995, §115 t), and likely \textit{ina pî} 'according to' at Amarna (EA 81:18).

Example (199) provides a plausible context in BH where the expansion to the complex preposition could be envisioned. In the final preposition phrase, the expression, \textit{םָּׁלְפִי הַטַּט}, could be understood as a composite or an aggregate. The former would designate that Joseph was giving food, [[[\textit{lp}]_{\text{PREP}} [\textit{pi hatɔṭ}]_{\text{NP}}]_{\text{PP}}} 'for the mouth of the children'. The use of a singular 'mouth' is the usual collective idiom in BH. The latter would specify who was sustained, [[[\textit{lpî}]_{\text{PREP}} hatɔṭ]\text{NP}]_{\text{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.

301
Joseph provided food for his father, his brothers, and his father's entire household according to \([\text{the number of]}\) the \((\text{mouths of the})\) children. Genesis 47:12

\[\text{3.2.11.4 Mapping the Grammaticalization Trajectories of } \text{לפי} \]

The functional expansion from the original preposition phrase to the complex preposition is modeled in Figure 3-M. The semantic change to the grammatical meaning ACCORDING TO is paralleled by the structural rearrangement. Moreover, Figure 3-N demonstrates the structural and functional variation which is evidenced in BH as is represented by Stage II.
3.2.121 *li*pnē

3.2.12.1 Morphology of *li*pnē

The string לִפְנֵי *li*pnē is composed of two lexemes. It consists of the preposition

l- 'to, for' and the plural tantum noun פּנִים *ponim* 'face' in the construct state. Most lexica relate the noun etymologically to the final-weak verbal root *PNW* or *PNY* 'turn'. The BH 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-ה ַא רֶץ *pne-ho'reṣ* '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 pānūm. The morphologically similar terms, Arabic fīnāʾ and Sabaic pnw, designate the 'front of (a building)'.

3.2.12.2 Usage of līpne

The BH syntagm līpne governs a following independent lexeme or a pronominal suffix. The two primary uses of the grammaticalized string function to denote locative and temporal relations. Whereas the compositional constituents are clearly discernible, the phrasal usage 'to the face of' is never found in BH. Even the independent phrase לְפָנָם līpānim is found only as the locative adverb 'forward' (Jeremiah 7:24) or the temporal adverb 'formerly'.

3.2.12.2.1  **PREP (IN FRONT OF)**

Eight hundred and seventy-five examples of *lipне* may be classified as

functioning as the locative relation IN FRONT OF.\(^{33}\) In Example (200), the verb *QRB*

\(^{33}\)Genesis 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; Exodus 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; Leviticus 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; Numbers 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); Deuteronomy 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; Joshua 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; Judges 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 Samuel 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;
'approach' is modified by three phrases headed by *liḇne*. Each of these 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 אֶלְע ז ר הַכֹּהֵן וְלִפְנֵי יְהוֹשֻׁעַ בִּן־נוּן וְלִפְנֵי הַנְשִׂיאִים *liḇne* 'elʿazor hakkohen wliḇne yhošuaʿ bin nun wliḇne hannšiʿim 'in front of Eleazar the priest, Joshua son of Nun, and the leaders'.

The locative relation is further combined with other spatial prepositions to form several compound-complex prepositions of note. The string מִלִפְנֵי *milliḇne* 'from in

11:16; Hosea 6:2; Joel 2:3 (2x), 10, 11; Amos 9:4; Jonah 1:2; Micah 6:4; Nahum 1:6; Habakkuk 3:5; Haggai 2:14; Zechariah 3:1, 3, 4, 8, 9; 4:7; 12:8; 14:20; Malachi 3:1, 16. An additional instance is also attested in the Iron Age Hebrew inscriptions (Arad 7.6).
front of (< min + līpne) denotes the relation SOURCE + [IN FRONT OF].

Twice the locative preposition is preceded by יָעַל ‘unto, upon, beside’. This compound preposition ‘al līpne denotes a twofold spatial relation UPON + [IN FRONT OF]. These combinations secure the analysis of līpne as a grammatical unit which can be compounded with additional prepositions.

3.2.12.2.2 PREP/ADVZ (BEFORE)

Another function exhibited by līpne is the temporal relation BEFORE which is evidenced in BH seventy-one times. Example (201) demonstrates this usage in


35 Ezekiel 40:15; Esther 4:2.

conjunction with the opposite temporal relation אַחֲר יוֹם 'after it'. The phrase לְפָנֵי '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' final blessing contained in chapter thirty-three of the Book of Deuteronomy is designated as having been proclaimed לִפְנֵי מוֹתוֹ 'before his dying'. That is, it was situated temporary prior to the action related by the infinitive.

30, 33; 2 Kings 17:2; 18:5; 19:26; 21:11; 23:25; 1 Chronicles 1:43; 17:13; 22:5; 24:2; 29:25; 2 Chronicles 1:12; 33:19; Nehemiah 13:19; Job 8:12; 21:18; Psalms 35:5; 83:14; Proverbs 8:25; 16:18 (2x); 18:12 (2x); Ecclesiastes 1:16; 2:7, 9; 4:16; Isaiah 17:13 (2x); 18:5; 37:27; 43:10; 48:7; 65:6; Jeremiah 28:8 (2x); 34:5; Ezekiel 33:22; Joel 3:4; Amos 1:1; Zechariah 8:10; Malachi 3:23. See also the usage in Iron Age Hebrew (Meṣad Ḥashavyahu 1.5).
There has not been anything like that day before it or after it. Joshua 10:14.

Elsewhere, *li磐ne* may govern a sentence as a clause linker or an adverbializer with the temporal function BEFORE. In Example (203), the clause-initial adverbial clause, *li磐ne hitgallא* 'before it breaks out', is subordinate to the imperative clause, *ה�行 נטווש* 'give up the strife'.

Lastly, the temporal function of *li磐ne* is found in combination with *מן min* 'from' both before and after to form compound prepositions. The syntagm, *mill磐ne* 'from
before', brings together the source relation FROM and the temporal function BEFORE.\textsuperscript{38}

With the following \textit{min} 'from' in one instance from Late Biblical Hebrew, the aggregate construction \textit{lîpne mizzê} 'before this' provides for a clause-initial preposition phrase which serves to mark the temporal situation of the following clause.\textsuperscript{39}

(203)

\begin{center}
\begin{tabular}{llll}
\textit{wli̱pne} & \textit{hitgalla'̊} & \textit{ḥarib} & \textit{nṭoš} \\
CJ + BEFORE & break.out-SC.3M.SG. & the.strife & give.up-IMP.M.SG.
\end{tabular}
\end{center}

Before a quarrel begins, concede. Proverbs 17:14

3.2.12.3 \textbf{Grammaticalization of \textit{lîpne}}

As seen previously (§2.3.1.3.2), 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 \textit{lpny} 'in front of' (< TO + 'face'), Phoenician \textit{lpn} 'before' (< TO + 'face'), Ugaritic \textit{l pn} 'before' (< TO + 'face'), Aramaic \textit{b'py} 'in front of' (< IN + 'face'), \textit{tyn} 'before' (< TO + 'eyes'), Akkadian \textit{ina pāni} 'in front of' (<

\textsuperscript{38} Genesis 23:4, 8; Ecclesiastes 1:10.

\textsuperscript{39} Nehemiah 13:4.
IN + 'front, face'), and Ge’ez 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)qdm(y) ‘ere, Arabic ‘amāma ‘before’, qabla 'before’, Akkadian ana pāni ‘before’, Ge’ez qəDMA ‘before’, and Sabaic l-qbl ‘before’, b-qdm(y) ‘before’.

A number of BH examples demonstrate situations where the shift from the locative and temporal function is likely to have occurred. 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 ṣaron YHWH

40 Genesis 32:4; 33:3, 14; 46:28 (2x); Exodus 13:21; 17:5; 23:20, 27, 28; 32:1, 23, 34; 33:2; 10:33; 14:14; 27:17 (2x); 32:17; Deuteronomy 1:22, 30, 33; 3:18, 28; 4:32; 9:3 (2x); 10:11; 31:3 (2x), 8; Joshua 1:14; 3:6 (2x), 11; 4:5, 11, 12, 13; 6:4, 6, 7, 8, 9, 13 (2x); 8:10; 24:12; Judges 4:14; 1 Samuel 4:17; 8:11, 20; 9:12, 19, 27; 10:8; 17:7; 18:13, 16; 2 Samuel 5:24; 15:1; 19:18; 24:13; 1 Kings 18:46; 2 Kings 4:31; 1 Chronicles 14:15; 2 Chronicles 1:10; Nehemiah 9:24; Esther 6:9, 11; Psalms 68:8; 105:17; Isaiah 45:2; 52:12 (2x); 58:8; Micah 2:13 (2x).
'before the Ark of Yahweh' and the priests. This designation clearly implies the spatial and chronological priority of the military in this accounting.

Joshua 6:7

3.2.12.4 Mapping the Grammaticalization Trajectories of *lipne*

The expansion of *lipne* is presented in this section in two figures. In Figure 3-O, the grammaticalization changes are linked through the extension of individual functions. The proposed originating phrase was expanded to the locative function and then to the temporal usage. Figure 3-P 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 BH where the originating structure and function is not evidenced.
Figure 3-O: Functional Developments of liḇne

*PREP (TO) + N ('face') > PREP (IN FRONT OF) > PREP/ADVZ (BEFORE)

Figure 3-P: Overlap Model for liḇne

<table>
<thead>
<tr>
<th>Stage</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP + N</td>
<td>*TO + 'face'</td>
<td>*TO + 'face'</td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>IN FRONT OF</td>
<td>IN FRONT OF</td>
<td>BEFORE</td>
</tr>
<tr>
<td>PREP/ADVZ</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

3.2.13 לִקְרַאת liqraʾt

3.2.13.1 Morphology of liqraʾt

The syntagm לִקְרַאת liqraʾt furnishes a morphological origin unlike that of the other cases in this chapter. The initial element, the preposition ℓ · 'to, for', is unexceptional. The second, however, appears to be the verbal noun, or the Qal-stem infinitive construct, of QRʾ 'to meet' (homographic with QRʾ 'to call (out)') itself a by-form of the more usual final-weak root. The infinitive-construct form of III-ʾ roots follows either the vocalic pattern *qū,tv,l or *qū,tv,l+t (Bauer and Leander 1922, 372-376). Some roots exhibit both forms, לִשְׁנּא snoʾ 'hating' (< *šunuʾ; Genesis 37:5) and לִשְׁנָא snoʾt 'hating' (< *šunuʾ+t; Proverbs 8:13), while most roots pattern after one or
the other. In the case of the root QR’ 'to meet', the latter pattern, קְרַאת qraʾt 'meeting' (< *qaraʾ + t), is found exclusively.\(^{41}\) The form is further anomalous as the syllable closing glottal stop is syncopated rather than quiescent. Thus it follows the unconditioned phonological change of *CvʾC > CvʾC\(^{42}\) even though the historic orthography is maintained (Gesenius, Kautzsch, and Cowley 1910, §19k).\(^{43}\)

3.2.13.2 Usage of liqraʾt

Three usages of liqraʾt are evidenced: 1) the originating string of the preposition plus the infinitive construct 'to meet', 2) a directional complex preposition TOWARD, and 3) an adversative preposition AGAINST.

\(^{41}\) The homophonous root QR’ 'to call' follows the former pattern, qroʾ 'calling' (< *guru̇; 1 Samuel 3:6). The example of liqraʾt nhɔ̄šim in Numbers 24:1 should probably be realigned with this root as 'to summon omens'.

\(^{42}\) 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 לִקְר אתִי liqrɔʾʾti 'to meet me' (Numbers 22:34).

\(^{43}\) The Siloam Tunnel Inscription evinces a less conservative spelling in line four, lqrt 'to meet' (< *lqrʾt).
3.2.13.2.1 PREP (TO) + INF ('meet')

The composite meaning of 'to meet' comprises two-thirds of the cases of liqrāt.\(^4^4\)

Most frequently (fifty-four of eighty-two examples), this usage modifies verbs of motion such as BWʾ 'enter', HLK 'go', YṢʾ 'go out', YRD 'go down', ‘LH 'go up', and RWŠ 'run'.

The other instances are used with a wide range of verbal notions. Example (205) demonstrates the infinitive construction 'to meet' modifying a main verb which does not denote motion. Ahimelech, the priest of Nob, is fearful of the situation surrounding his encounter, or meeting, with David.


316
Ahimelech was afraid to meet David. 1 Samuel 21:2

3.2.13.2.2 PREP (TOWARD)

There are only a handful of clear examples of the directional preposition which may be differentiated categorically from the infinitive. These usages are separable based on semantic and pragmatic reasons. Two instances are found with verbs of shouting (עָפְלִשְׁתִים הֵרִיעוּ לִקְרַאתוֹ 'the Philistines were shouting at him'; Judges 15:14) or roaring (כְּפִיר אֲרִיוֹת שֹׁאֵג לִקְרַאתוֹ 'a young lion was roaring toward him'; Judges 14:5) where the object is marked by the grammaticalized complex preposition לִקְרַאת 'toward'. In Exodus 14:27, the directionality of the fleeing Egyptians toward Moses may also be in view (מִצְרַיִם נָשִׁים לִקְרַאתוֹ 'The Egyptians were fleeing to him'). Lastly, the string with a directional sense is found twice in Example (206). The verb is being modified

45 Exodus 14:27; Judges 14:5; 15:14; 1 Samuel 30:21 (2x).
by two equivalent expressions לִקְרַאת דּ וִד wliqraʾ t hɔʾ cm liqraʾ t dɔw id wliqraʾ t hɔʾ cm 'toward David and toward the people'. The repetition of an identical preposition is expected in BH with compound objects. However, only once in BH is a duplicate infinitive used to modify a single verb, where it is used to highlight a sequence of multiple paired items (see 2 Kings 5:26). It may be reasonably asserted that the double usage in Example (206) is most probably prepositional.

(206) וּוַיְצָא לִקְרַאת דּ וִד wliqraʾ t hɔʾ cm וְלִקְרַאת hɔʿ ɔm ašɛrʾ itto wayyeṣʾu ʾdɔw id ʾašer ʾitto go.out-W CPC.3M.PL. TOWARD PN CJ + TOWARD the.people REL + WITH + him They went towards David and the people who were with him. 1 Samuel 30:21

3.2.13.2.3 PREP (AGAINST)

An adversative relation is conveyed in ten instances of liqraʾ t. Example (207) exhibits this usage. In preparing for a battle, the armies are said to be arranged opposing one another. The adverbial expression, מִנְרוּהַ לִקְרַאת מְגֻרָה maɾɔko liqraʾ t μνρθ λΚρθ μγρθ}

46 Genesis 15:10; 1 Samuel 4:2; 17:2, 21; 2 Samuel 10:9, 10, 17; 1 Chronicles 19:10, 11, 17.
maʻaroḵō 'rank against rank', designates how the battle lines were drawn in an opposite manner.

תַּעֲרֹּתָה יִשְׂרָאֵל וּפוֹלְשִׁיתִים מַעֲרַכָּה לְקַרְּאת מַעֲרַכָּה (207)

wattaʿaʁo yak el unplishim maʻaroḵō liqra’t maʻaroḵō
arrange-WCPC.3M.SG. PN CJ+PN line AGAINST line
Israel and the Philistines arrayed for battle rank against rank. 1 Samuel 17:21

3.2.13.3 Grammaticalization of liqra’t

The expansion of liqra’t to grammatical contexts is explored by looking at ambiguous usages and analogous cross-linguistic examples.

3.2.13.3.1 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 Fwr ʾ ‘toward' in several dialects (Official Aramaic, Qumran Aramaic, and Syriac) is derived from a string of PREP + INF where the verbal root is ’R ʾ ‘reach, meet'.
The development from the infinitive phrase to the directional preposition is apparent in multiple BH contexts. In these examples, oftentimes the modified constituent is a verb of motion, notably יָשָׁר 'go out' and חל 'go', and the complement of לִקְרַאת is a person or group of people. Thus the semantic ambiguity of 'go (out) to meet someone' and 'go (out) toward someone' is patent. Example (208) provides one such situation. Saul is said to turn from pursuing David to encounter a group of the Philistines. The modifying phrase, לִקְרַאת פְּלִשְׁתִּים liqra’t plištirim, may be understood as the modifying infinitive phrase, 'to meet the Philistines', or the preposition phrase, 'toward the Philistines'.


320
wayyelek liqraʾṯ plištim

[Saul] went to meet/toward the Philistines. 1 Samuel 23:28

3.2.13.3.2  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; however, the

possibility of an expansion from the original infinitive phrase in BH cannot be

completely discounted. Heine and Kuteva point to an example of a similar

development. In the Indian Ocean French Creole, kot 'toward' (< French côté 'side')

may further designate the prepositional relation 'against' (2004, 272). Semitic

evidence provide additional evidence the extension of the directional to the

adversative. The Aramaic complex preposition ʾwrʾwt 'towards' takes on the notion of

'against' in the Psalms Targum, and Aramaic ʾzymwn is multivalent denoting both

'towards' and 'against'. The Akkadian compounds, ana libbi 'towards' and ana mulḫḫi
'towards', may designate opposition as 'against'. Several Sabaic function words composed of the preposition 'br 'towards' acquire the function 'against'.

In BH, 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 רֹדְפ י́ ʾɔ  y, may be read as a directional notion 'toward my pursuers' or an adversative 'against my pursuers'.

\[
\text{whoreq} \quad h^\text{niṭ} \quad uṣgor \\
\text{CJ + empty-IMP.M.SG.} \quad \text{spear} \quad \text{CJ + weapon} \\
\text{líqrarʾṭ} \quad roḏpɔy \\
\text{TOWARD/AGAINST} \quad \text{pursuers + MY}
\]

Draw out a spear and spar toward/against my pursuers. Psalm 35:3

3.2.13.4  Mapping the Grammaticalization Trajectories of líqrarʾṭ

The development of líqrarʾṭ 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 3-Q. 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.

Figure 3-Q: Overlap Model for *liqra’t*

<table>
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<th>Stage:</th>
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<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP + INF</td>
<td>TO + 'meet'</td>
<td>TO + 'meet'</td>
<td>TO + 'meet'</td>
</tr>
<tr>
<td>PREP</td>
<td>TOWARD</td>
<td>TOWARD</td>
<td></td>
</tr>
<tr>
<td>PREP</td>
<td>(AGAINST)</td>
<td>AGAINST</td>
<td></td>
</tr>
</tbody>
</table>

3.2.14 *miyyom*

3.2.14.1 Morphology of *miyyom*

The word *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 *byom* (3.2.2.1).
3.2.14.2 Usage of miyyom

The *miyyom* string is used in BH 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.

3.2.14.2.1 PREP (FROM) + N ('day')

The composite meaning of the preposition phrase is evidenced thirteen times in BH.\textsuperscript{48} These instances are either followed by a distinct phrase or a modifying element, such as an adjective or a demonstrative. In Example (210), the independent nature of the constituents of the preposition phrase is evidenced by the adjective, רִאשׁון 'first, former', which is modifying the noun *yom*. Elsewhere, the preposition phrase is found as an idiom marking the extremities of a discrete timeframe. For example, *miyyom* may be followed by לְיוֹם lyom '(from day) to day' (Numbers 30:15; 1 Chronicles 16:23), אֶל־לְיוֹם אֶלֶךָ 'unto me day by day' (Numbers 14:31; 20:1; Deuteronomy 1:33; 20:3), אָּלֵי lyom 'from day to day' (Leviticus 23:31), קְָּלָּא lyom 'from day to day' (Numbers 28:19; Deuteronomy 16:8; 30:15), אָּלֵי lyom 'unto me day by day' (Numbers 29:24; Deuteronomy 16:8; 30:15).
'el-yom 'from day to day' (Esther 3:7; Psalm 96:2), and 'ad-layl 'from day until night' (Isaiah 38:12, 13).

As for anyone eating leavened food, that person will be separated from Israel from the first day [of the festival] until the seventh. Exodus 12:15

### 3.2.14.2.2 PREP/ADVZ (SINCE)

The grammaticalization of miyyom as a preposition SINCE is apparent in contexts where the object is an infinitive phrase.\(^49\) Example (211) evidences the usage of the string as a durative temporal preposition. In this instance, the infinitive phrase headed by the grammaticalized phrase, מִיוֹם הֶיוֹתָם עַל־ה אֲד מ ה miyyom h'ytom 'al-hɔmi ɛ ɔ ɔ ə m 'since their being upon the earth', is sequenced with another preposition phrase עַד ה היִסְמ עד ה ביִסְמ 'ad hɔy ɛ s 'ad hɔy ɛ s 'from day to day'

\(^{49}\) Exodus 10:6; Leviticus 23:15; Deuteronomy 9:24; 1 Samuel 7:2; 8:8; 29:3, 6; 2 Samuel 13:32; 2 Kings 8:6; Ezekiel 28:15.
‘ad hayyom hazze '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 Jeremiah 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, ‘ad hayyom hazze 'until this very day'. The further designation of the original timeframe as וּמִימוֹיָּׁהּ ה mime yy ɔ hu 'from the days of Josiah' evinces the loss of the denotative meaning of the component parts of this expression.
Your fathers and grandfathers have never seen [it] since they were on the earth until this very day. Exodus 10:6

I spoke to you against Israel ... since I spoke to you from the days of Josiah until this very day. Jeremiah 36:2

3.2.14.3 Grammaticalization of miyyom

Semitic examples in Akkadian, anûmišu 'since' (< *ana +  ūmi + -šu), and in Ethiopic, ʾəm'ama 'since' (< *əm + ʾama), 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 in the semantics and differences of the construction. The original BH 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, the evolution may have obtained from the complex preposition via the usage with the relative אֲשֶׁר *ʾ*אָשֶׁר. The two examples of this construction may be read as either a preposition phrase or a complex preposition. For example, the phrase *miyyom* is followed by a relative clause in Example (213). 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'.

50 1 Samuel 29:8; Nehemiah 5:14.
What have you found [wrong] with your servant since (or 'from the day when') I was before you until this very day? 1 Samuel 29:8

3.2.14.4 Mapping the Grammaticalization Trajectories of *miyyom*

The apparent linear evolutionary trajectory of *miyyom* allows for a simple model of grammatical change. The preposition phrase, FROM + 'day', was extended to contexts where the temporal meaning was generalized as SINCE. The rebracketing of

\[
[[\text{min}]_{\text{PREP}} [\text{yom}]_{\text{N}}]_{\text{PP}} \rightarrow \text{[miyyom]}_{\text{PREP}}
\]

designates the structural change implicit in the grammaticalization. Secondly, the complex preposition was expanded to take not just nominal but verbal complements—both as relative and nonrelative clauses. This extension marks another structural change resulting in the adverbializer usage without any apparent semantic change. The Overlap Model in Figure 3-R presents the structural and semantic expansions in two stages. In the second column, Stage II
designates the situation in BH, where the preposition phrase, complex preposition, and adverbializer are evidenced.

Figure 3-R: Overlap Model for *miyyom*

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP + N</td>
<td>FROM + 'day'</td>
<td>FROM + 'day'</td>
</tr>
<tr>
<td>PREP/ADVZ</td>
<td>SINCE</td>
<td></td>
</tr>
</tbody>
</table>

### 3.2.15 מִפְּנֵי mippne

#### 3.2.15.1 Morphology of mippne

The morphology of מִפְּנֵי mippne consists of the preposition מִן min 'from' and the construct state of the noun פְָּנִים pnim 'face'. The nun of the first element assimilates to the initial bi-labial of the noun (min + pne > mippne). The particular semantics and morphology of the noun have been appraised previously (3.2.12.1).

#### 3.2.15.2 Usage of mippne

The string mippne has two basic meanings: the composite idea of FROM + 'face' or the logical relation CAUSE.
3.2.15.2.1  PREP (FROM) + N ('face')

Just over half of the occurrences of mippne (171 examples) may be understood as a simple preposition FROM and the noun 'face, presence' without any evidence of grammaticalization.51 One such usage is found in Example (214). Esau is said to be leaving the land of Canaan where his brother Jacob lives. The adverbial phrase, מִפְּנֵי יַעֲקֹב, 'from the presence of his brother Jacob', functions to designate the location from which Esau journeyed.


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[Esau] went to a land away from Jacob his brother. Genesis 36:6

3.2.15.2.2 PREP (CAUSE)

The grammaticalized string mippne exhibits a causal function governing the following phrase with 127 BH instances. In Example (215), the land of Canaan is said not to be able to hold both of the brothers, Esau and Jacob, מִפְּנֵי מִקְנֵיָם mippne miqneh mipnem 'because of [the large number of] their livestock'. The preposition mippne designates the basis on which the assertion is made.

The land of their sojournings is not able to sustain them because of their cattle.

Genesis 36:7

### 3.2.15.3 Grammaticalization of mippne

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 ‘lʾpy ’on the grounds that' (< ‘lʾupon’ +ʾpyʾ 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 mippne demonstrate the potential dual-fold alignment between the grammaticalized and ungrammaticalized usages.\(^{53}\) In Example

\(^{53}\) Genesis 45:3; Joshua 2:9, 24; Jeremiah 35:11 (2x); 37:11; Lamentations 5:9; Ezekiel 14:15.
(216), the brothers' horror is explained with הָפְנִי 'from his face'. This phrase may be functioning either as a locative, signaling that the brothers were fearful on account of Joseph's shocking appearance before them, or as a causal, designating their fear of him directly. Such ambiguity between the locative and causative relations demonstrates a situation in which the expansion of meaning could be understood.

Now [Joseph's] brothers were not able to answer him for they were horrified because of him/at his presence. Genesis 45:3

3.2.15.4   Mapping the Grammaticalization Trajectories of mippne

The preposition phrase mippne 'from the face of' may be traced to the complex preposition with the function of CAUSE. The functional extension may be assessed by its linear development as presented in Figure 3-S. The Overlap Model in Figure 3-T shows the functional and structural changes from the initial stage to the expanded usage of BH in Stage II.
3.2.16.1 Morphology of ‘al yerek

The polymorphic expression, יָהֵל יֵלֵּר ‘al yerek, includes the preposition ‘al 'on, upon' and the anatomic noun יֵלֵר yerek 'thigh, hip' in the construct state. This original noun belongs to the *qatil nominal pattern. This pattern is typically realized in the Tiberian vocalization system as the construct-state form qtal (e.g. צַקְנֶן zqen is the absolute state, and צָקָן zqan is the construct state). However, several Hebrew *qatil-type construct-state nouns have lexicalized biforms of the type *qatl (e.g. הגֶּדר geder...
'wall', כֶּבֶד 'heavy', כָּבֵד 'shoulder', עֶרֶל 'uncircumcised') or *qitl (e.g. גֵזֶל 'robbery'). This phenomenon of multiple biforms is widespread elsewhere in Central Semitic as in, for example, Arabic warik, wark, or wirk 'hip' (Fleisch 1961, 158-159) and Syriac katpo and ktep 'shoulder' (Fox 2003, 167-171). The Hebrew allomorphic biforms are found in collocations with the absolute noun כְּעַלָּי רֵי 'al yrk 'on (the) thigh', the pronominal form כְּעַל־יְרֵכ 'al-yrek 'on his thigh', and the construct form כְּעַל־יְרֵכ 'beside NP'.

### 3.2.16.2 Usage of כְּעַל־יְרֵכ

The string כְּעַל־יְרֵכ is used in BH 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 SIDE-REGION locative relation.

54 The more common construct state of כֶּבֶד 'heavy' is the more regular formation כָּבֵד kbad.
3.2.16.2.1 PREP (ON) + N ('thigh')

The noun follows the preposition six times—half in the absolute form יַרְכָּה 'thigh' and half as the suffixed form יֶרֶךְ 'his thigh'.\(^{55}\) 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 על יַרְכָּה 'upon his thigh'.

‘al-yreko 'upon his thigh'.

\[\text{שָׁמוּא אֶת־חַרְבּוֹ עַל־יַרְכָּה} (217)\]

\[
\begin{align*}
\text{šimù} & \quad \text{ìš-hàrbo} \\
\text{set-IMP.M.PL.} & \quad \text{each + sword + his}
\end{align*}
\]

\[
\begin{align*}
\text{ON + thigh + his}
\end{align*}
\]

Each of you put his sword upon his side! Exodus 32:27

3.2.16.2.2 PREP (BESIDE)

The complex preposition ‘al yerek 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 על יַרְכָּה 'al yerek

\[^{55}\text{Genesis 32:32; Exodus 32:27; Judges 15:8; Psalms 45:4; Song of Solomon 3:8; Jeremiah 31:19.}\]

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hammiškon 'beside the dwelling place'). Further their locality is specified by the cardinal direction temcon 'southward' and ṣapono '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 ‘al yerek is being used as a function word designating a SIDE-REGION. Six times in BH this relation is found where it is specified with regard to cardinal location.56

(218)
yah‘nu ʿal yerek hammiškon temcon
camp-PC.3M.PL. BESIDE the.tabernacle southward
They should encamp beside the tabernacle on the south side. Numbers 3:29

(219)
ʿal yerek hammiškon yah‘nu ṣapono
BESIDE the.tabernacle camp-PC.3M.PL. northward
They should encamp beside the tabernacle on the north side. Numbers 3:35

3.2.16.3 Grammaticalization of ‘al yerek

This particular shift from preposition phrase to complex preposition may be established by external linguistic evidence and internal Hebrew data providing a


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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 Ge‘ez bawa‘da 'by the side of' (< ba 'in, by' + ʾəd 'hand').

With regard to internal data, two examples in Chapter Three of the Book of Judges demonstrate a context in which the expansion of meaning from the nominal source could be supposed. In Example (220), for instance, the adverbial modifier יָּרֵךְ יְמִינוֹ al yereḵ ymino may designate that the blade was tied 'on his right thigh' or simply 'beside his right side'. The expression would be analyzed accordingly as [[ʼal]PREP [yereḵ + ymin]NP]PP 'on his right thigh' or [[ʼal yereḵ]PREP + [ymin]N]PP 'beside

his right side’. Such contexts could provide for the expansion to the grammaticalized meaning.

יוֹתֵר אָמַת מַחְתָּת לְמַדְּחָא עַל יָמֵינוּ (220)

wayyahgor ʾoṭōh mittahat lmaddōw

gird-WCPC.3M.SG. DOM + it UNDER robe + him
‘al yerek ymino

BESIDE/ON + thigh.of right.side + his

He bound [the sword] under his robe on his right side. Judges 3:16

3.2.16.4  Mapping the Grammaticalization Trajectories of ‘al yerek

The expansion of the meaning of ‘al yerek, then, can be mapped using the Overlap Model of Figure 3-U. The initial stage, including only the original preposition phrase (PREP + N), was expanded to the locative function of the complex preposition at Stage II representing BH.

Figure 3-U: Overlap Model for ‘al yerek

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP + N</td>
<td>ON + 'thigh'</td>
<td>ON + 'thigh'</td>
</tr>
<tr>
<td>PREP</td>
<td>BESIDE</td>
<td></td>
</tr>
</tbody>
</table>
3.2.17  ‘al pi

3.2.17.1  Morphology of ‘al pi

The string ‘al pi is composed of the locative preposition ‘al 'upon' and the anatomic noun פֶּה pe 'mouth' (< *pē) in the construct state. The noun was previously discussed (§3.2.6.1).

3.2.17.2  Usage of ‘al pi

Two usages of ‘al pi—the preposition phrase and the grammatical relation—are exemplified in the following subsections.

3.2.17.2.1  PREP (ON) + N ('mouth')

Fifty-seven instances of the preposition phrase are found in BH.\(^{58}\) The basic meaning of the noun as 'mouth' is observable in Example (221). Also, the anatomic

\(^{58}\) Genesis 29:2, 3 (2x), 8, 10; 41:40; 45:21; Exodus 17:1; 23:13; 38:21; Leviticus 24:12; Numbers 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; Deuteronomy 21:5; 34:5; Joshua 10:27; 19:50; 22:9; Judges 18:19; 2 Samuel 13:32; 1 Kings 7:31; 2 Kings 4:34; 23:35; 24:3; 1 Chronicles 341
noun may be used as a figure of speech to designate metonymically that which comes from one's mouth (a 'word' in Deuteronomy 17:6; a 'command' in Joshua 19:50) or metaphorically the entry point into an object (an 'opening, orifice' in Genesis 29:2ff; a 'riverbank' in Isaiah 19:7).

The two examples of the string על פיך 'al-pe 'upon a mouth' do not include a complement following the absolute form of the noun pe 'mouth' (Micah 7:16; Job 21:5).

These instances are excluded from this discussion.
3.2.17.2.2 PREP (ACCORDING TO)

The grammatical function of ‘*al-pi* as ‘according to’ is apparent eight times in BH. In all by one of these, the complement is a NP. For instance in Example (222), the partitioning of the tribal land inheritances is further qualified as being distributed by a logical relation, that is to say, apportioned ‘*al-pi haggor*’ ‘according to the [casting of the] lot’. A lone case in Example (223) is identified with a relative clause as the object of the preposition. The priest is provided the duty of evaluating the special vow (Leviticus 27:1-29). On the occasion when restitution cannot be made, a special dispensation may be given based not on the temple standard (vss. 3-7) but in accordance with the earnings of the pledger. Thus the vow could be fulfilled ‘*al-pi ’asher ta’sig yad hannodar*’ ‘according to what the vower can produce’.

59 Genesis 43:7; Exodus 34:27; Leviticus 27:8, 18; Numbers 26:56; Deuteronomy 17:10, 11; Proverbs 22:6.
Each inheritance will be apportioned by lot to the largest and the smallest [tribes] (literally, between the numerous and the few). Numbers 26:56

The priest will assess the valuation according to what the vower will produce. Leviticus 27:8.

3.2.17.3  Grammaraticalization of ‘al pi

Several Semitic examples of similar changes are reviewed above with kpi (§3.2.6.3) and lpi (§3.2.11.3). Clear cases of ambiguity between the preposition phrase and the complex preposition are difficult to detect in BH; however, the common usage found in several contexts may provide an environment for semantic expansion.60 One such context is found in Example (224). The preposition phrase, על פי שני עדים ָה הוֹ בָּלַחְק, אֵל יָּשִׁירֵה יִדְרֵהוּ תָּרָבָּהָנַּתֲו (222)

60 Deuteronomy 17:6 (2x); 19:15 (2x).
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. Deuteronomy 17:6.

### Mapping the Grammaticalization Trajectories of ‘al pi

The grammaticalization of ‘al pi may be mapped according to its developmental trajectory and overlapping functions. In addition, the structural change from a
preposition phrase \[ [ [ 'al ] _ { \text{PREP} } [ pi + \text{NP} ] _ { \text{NP} } ] _ { \text{PP} } \] to a complex preposition \[ [ [ 'al pi ] _ { \text{PREP} } + \text{NP} ] _ { \text{PP} } \] may be aligned herewith. In Figure 3-V, the expansion is presented from the originating preposition phrase, 'on the mouth of', to the grammatical function, 'according to'. The Overlap Model of Figure 3-W also shows this extension in two stages. The first consists of the initial state of the preposition phrase, and Stage II represents the situation in BH where both the original usage and the grammaticalized function are extant.

Figure 3-V: Functional Developments of 'al pi
PREP (UPON) + N ('mouth, word') > PREP (ACCORDING TO)

Figure 3-W: Overlap Model for 'al pi

<table>
<thead>
<tr>
<th>Stage</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREP + N</td>
<td>UPON + 'mouth'</td>
<td>UPON + 'mouth'</td>
</tr>
<tr>
<td>PREP</td>
<td></td>
<td>ACCRD</td>
</tr>
</tbody>
</table>

3.2.17.5 A Further Note on kōpi, ʾlpi, and 'al pi

Of the three complex prepositions containing the anatomic noun ʾpe 'mouth', ʾlpi is the most frequent with sixteen instances (§3.2.11). The other two 'al pi (§3.2.17) and kōpi (§3.2.6) 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, 'according to his service' is only construed with kpi (Numbers 7:5, 7, 8; 2 Chronicles 31:2); while 'according to the(se) matter(s)' is found with 'al pi (Genesis 43:7; Exodus 34:27; Deuteronomy 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, 'at the edge of the sword' is always construed with lpi. On the other hand, the idiom 'hand to mouth' signifying a gesture of silence is found as yod 'al-pee in Micah 7:16 and Job 21:5 but also in Proverbs 30:32 as yod leepee.

The distribution of each within the biblical corpus, however, is notable. Most specifically, the occurrences of the string kpi are confined to what may be considered

61 Genesis 34:26; Exodus 17:13; Numbers 21:24; Deuteronomy 13:16 (2x); 20:13; Joshua 6:21; 8:24 (2x); 10:28, 30, 32, 35, 37, 39; 11:11, 12, 14; 19:47; Judges 1:8, 25; 4:15, 16; 18:27; 20:37, 48; 21:10; 1 Samuel 15:8; 22:19 (2x); 2 Samuel 15:14; 2 Kings 10:25; Job 1:15, 17; Jeremiah 21:7.
the Late Biblical Hebrew books, including Chronicles, Zechariah, and Malachi, as well as the Priestly material along with the Holiness Code. The instances of 'al pi are attested in several different textual sources, but each is found in a magisterial or judiciary context. Finally, the string l.pi 'according to' appears 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.

3.2.18 Other Examples

3.2.18.1 בְּאֶפֶס ʾeēs

The string בְּאֶפֶס ʾeēs is used as a complex preposition in BH. It consists of the preposition b- 'in' and the noun ʾeēs 'end, extremity' (< *ap). There are only five instances of this sequence in BH.\(^{62}\) The composite meaning is found in Example (225) functioning as a temporal adverb בְּאֶפֶס ʾeēs 'in the end'. Israel's oppression at the hand of

\(^{62}\) Isaiah 52:4; Job 7:6; Proverbs 14:28; 26:20; Daniel 8:25.

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the Assyrians stands in contrast with their previous time spent in Egypt which is designated as בָּרָאשִׁים ‘at the beginning’. A single example of the privative function WITHOUT is evident in Example (226). The evil ruler, who seeks to destroy the saints by his own power and might, is destined to annihilation. His ruin is said to come בְּאֶפֶסָּׁי דְּהָפָס ‘without (someone lifting) a hand’, that is, not by human power. The final three examples are ambiguous. One instance is provided below as Example (227). The proverb provides an analogy between the extinguishing of a fire and the ceasing of quarreling. Thus, בְּאֶפֶס יָסִים b’e’pes ےֶסִים may be understood as either ‘at the end of wood’ or ‘without wood’.

Even with the paucity of instances of this string, the grammaticalization trajectory of b’e’pes seems to follow from IN + ‘end’ to WITHOUT. The structural change would be analogous to the other BH complex prepositions, that is, [[b]PREP [e’pes]N]PP to [b’e’pes]PREP.

63 Job 7:6; Proverbs 14:28; 26:20.
wʾaššur bʾeḇes ʾešɔqɔ
CJ + Ashur IN + end oppress-SC.3M.SG. + him
But Assyria oppressed him in the end. Isaiah 52:4

uḥʾeḇes yɔyiššɔ er
CJ + WITHOUT hand be.broken-PC.3M.SG.
But without a hand, he will be broken. Daniel 8:25

bʾeḇes ʿešim tikbe-ʾeš
IN + end.of/WITHOUT wood-PL. go.out-PC.3F.SG. + fire-F.
At the end of/without wood, the fire is extinguished. Proverbs 26:20

3.2.18.2 בֵּית bʾet

The common string בֵּית bʾet 'in the time of', composed of b 'in' and 'et 'time' (< "int), is often used to mark temporal phrases in BH. Five examples in Late Biblical Hebrew are found with a following verb and may be considered grammaticalized as the function WHEN.64 A clear semantic shift, however, is not evident even though the syntactic structure parallels similar grammatical changes in other examples. Therefore,

64 Job 6:17; Ecclesiastes 10:17; 2 Chronicles 20:22; 24:11; 29:27.

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this grammaticalization may only be included as a potential or nascent-stage change, IN + 'time' > WHEN.

3.2.18.3 לְעֻמַת lōmmat

The string לְעֻמַת lōmmat may be analyzed as the preposition l- 'to' and a construct-state noun 'ummat (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 to designate the locative BESIDE or SIDE-REGION.65 Example (228a) demonstrates this locative function. Shimi is said to be following along the mountainside lōmmatō 'beside him (i.e. David)'. In the same verse (228b), a sole usage is likely functioning as the directional relation TOWARD. This second usage designates the direction in which Shimi was pelting rocks, that is, lōmmatō 'toward him'. Without a clear originating

construction, however, it is impossible to evaluate the grammaticalization trajectory or even to discern which function is primary of the two represented in BH.

(228) a. וְשִׁמְעִי הֹלֵךְ בּsects הָּׁר לְעֻמ תוֹ hɔhɔr ɔ ləm tɔh ɔ
b. וִיֵּקַל וַיְסַקֵל בּאֲבַנְיָים לְעֻמ תוֹ wšimʿi holek bṣelaʿ hɔhɔr lʿummaṭo hɔloκ
CJ + PN travelling ON + side.of the.mountain BESIDE + him following
wayqallel waysaqqel bɔʾɔnim lʿummaṭo
curse-W CPC.3M.SG. throw-W CPC.3M.SG. INSTR + stones TOWARD + him
Meanwhile Shimi was following alongside (David) on the hillside.
He cursed and threw stones at him. 2 Samuel 16:13

3.2.18.4 מִזַּד missad

The string מִזַּד missad provides another possible instance of grammaticalization yielding the locative relation BESIDE. The first element is the preposition min 'from', and the second is the noun sad 'side' (< *šadd). The preposition phrase is found in eight instances with the meaning 'from the side of'. The string appears to designate the SIDE-REGION as a grammatical function and not simply as an analogical extension

66 Exodus 25:32 (3x); 37:18 (3x); Ezekiel 4:8; Psalms 91:7.

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in instances where the complement is a locality.\textsuperscript{67} As with many examples, there are a number of usages which may be analyzed with either the denotative or grammatical meaning.\textsuperscript{68} In the end, \textit{miṣṣad} may provide another case with an anatomic meaning which is grammaticalized as a locative relation; however, the scarcity of data does not provide enough evidence for an absolute assessment.

### 3.3 Overview of Complex Prepositions

In this chapter, twenty strings were presented as examples of the grammaticalization of BH complex prepositions. In each case, the polymorphic structure consisted of an initial preposition in sequence with a noun in the construct state or an infinitive construct. The preposition element with each instance was a simple preposition (\textit{b} - 'in', \textit{k} - 'as', \textit{l} - 'to', \textit{min} 'from', or \textit{al} 'upon'). The construct-state noun referred to a body part ('face', 'hand', etc.), a space or time ('part', 'side'; 'time', 'day'), or a more abstract semantic concept ('purpose', 'meeting').

\textsuperscript{67} Joshua 3:16; 12:9.

\textsuperscript{68} Deuteronomy 31:26; 1 Samuel 6:8; 20:25; 23:26 (2x); 2 Samuel 13:34; Ruth 2:14.
These examples of grammaticalization may also be classified according to their outcomes. Table 3-3 presents the resulting outcomes that grammaticalized to complex prepositions 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, CAUSE, COMITATIVE, PURPOSE, and WITHOUT). Fifteen examples are classified as logical relations. The locative and temporal functions consist of six examples each. Two directional outcomes (THROUGH and TOWARD) are identified.

Further, the grammatical outcomes AGAINST and TOWARD developed from the string *liqra’t*. These functions obtained from an original 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>
<thead>
<tr>
<th>Function</th>
<th>Outcome</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATIVES:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEFORE</td>
<td>לִפְנֵי lipne</td>
<td>&lt; l- TO + āne 'face of'</td>
</tr>
<tr>
<td>BESIDE</td>
<td>מִצַד miṣṣad</td>
<td>&lt; min FROM + ād 'side of'</td>
</tr>
<tr>
<td>BESIDE</td>
<td>עַל yerek</td>
<td>&lt; ‘al ON + yerek 'thigh (of)'</td>
</tr>
<tr>
<td>INSIDE</td>
<td>bütok</td>
<td>&lt; b- IN + tok 'middle of'</td>
</tr>
<tr>
<td>NEAR</td>
<td>lyaḥ</td>
<td>&lt; l- TO + yad 'hand of'</td>
</tr>
<tr>
<td>WITHIN</td>
<td>bqereh</td>
<td>&lt; b- IN + qereb 'innards (of)'</td>
</tr>
<tr>
<td>DIRECTIONALS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THROUGH</td>
<td>bütok</td>
<td>&lt; bütok INSIDE</td>
</tr>
<tr>
<td>TOWARD</td>
<td>liqraʾt</td>
<td>&lt; l- TO + qraʾt 'meet'</td>
</tr>
<tr>
<td>TEMPORALS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEFORE</td>
<td>לִפְנֵי lipne</td>
<td>&lt; lipne IN FRONT OF</td>
</tr>
<tr>
<td>DURING</td>
<td>bütok</td>
<td>&lt; bütok INSIDE</td>
</tr>
<tr>
<td>SINCE</td>
<td>miyyom</td>
<td>&lt; min- FROM + yom 'day (of)'</td>
</tr>
<tr>
<td>THROUGHOUT</td>
<td>bqereh</td>
<td>&lt; bqereh WITHIN</td>
</tr>
<tr>
<td>WHEN</td>
<td>byom</td>
<td>&lt; b- IN + yom 'day (of)'</td>
</tr>
<tr>
<td>WHEN</td>
<td>bʾet</td>
<td>&lt; b- IN + ʾet 'time (of)'</td>
</tr>
<tr>
<td>LOGICAL-RELATIONS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCORDING TO</td>
<td>kpi</td>
<td>&lt; k- LIKE + pi 'mouth of'</td>
</tr>
<tr>
<td>ACCORDING TO</td>
<td>āpi</td>
<td>&lt; ‘āl ON + āpi 'mouth of'</td>
</tr>
<tr>
<td>AGAINST</td>
<td>liqraʾt</td>
<td>&lt; liqraʾt TOWARD</td>
</tr>
<tr>
<td>BY –SELF</td>
<td>lḥad</td>
<td>&lt; l- TO + ḥad 'part (of)'</td>
</tr>
<tr>
<td>CAUSE</td>
<td>biqal</td>
<td>&lt; b- ON + qal 'matter of'</td>
</tr>
<tr>
<td>CAUSE</td>
<td>baʾaḥbur</td>
<td>&lt; b- IN + ʾaḥbur 'produce'</td>
</tr>
<tr>
<td>CAUSE</td>
<td>lmaʾan</td>
<td>&lt; l- FOR + maʾan 'purpose (of)'</td>
</tr>
</tbody>
</table>
Table 3-3: Grammatical Outcomes from Preposition Phrases (cont.)

<table>
<thead>
<tr>
<th>Function</th>
<th>Outcome</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOGICAL-RELATIONS (cont.):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAUSE</td>
<td>מִפְּנֵי mippne</td>
<td>&lt; min FROM + pne 'face of'</td>
</tr>
<tr>
<td>COMITATIVE</td>
<td>בְּתוֹק bток</td>
<td>&lt; bток INSIDE</td>
</tr>
<tr>
<td>CONSEQUENTIAL</td>
<td>כְּפִי kפי</td>
<td>&lt; kפי ACCORDING TO</td>
</tr>
<tr>
<td>EXCHANGE</td>
<td>בְּעַבּוּר ba’avbur</td>
<td>&lt; b- IN + ‘rub 'produce'</td>
</tr>
<tr>
<td>FOR</td>
<td>לְנֹכַח lnokh</td>
<td>&lt; l- TO + nokh 'front (of)'</td>
</tr>
<tr>
<td>PURPOSE</td>
<td>בְּעַבּוּר ba’avbur</td>
<td>&lt; b- IN + ‘rub 'produce'</td>
</tr>
<tr>
<td>PURPOSE</td>
<td>לְמַעַן lma’an</td>
<td>&lt; l- FOR + ma’an 'purpose (of)'</td>
</tr>
<tr>
<td>WITHOUT</td>
<td>בְּאֶפֶס b’epès</td>
<td>&lt; b- IN + ‘epès 'end (of)'</td>
</tr>
</tbody>
</table>

The final chapter will review the evolution of the BH prepositional system. It will further provide an overview of all the BH 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 will be discussed and exemplified.
CHAPTER FOUR

4 Conclusion

This study has presented an analysis of the sources and diachronic developments of prepositions from the viewpoint of grammaticalization within a historical linguistics framework. The approach provides a novel understanding of the emergence of this linguistic subsystem, contributing a detailed accounting of the variation evidenced by the usages of BH prepositions. Furthermore, it demonstrates the value of integrating diachronic linguistics and traditional philological approaches in the investigation of grammar providing for an exhaustive language-internal description of prepositions.

The following sections provide an overview of the study, an illustration of the implications of grammaticalization for assessing diachronic change, and an exploration of several important conclusions of this research.

4.1 Overview of the Study

In Chapter One, grammaticalization was described as the principal language-internal mechanism by which new grammatical functions arise within a linguistic
system. It provides the basis for the description of a distinct change which does not transpire in a linguistic vacuum. Linguists have often coupled other phenomena with grammaticalization, such as phonological erosion (e.g. the loss of phonological elements as in 
\textit{going to} \rightarrow \textit{gonna}), desemanticization (i.e. the loss of the original lexical meaning as in \textit{**I am gonna to town}), and syntactic reanalysis (i.e. the rebracketing of phrasal components as in \textit{[going]}_{PTCP} \textit{[to go]}_{INF} \rightarrow \textit{[going to]}_{FUT} \textit{[go]}_{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 was 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 was exemplified by tracing the discrete steps involved in the evolution of the English FUTURE marker \textit{going to}. Initially, it was shown that a morpheme is used in
constructions where semantic ambiguity would allow for an innovative grammatical meaning. A novel function, then, is extended into contexts where the original usage is no longer accessible. In this contextual expansion, the new meaning is incorporated and standardized as a part of the grammar.

Chapter Two presented an examination of twelve BH simple prepositions in which the original source was identifiable from language-internal data. The functions of each preposition were analyzed and exemplified. Internal and external linguistic data were considered in the mapping of the pathways of the grammatical changes. Cases of semantic ambiguity along with cross-linguistic examples of grammaticalization were examined in order to evaluate these trajectories of change. Finally, the changes were charted using a layering diagram and the Overlap Model to map the purported changes in semantics.

Chapter Three offered an assessment of twenty-one BH complex prepositions of the form PREP + NP. Each example provided a clear discernible source and resulted in a grammatical outcome. The analysis of these polymorphic morphemes
corresponded 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 were mapped as overlapping or related usages occasioned by grammaticalization.

4.2 Diachronic Change and Grammaticalization

Examining two simple prepositions will provide an illustration for understanding the results and implications of applying grammaticalization theory to BH. This presentation will not rehearse all of the details of each function word but will concentrate on the diachronic results that emerge from the present study. Ultimately, the goal is to evaluate the degree to which one may draw reliable conclusions regarding diachrony based on the internal and comparative investigation of grammaticalization.

The prepositions ʾaḥar (§2.3.1) and ʾaḥre (§2.3.2) are etymologically related, having derived from an original anatomic noun meaning 'back'. The BH evidence indicates that both terms developed into locative functions designating the relationship
BEHIND. Further, these locative functions were used for temporal notions labeled as AFTER. At this point, though, the usages diverge. For ʾaḥar, the LOCATIVE was expanded to the ACCORDANTIVE and COMITATIVE functions. Also, the temporal function was found in certain contexts as a conjunctive adverb THEN. On the other hand, the locative and temporal functions of ʾaḥāre were extended to a particle-verb construction and a causative function, respectively.

These various functions can be represented by graphing the semantic functions synchronically on a single chart for each lexeme. In Figure 4-A, ʾaḥar is mapped. Similarly, ʾaḥāre is presented in Figure 4-B. Each usage is represented by a circle with the number of BH tokens indicated in parentheses. The diameter also corresponds to the number of instances found—larger circles indicate more BH 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.). Thus, the overlap of the circles represents semantic ambiguity between the usages, which has been proposed to be required for function extension and oftentimes is preserved in the language even
after the original grammaticalization obtains. Where the circles touch tangentially, no BH examples of ambiguity between the two sets were identified, but the comparative data suggest a connection.

In the cases where the circle is dashed, the usage may only be reconstructed and is not attested in BH. 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 be seen necessarily as a claim of sequential expansion. The suggested sequential development, however, is loosely denoted from earlier to later in time with the progression from left to right in these charts.
Figure 4-A: Semantic Map of ʾahar

Figure 4-B: Semantic Map of ʾahere
One question arising from the present investigation concerns what, if any, historical data may demonstrate that the present results from applying this theory to BH reflect actual changes realized in time. For most of the examples detailed in this study, providing evidence is difficult because of the limited corpus and the nature of the data found in the Hebrew Bible. That is, the compositional realities of editing and redaction as well as the subsequent transmission history do not allow for an altogether straightforward assessment of the internal diachrony of most biblical books. However, providing an answer is not altogether impossible from the extant data. In particular, the usage of these two morphemes within the different strata of BH and a comparison to later Hebrew usage patterns provides for a closer assessment of the diachronic changes suggested by this study of grammaticalization.

Several suppositions should be outlined before providing the analysis. First, the designations, "Standard Biblical Hebrew" (SBH) and "Late Biblical Hebrew" (LBH), are applied only to Genesis–Kings and Ezra-Nehemiah along with 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 has yet to be displaced and continues to provide a valuable starting point for diachronic studies in BH (Miller-Naudé and Zevit 2012). Second, one main external source for linguistic comparison is the later corpus of Mishnaic Hebrew (MH), which is understood as related, at least in some measure, to BH (Rendsburg 1992). This does not mean that direct lineage is necessarily obliged without reference to any other influence, but it is assumed that the ancestry may be traced to BH.

With these cautions in mind, the changes evidenced with these two morphemes may be compared internally using the traditional understanding of SBH and LBH and externally with reference to MH. The semantic maps of the usage of ʾahar and ʾahāre are presented below according to the attested tokens. For ʾahar, the SBH examples are represented in Figure 4-C and LBH in Figure 4-D. Additionally, Figure 4-E and Figure 4-F provide a diagram of the instances of ʾahāre.
Figure 4-C: Functions of ‘ahar in SBH

Figure 4-D: Functions of ‘ahar in LBH
Figure 4-E: Functions of ʾahre in SBH

Figure 4-F: Functions of ʾahre in LBH
These models allow for an exploration of the changing semantic landscape of each function word from SBH to LBH. The SBH mapping of ʾaḥar (Figure 4-C) reflects four usages—'back', BEHIND, AFTER, and THEN. The last two functions provide the majority of the attestations in SBH; the previous two are vestigial. For ʾaḥar, in contrast, the LBH model (Figure 4-D) is limited to 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 LBH usage has 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 most abstracted expansion from the etymological origin.

The semantic maps of ʾaḥrē demonstrate similar modifications in usage patterns when comparing SBH to LBH tokens. The first ʾaḥrē diagram (Figure 4-E) presents four SBH 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 LBH (Figure 4-F), three functions of ʾaḥre (BEHIND, AFTER, and PARTICLE) are found, and the original noun 'back' is not attested. 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 ʾaḥre in SBH and LBH, the pattern suggests the loss of the original noun and a shift away from the locative function to the temporal usage, that is, the trend is toward the innovated functions, principally in the direction of the temporal function, as in the case of ʾaḥar.

Post-Biblical Hebrew provides further evidence of these evolving patterns of change. In the morphosyntax of MH, the form ʾaḥre is restricted to the pronominal form, and ʾaḥar is the corresponding independent morpheme. The semantic value of the MH ʾaḥar/ʾaḥre is almost exclusively temporal, being similar to the BH function AFTER. The locative BEHIND is only preserved in MH with particular compounds such as לְאַחַר ʾaḥar (Segal 1927, 141-142). As has been seen, the consolidation of the two morphemes into a single temporal function follows the trajectory evidenced from the LBH usage of ʾaḥar and ʾaḥre. In addition, a new morpheme was established in MH as
the locative relation BEHIND. The well-known Hebrew anatomic term \( \text{א חוֹר} \) 'back' has been grammaticalized, resulting in the innovation of the locative function BEHIND with the form \( \text{איהור} \) (Segal 1927, 141).

The interplay between these functions provides a diachronic picture of semantic change starting with the early stages of BH and continuing through MH. A provisional understanding suggests a pathway of change for all three morphemes—\( \text{אחָר}, \text{אזוּר}, \) and \( \text{א חוֹר} \)—that originates from the body part nouns denoting the 'back (side)'.

Initially, \( \text{אחָר} \) grammaticalized into a locative function and was extended to a temporal function. Subsequently, \( \text{אזוּר} \) followed a similar trajectory to the locative, possibly as \( \text{אחָר} \) began to be used more regularly as a temporal marker. This situation appears to reflect the SBH system, where \( \text{אחָר} \) is primarily temporal and \( \text{אozoּר} \) is locative. A strict division of these locative and temporal functions, however, was precluded by the morphological connection of the two morphemes, viz. the exclusive use of pronominal suffixes with the \( \text{אozoּר} \) form. This morphosyntactic association may well have allowed for the semantic expansion and growth of \( \text{אozoּר} \) into the temporal function as found in
LBH, the functional fusion of the two morphemes, and the eventual loss of the independent status of ḍāḥe in MH. As these two forms were reanalyzed as the independent and pronominal biforms of the temporal function, the semantic space vacated by the loss of the locative was filled by the innovative use of the third morpheme. The noun ḍhore underwent a similar change ('back' > BEHIND) as that of the other two prepositions resulting in a locative function. The Overlap Model of Figure 4-G 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 SBH, LBH, and MH, respectively.

In conclusion, this example provides a clear demonstration of the value of examining language change from the point of view of grammaticalization. Stated briefly, the development proposed by examining functional ambiguity and cross-linguistic changes is confirmed through the examination of the philological data from different chronological strata. Therefore, it may be concluded that the variation
attested in BH need not be explained purely in synchronic terms, but a plausible
diachronic analysis can be assessed based on well-known models of change (Cook
2012). In light of this evidence, the developments of the other examples in this study
can reasonably be established by analogy as reflecting diachronic realities, even where
temporality is not readily accessible from the textual evidence.

Figure 4-G: Overlap Model of ʾaḥar, ʾaḥre, and ʾaḥor

<table>
<thead>
<tr>
<th>Stage:</th>
<th>I</th>
<th>II (SBH)</th>
<th>III (LBH)</th>
<th>IV</th>
<th>V (MH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ʾaḥar</td>
<td>'back'</td>
<td>('back')</td>
<td>BEHIND</td>
<td>AFTER</td>
<td>AFTER + NP</td>
</tr>
<tr>
<td></td>
<td>BEHIND</td>
<td>BEHIND</td>
<td>(AFTER)</td>
<td>THEN</td>
<td>THEN</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>THEN</td>
<td>THEN</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(ACCORD)</td>
<td></td>
</tr>
<tr>
<td>ʾaḥre</td>
<td>'back'</td>
<td>('back')</td>
<td>BEHIND</td>
<td>AFTER</td>
<td>AFTER + PRO</td>
</tr>
<tr>
<td></td>
<td>(BEHIND)</td>
<td>BEHIND</td>
<td>(BEHIND)</td>
<td>PTCL</td>
<td>PTCL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(PTCL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ʾaḥor</td>
<td>('back')</td>
<td>'back'</td>
<td>'back'</td>
<td>'back'</td>
<td>'back'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(BEHIND)</td>
<td></td>
<td>BEHIND</td>
</tr>
</tbody>
</table>

4.3 Further Implications

Several further implications may be concluded from this analysis and the
generalization of the study for understanding grammatical change in BH and cross-
linguistic comparison. In particular, a number of observations are added pertaining to the emergence of BH prepositions, the interpretation of functional variation, and the typological pathways of grammaticalization evidenced in BH. Finally, suggestions for future investigation will conclude this section.

4.3.1 Emergence of BH Prepositions

It is widely recognized that prepositions develop from various denotational origins. This study has not only provided strong evidence for synchronic affinities between the grammatical results and the nominal sources but also for the clear overlap in the semantic and morphosyntactic usages of the two. It has been demonstrated that the detectable sources of grammatical innovation include nouns in the genitive construction and grammaticalized strings including prepositional and infinitive phrases. In light of this, several conclusions may be drawn concerning the emergent grammar of BH prepositions.

Contrary to the assumptions of many Hebrew grammarians (§2.1), the BH evidence does not support the pathway of change from noun to adverb to preposition.
Out of the more than sixty grammaticalized morphemes, only four constructions, viz. *taḥat* 'place', *səbiḥ* 'environ(s)', *lbad* 'to a part', and *lpanim* 'to the face', are attested as independent adverbs. Of these, the attestations of *taḥat* 'below' are rare and limited to poetry (§2.3.12.2.2). It would be difficult to suppose a middling step from a noun to an adverb before the development of the preposition without vestige 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 highlighted 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 Figure 4-H).1 Her expanded study (Svorou 1994) provides an

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1 Heine proposes two revisions to this continuum: (1) in all of the African languages known to him, the development bypasses the genitive construction and
amended presentation of the comparative data showing that two different sequences are evinced: (1) genitive constructions to adpositions without the intermediating step to adverbs and (2) genitive constructions to adverbs to adpositions. She further hypothesizes that the 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 (1), and the adpositional pattern, PREP N-GEN or N-GEN POSTP, is connected to the adverbial sequence (2).\(^2\) Svorou indicates that the first pattern is well-supported from her sample, and BH prepositions provide additional support to this claim.

\(^2\) 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
This understanding allows for a more thorough discerning of the changes and the syntactic environment in which source constructions become prepositions in BH.

For the simple prepositions, a genitive construction was grammaticalized in situations where the initial noun became understood as a preposition: \( N + NP > [\text{PREP}, N] + NP > \text{PREP} + NP \). This change of category and function in the initial element does not require reanalysis, specifically syntactic rebracketing (§1.3.3.1). The complex strings, on the other hand, attest rebracketing. The original construction, \( \text{PREP} + [N + NP]_{NP} \), was reinterpreted as \( [\text{PREP} + N]_{\text{PREP}} + NP \) in conjunction with the grammaticalization and recategorialization of the expression. Lastly, the extension of grammatical functions into innovative relations (i.e. secondary grammaticalization):

phrase types and not the marking strategy of the language as a whole seeing as BH presents a mixed-marking system.
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 may occur separately from grammaticalization. A category change from a preposition to an adverbializer is exhibited by seven BH examples from the dataset: ʿaḥar AFTER (§2.3.1.2.4), ʿahḥre AFTER (§2.3.2.2.3), ʿeqeb CAUSE (§2.3.11.2.2), byom WHEN (§3.2.2.2.2), lmaʿan RESULT (§3.2.9.2.1), lḥpne BEFORE (§3.2.12.2.2), and miyyom SINCE (§3.2.14.2.2). 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 suggest a clear category shift (recategorialization), even though the semantic function does not change (grammaticalization).

The study also shows that following the change of grammaticalization, the source morpheme is generally preserved in the language resulting in polysemy. This variation may remain salient for an extended time as the original construction
continues to encode the source meanings. 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 observable in BH from a comparison of the source tokens to the outcomes in the dataset. Table 4-1 provides the cases where the original constructions are attested, and Table 4-2 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 means that for the types with detectable source constructions in BH, the original source on average is found one and a half times for every one instance of the grammatical usage. However, only six types (b’et, ‘al pi, liqra’t, miṣṣad, lpi, byom) attest a ratio greater than this

3 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 a producing a statistical model, a linguistic type could be the construction b’et, and the tokens would be the instances of this construction in a text.
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 denotational 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. Hence, even considering those types which were designated as outliers, the
grammaticalized tokens are in excess of five times more frequent than the denotational
tokens.

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 grammatical system of
BH. This lack of incorporation could be construed as a result of the temporal newness
of the grammaticalization change or perhaps, more likely, as a result of well-used
idioms, like *byom* 'in the day of' or *b'et* '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 *byom* (§3.2.2.2), 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 4-1, which is organized by the ratio of the denotational to functional meaning, the number of tokens of the original source NP 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 and in a quarter of the examples (eight of the thirty-two types; see Table 4-2) the lexical source is not evidenced at all. However, this loss should not be tied directly to grammaticalization but is better attributed to a secondary result. That is to say, the grammaticalization itself does not cause the decrease in the original source construction, but on account of the increase in the frequency of the grammatical meaning, the denotational usage decreases and is often lost completely unless specific linguistic factors provide for its preservation.
Table 4-1: Ratio of Denotational Sources to Grammatical Outcomes

<table>
<thead>
<tr>
<th>Lexical Source</th>
<th>Source Tokens</th>
<th>Outcome Tokens</th>
<th>Ratio of Source to Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>b’et ‘in the time’</td>
<td>97</td>
<td>5</td>
<td>19.4</td>
</tr>
<tr>
<td>‘al pi ‘on the mouth’</td>
<td>54</td>
<td>8</td>
<td>6.75</td>
</tr>
<tr>
<td>liqrat ‘to meet’</td>
<td>83</td>
<td>15</td>
<td>5.533</td>
</tr>
<tr>
<td>miṣṣad ‘from the side’</td>
<td>8</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>lpi ‘to the mouth’</td>
<td>51</td>
<td>14</td>
<td>3.643</td>
</tr>
<tr>
<td>byom ‘in the day’</td>
<td>126</td>
<td>74</td>
<td>1.703</td>
</tr>
<tr>
<td>mippne ‘from the face’</td>
<td>171</td>
<td>127</td>
<td>1.346</td>
</tr>
<tr>
<td>lyad ‘to the hand’</td>
<td>4</td>
<td>3</td>
<td>1.333</td>
</tr>
<tr>
<td>miyyom ‘from the day’</td>
<td>13</td>
<td>11</td>
<td>1.182</td>
</tr>
<tr>
<td>b’epeš ‘in the end’</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>lnoṭah ‘to the front’</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>‘al yerek ‘on the thigh’</td>
<td>6</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>‘eqeb ‘end’</td>
<td>6</td>
<td>9</td>
<td>0.667</td>
</tr>
<tr>
<td>kpi ‘like the mouth’</td>
<td>5</td>
<td>10</td>
<td>0.5</td>
</tr>
<tr>
<td>sḥib ‘environs’</td>
<td>13</td>
<td>37</td>
<td>0.351</td>
</tr>
<tr>
<td>bgereḥ ‘in the innards’</td>
<td>29</td>
<td>125</td>
<td>0.232</td>
</tr>
<tr>
<td>nokah ‘front (of object)’</td>
<td>3</td>
<td>19</td>
<td>0.158</td>
</tr>
<tr>
<td>tahat ‘place’</td>
<td>23</td>
<td>377</td>
<td>0.061</td>
</tr>
<tr>
<td>*bayin ‘space between’</td>
<td>11</td>
<td>379</td>
<td>0.029</td>
</tr>
<tr>
<td>lipne ‘to the face’</td>
<td>18</td>
<td>1025</td>
<td>0.018</td>
</tr>
<tr>
<td>btoq ‘in the middle’</td>
<td>5</td>
<td>310</td>
<td>0.016</td>
</tr>
<tr>
<td>bhad ‘to a part’</td>
<td>1</td>
<td>88</td>
<td>0.011</td>
</tr>
<tr>
<td>‘ahar ‘back’</td>
<td>1</td>
<td>90</td>
<td>0.011</td>
</tr>
<tr>
<td>‘ahere ‘back’</td>
<td>4</td>
<td>542</td>
<td>0.007</td>
</tr>
</tbody>
</table>

Totals: 734 3278
Table 4-2: Tokens of Grammatical Outcomes without Denotational Sources

<table>
<thead>
<tr>
<th>Lexical Source</th>
<th>Source Tokens</th>
<th>Outcome Tokens</th>
<th>Ratio of Source to Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḥešeph 'change'</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>'ešeš 'side'</td>
<td>0</td>
<td>54</td>
<td>0</td>
</tr>
<tr>
<td>ba'ad 'distance'</td>
<td>0</td>
<td>99</td>
<td>0</td>
</tr>
<tr>
<td>neqed 'opposite (place)'</td>
<td>0</td>
<td>89</td>
<td>0</td>
</tr>
<tr>
<td>ya'ın 'answer'</td>
<td>0</td>
<td>99</td>
<td>0</td>
</tr>
<tr>
<td>biqgal 'on the matter'</td>
<td>0</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>ba'ebur 'in the produce'</td>
<td>0</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>lma'ın 'for the purpose'</td>
<td>0</td>
<td>272</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td><strong>0</strong></td>
<td><strong>661</strong></td>
<td><strong>0</strong></td>
</tr>
</tbody>
</table>

In sum, this study of grammaticalization allowed for a detailed description of grammatical change with BH prepositions. The source constructions consist of genitive-construction nouns or preposition-noun strings which acquired innovative grammatical functions. Accompanying this change which has been designated as grammaticalization, other shifts of category and structural realignment may or may not occur. The innovative forms, then, were 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 recategorialization, as a part of the grammatical system. The original construction
oftentimes remained salient especially where the source was common, but this polysemy typically reduced as the lexical source became less frequent or was lost altogether.

4.3.2 Interpreting Functional Variation

Most traditional grammatical evaluations restrict the assessment of function words to an etic categorization of the expressed relations. Each instance is necessarily assigned to a discrete synchronic category. An example of this approach with BH prepositions is the magisterial three-volume work of Jenni (1992-2000). Such studies, however, limit the explanative options of functional variation to synchronic connections without reference to diachronic and typological developments. Additionally, the instances where functional ambiguity exists are necessarily forced into a single group or disregarded. In contrast, a central premise of this study is that functional variation within a linguistic system indicates diachronic language change.

Through employing diachronic investigation with cross-linguistic comparison, the present study has not only appraised language-internal variation but also affords an
evaluative matrix to view semantic ambiguity as indicative of the context for functional innovative. Thus, functional variations may be considered the consequence of development through time. As such, synchronic ambiguity may be properly understood as the preservation of transitional encoding and not relegate it to sundry or anomalous usage patterns.

Several BH examples from this study may be highlighted to demonstrate the diachronic nature of synchronic variation as indicative of language change.

In the description of ʾaḥʿre and ʾaḥar above (§4.2), both morphemes are used interchangeably for the functions BEHIND and AFTER demonstrating the connectiveness of these lexemes morphosyntactically and semantically. This diachronic link, however, did not limit the functional innovation of either morpheme independently. It was observed that in certain environments a particle-verb construction obtained with the preposition ʾaḥʿre (§2.3.2.2.5) and a clause linker with ʾaḥar (§2.3.1.2.6). Elsewhere, the various constructions of *bayin (§2.3.4.2) demonstrated a synchronic semantic separation which appears to diverge in the later
strata of BH. In SBH, the semantics of the ben-NP structure primarily included the locative function BETWEEN along with the temporal function. The ben-NP (w)l-NP sequence was generally used as the separative relation. On the other hand, the construction ben-NP w-ben-NP appeared to function more generally with locative, separative, or reciprocative notions. In LBH, this taxonomy was complicated by an increase in the cases of the NP (w)l-NP pattern and the breakdown of the semantic divisions amongst the different sequences. This variation in morphosyntax and function is preserved in MH (Segal 1927, 142-143).

The interaction of similar morphemes and functions may also drive change. As has been observed in the previous section (§4.2), the locative semantic space vacated by the morphemes ʾahāre and ʾahar was filled by the grammaticalization of a new morpheme ʾaḥore BEHIND in MH. Such interactions are, also, attested to motivate reduction in the number of morphemes expressing a similar function. There are eight different morphemes which evidence a causative function in BH—ʾahāre, biğlal, baʿābur, yaʿan, lmaʿan, mippne, ʿeqb, and taḥat. This multiplicity is reduced in later strata. In
MH, three of these morphemes bi\textit{gl}al, ba\textit{c}\text{"b}ur, and lma\text{"a}n are not attested, and the causative function is lost for most of the other BH examples (Segal 1927, 148, Pérez Fernández 1999, 160).

4.3.3 Typological Shifts

This investigation has provided a complete picture of the morphosyntactic origin and functional development of a number of BH prepositions through the lens of grammaticalization. Each preposition was examined with regard to the discrete steps of change contributing to the emergence of new grammatical notions. The individual pathways of change were 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 BH source characteristics and the grammatical results with attention given to the place of these changes within typological research. As noted previously, prepositions obtained 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 (§4.3.3.1) are grouped together in semantic categories which 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 as body parts, locations, objects, relations, and abstract notions. Moreover, the functional sources (§4.3.3.2), such as the locative, directional, and temporal, which evidence secondary grammaticalization, are likewise categorized together.

The majority of the changes are not unknown from the world’s languages (Heine and Kuteva 2004). A few of the BH examples, however, should be highlighted as providing additional support to tentative pathways of change or even suggest unique trajectories. These include primary grammaticalizations from nouns and secondary function changes. The abstract noun ḥelc🛍 'change' is demonstrated to develop the meaning EXCHANGE (§2.3.6.3). The function AROUND obtained from the location noun šźbih 'environs' (§2.3.10.3). These examples may be connected with several other
examples and likely indicate cross-linguistic trends. Also, the strings with the nouns

\( ba\text{’}\text{bu} \text{r} \) 'produce' and \( l\text{nok}a\text{h} \) 'front' provided evidence for the grammatical functions of

CAUSE (§3.2.3.3) and BENEFACTIVE (§3.2.10.3), respectively. Unique pathways of

secondary grammaticalization in BH resulted in the COMITATIVE (§2.3.1.3.3),

ACCORDANTIVE (§2.3.1.3.4), CAUSE (§2.3.2.3.3), and DIRECTIONAL (§2.3.3.3.3)

from the BEHIND, AFTER, and BESIDE functions. Finally, the lone verbal source \( li\text{q}ra\text{’}\text{t} \)

'\text{to meet}' suggests a possible trend to the directional meaning TOWARD (§3.2.13.3.1).

4.3.3.1 Nominal Sources

4.3.3.1.1 Body Part Nouns

The most common nominal sources for prepositions in BH are body part nouns.

These anatomic nouns make up thirteen examples of grammaticalization to locative

functions and logical relations as summarized in Table 4-3. Three sources are simple

nouns in genitive construction; ten are complex preposition phrases. The body parts

include the semantic notions of BACK, FACE, HAND, INNARDS, MIDDLE, MOUTH,

SIDE, and THIGH.
It is also noteworthy that a single source may evolve into multiple functions, and different originating constructions can converge as similar spatial grams. Two of the BH body-part sources demonstrate these various trajectories of change. The BH noun *pone* 'face', yields two outcomes: the spatial notion BEFORE and the logical relation CAUSE. On the other hand, three different source constructions with the
nominal source pe 'mouth' result in the ACCORDING TO function (kpi 'like the mouth', lpi 'to the mouth', and 'al pi 'on the mouth').

Nearly all of the BH anatomic sources and the resulting spatial grams are evidenced in either Svorou's database of fifty-five languages (1994, 71) or Heine's various cross-linguistic studies (Heine and Reh 1984, Heine 1989, Heine and Kuteva 2004). One BH body-part source, though, evidences a spatial notion that is not found in these typological studies. The proximal gram NEAR evolved from a construction with the body part HAND (lyad 'to the hand'). A somewhat similar shift, HAND to LOC, however, is predicted by Heine and Kuteva 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" (2004, 166). This BH example provides additional support for this general notion.

Generally speaking, Svorou (1994, 73-79) suggests two evolutionary templates of body-part terms which result in spatial grams. These models are based on anthropomorphistic (upright human) and zoomorphic (horizontal, four-legged animal)
anatomies, depending on the relative location of certain terms to the body as a whole.\(^4\)

Regarding the evolution of its spatial grams, BH follows the anthropomorphic model.

This is discernible with the body-part nouns for BACK (ʾaḥar 'back' and ʾaḥale 'back') which following the anthropomorphic archetype are used to designate the relative location BEHIND. In the prototypical zoomorphic model, this spatial gram (BEHIND) is typically derived from terms designating BUTTOCKS or LOINS; whereas, BACK results in a TOP-REGION relation.

### 4.3.3.1.2 Location Nouns

In eight cases, a location noun, or an "environmental landmark" (Svorou 1986, 526), serves as the source of a grammatical function. Each of these examples is made up of a noun in a genitive construction—there are no complex preposition constructions found with locative nouns. These source nouns designate the semantic notions of HOUSE, INTERVAL, DISTANCE, OPPOSITE PLACE, ENVIRONS, and PLACE

\(^4\) Heine (1989) designates this latter category, the "pastoralist model", connecting it to certain nomadic societies dependent on animal husbandry.
(see Table 4-4). The nouns, ba‘ad 'distance' and tahat 'place', are the source of two different outcomes each.

Table 4-4: Location Sources

<table>
<thead>
<tr>
<th>BH Source</th>
<th>Location</th>
<th>Outcome</th>
<th>Function Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>בַּיִת 1 'house'</td>
<td>HOUSE</td>
<td>*IN</td>
<td>LOC</td>
</tr>
<tr>
<td>בַּעַד 2 'distance'</td>
<td>*DISTANCE</td>
<td>THROUGH</td>
<td>DIR</td>
</tr>
<tr>
<td>בַּעַד 3 'distance'</td>
<td>*DISTANCE</td>
<td>BEHIND</td>
<td>LOC</td>
</tr>
<tr>
<td>סֹבִיב 4 'environs'</td>
<td>ENVIRONS</td>
<td>AROUND</td>
<td>LOC</td>
</tr>
<tr>
<td>*bayin 5 'space between'</td>
<td>INTERVAL</td>
<td>BETWEEN</td>
<td>LOC</td>
</tr>
<tr>
<td>תַּחַת 6 'place'</td>
<td>PLACE</td>
<td>UNDER</td>
<td>LOC</td>
</tr>
<tr>
<td>תַּחַת 7 'place'</td>
<td>PLACE</td>
<td>INSTEAD</td>
<td>LOG REL</td>
</tr>
<tr>
<td>נֶגֶד 8 'opposite (place)'</td>
<td>*OPPOSITE</td>
<td>BEFORE</td>
<td>LOC</td>
</tr>
</tbody>
</table>

It has been observed that Afroasiatic languages evolve spatial relations from different sources than those of the areal-related African languages. In particular, Heine (1989, 98-100) uses five basic functions (ON, UNDER, IN, FRONT, and BACK) to highlight this difference. The 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 proportional number of Semitic exemplars.\(^5\) In contrast to Heine's "Afroasiatic pattern", BH 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. In fact, only two BH sources, \(\text{n}\text{eg\text{\textit{e}}d}\) 'opposite (place)' and \(\text{n}\text{k\text{\textit{a}}\text{l}}\ '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.

\(^{5}\) To wit, the specific eighteen Afroasiatic languages are not outlined 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), however, only Amharic and Tigrinya are Semitic.
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 in BH with taḥat 'place' (Heine 1989, 94). Additionally, the locative relation IN derived from the object noun bayit 'house' has only minimal evidence in BH, although this change is evidenced with MH bbyt/byt 'in, inside' (Pérez Fernández 1999, 160) and may be connected to an analogous change found in Abkhaz (Svorou 1994, 81). Finally, the environmental landmark, sɔbìh '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, 122-123), the Papuan language Imonda (p. 44), the Niger-Congo language Kpelle (p. 44), and the isolate Basque (p. 68). On account of the areal and genetic diversity of the languages evidencing this change, this grammaticalization may well be considered a more general typological change.⁶

⁶ Svorou's (1994, 152-153) CIRCUMFERENTIAL-path outcome, which originates
4.3.3.1.3 Object Nouns

Several BH outcomes grammaticalized from concrete nouns are identified as object noun sources in Table 4-5. All three, CAUSE, EXCHANGE, and PURPOSE, developed from the same preposition phrase, *ba'burops* 'in the production of', which has a nominal component with a disputed etymology and meaning. No clear typological connections are known connecting similar source notions and outcomes.

<table>
<thead>
<tr>
<th>BH Source</th>
<th>Object</th>
<th>Outcome</th>
<th>Function Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual</td>
<td>*PRODUCE</td>
<td>CAUSE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>Sexual</td>
<td>*PRODUCE</td>
<td>EXCHANGE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>Sexual</td>
<td>*PRODUCE</td>
<td>PURPOSE</td>
<td>LOG REL</td>
</tr>
</tbody>
</table>

4.3.3.1.4 Relation Nouns

The sources of five grammatical functions are classified as relational object nouns such as FRONT, END, and PART (see Table 4-6). Two instances originate in simple nouns, and two outcomes are complex prepositions. The nominal components from a POSTERIOR, does not appear to be related.
designating END, \( b'epes \) 'in the end' and \( 'eqeb \) 'end', are unrelated lexemes. The terms for FRONT, however, are equivalent: \( nokah \) 'front (of object)' yields a locative function, and \( lnokah \) 'to the front' results the BENEFACTIVE relation. Elsewhere, relational nouns are recognized to have been the source of the grammaticalization of the outcome BENEFACTIVE (Svorou 1994, 158). For a discussion on the typological relationship between relation nouns and spatial relations, see the previous discussion on locative nouns (§4.3.3.1.2).

Table 4-6: Relation Sources

<table>
<thead>
<tr>
<th>BH Source</th>
<th>Relation</th>
<th>Outcome</th>
<th>Function Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>( b'epes ) 'in the end'</td>
<td>END</td>
<td>WITHOUT</td>
<td>LOG REL</td>
</tr>
<tr>
<td>( 'eqeb ) 'end'</td>
<td>END</td>
<td>CAUSE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>( lnokah ) 'to the front'</td>
<td>FRONT</td>
<td>FOR</td>
<td>LOG REL</td>
</tr>
<tr>
<td>( nokah ) 'front (of object)'</td>
<td>FRONT</td>
<td>BEFORE</td>
<td>LOC</td>
</tr>
<tr>
<td>( lbad ) 'to a part'</td>
<td>PART</td>
<td>BY -SELF</td>
<td>LOG REL</td>
</tr>
</tbody>
</table>

4.3.3.1.5 Abstract Nouns

Abstract nouns designate nonmaterial referents. Seven grammatical functions originate from abstract sources (Table 4-7). 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 BH lexeme yom 'day' is the nominal component of both a grammaticalized
temporal function and a logical relation. The string lma‘an 'for the purpose' developed
into both purpose and causative functions.

Table 4-7: Abstract Sources

<table>
<thead>
<tr>
<th>BH Source</th>
<th>Abstract</th>
<th>Outcome</th>
<th>Function Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>הָלְפַף helsèp 'change'</td>
<td>*CHANGE</td>
<td>EXCHANGE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>בּוֹם byom 'in the day'</td>
<td>DAY</td>
<td>WHEN</td>
<td>TEMP</td>
</tr>
<tr>
<td>מְיוֹם miyyom 'from the day'</td>
<td>DAY</td>
<td>SINCE</td>
<td>TEMP</td>
</tr>
<tr>
<td>בָּרָל bigal 'on the matter'</td>
<td>*MATTER</td>
<td>CAUSE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>לָמַע lma‘an 'for the purpose'</td>
<td>PURPOSE</td>
<td>PURPOSE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>לָמַע lma‘an 'for the purpose'</td>
<td>PURPOSE</td>
<td>CAUSE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>בּוֹעַ b‘et 'in the time'</td>
<td>TIME</td>
<td>WHEN</td>
<td>TEMP</td>
</tr>
</tbody>
</table>

Several typological connections may be discoursed with this source type. Heine
and Kuteva 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" (2004, 299). The extension of a salient
semantic property may also provide for the emergence of the PURPOSE function from a noun denoting 'purpose' (lma’an ‘for the purpose’). Additionally, 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).

4.3.3.1.6 Verb Phrases

As noted above, a lone BH outcome derived from the verbal source, liqra’t ‘to meet’. This verb MEET is construed as an infinitive-construct phrase with the prefixed element TO. The grammaticalized string yielded the directional function TOWARD as shown in Table 4-8. Although the 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, 109-117).
4.3.3.2 Grammatical Sources

4.3.3.2.1 Locative Functions

The largest group of innovative relations with previously grammaticalized source constructions, dubbed secondary grammaticalization, derives from locative functions. In BH, seventeen examples have their sources in spatial notions such as BEFORE, BEHIND, BESIDE, BETWEEN, INSIDE, UNDER, and WITHIN. Several similar sources produce multiple grammatical outcomes as outlined in Table 4-9.

These grammaticalization pathways may be connected with known typological tendencies in the world's languages. The largest group of these locative functions provides the source of various temporal notions. In particular, the temporal outcomes are connected to the path of motion or goal of anterior and posterior grams. The locative function may be extended into temporal contexts when used with a situation as its landmark. Svorou explains this metaphorical extension through the cognitive
connection that "reaching a goal translates into completing an event" (1994, 159).

There does 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 devote to exploring the cognitive connections between these more abstracted relations.
### Table 4-9: Locative Function Sources

<table>
<thead>
<tr>
<th>BH Source</th>
<th>LOCATIVE</th>
<th>Outcome</th>
<th>Function Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>לִפְנֵי</td>
<td>BEFORE (space)</td>
<td>BEFORE</td>
<td>TEMP</td>
</tr>
<tr>
<td>אַחַר ʾ</td>
<td>BEHIND</td>
<td>THEN</td>
<td>TEMP</td>
</tr>
<tr>
<td>אַחַר ʾ</td>
<td>BEHIND</td>
<td>ACCORDING TO</td>
<td>LOG REL</td>
</tr>
<tr>
<td>אַחַר ʾ</td>
<td>BEHIND</td>
<td>AFTER</td>
<td>TEMP</td>
</tr>
<tr>
<td>אַחֲרֵי ʾ</td>
<td>BEHIND</td>
<td>PTCL</td>
<td>OTHER</td>
</tr>
<tr>
<td>אַחֲרֵי ʾ</td>
<td>BEHIND</td>
<td>AFTER</td>
<td>TEMP</td>
</tr>
<tr>
<td>בַּעַד ʾ</td>
<td>BEHIND</td>
<td>FOR</td>
<td>LOG REL</td>
</tr>
<tr>
<td>אֵצֶל ʾ</td>
<td>BESIDE</td>
<td>TOWARD</td>
<td>DIR</td>
</tr>
<tr>
<td>אֵצֶל ʾ</td>
<td>BESIDE</td>
<td>NEAR</td>
<td>LOC</td>
</tr>
<tr>
<td>בֵּין ʾ</td>
<td>BETWEEN (space)</td>
<td>SEPARATIVE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>בֵּין ʾ</td>
<td>BETWEEN (space)</td>
<td>RECIPROCATIVE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>בֵּין ʾ</td>
<td>BETWEEN (space)</td>
<td>BETWEEN</td>
<td>TEMP</td>
</tr>
<tr>
<td>בְּתток ʾ</td>
<td>INSIDE</td>
<td>THROUGH</td>
<td>DIR</td>
</tr>
<tr>
<td>בְּתток ʾ</td>
<td>INSIDE</td>
<td>COMITATIVE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>בְּתток ʾ</td>
<td>INSIDE</td>
<td>DURING</td>
<td>TEMP</td>
</tr>
<tr>
<td>תַּחַת taḥat ʾ</td>
<td>UNDER</td>
<td>CAUSE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>בֵּין bqereb ʾ</td>
<td>WITHIN</td>
<td>THROUGHOUT</td>
<td>TEMP</td>
</tr>
</tbody>
</table>

#### 4.3.3.2.2 Directional Functions

The directional function TOWARD is the source of a single grammatical outcome. The logical relation yielded is AGAINST. This change follows the primary
grammaticalization of the verbal string (§4.3.3.1.6). The source is outlined in Table 4-10. The typological data is quite limited for this example being primarily circumscribed by only genetically related languages (§3.2.13.3.2).

Table 4-10: Directional Function Sources

<table>
<thead>
<tr>
<th>BH Source</th>
<th>DIRECTIONAL</th>
<th>Outcome</th>
<th>Function Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>לִקְרַאת</td>
<td>TOWARD</td>
<td>AGAINST</td>
<td>LOG REL</td>
</tr>
</tbody>
</table>

4.3.3.2.3 Temporal Functions

Two logical relations find their source in temporal functions that were grammaticalized from locatives (§4.3.3.2.1). The sources consist of the etymologically related terms ʾahar and ʾahr'e. These temporal sources both mark the AFTER function (Table 4-11) and developed the logical relations, CAUSE and COMITATIVE. The latter relation appears to be in the earliest stage of expansion in BH (see above §2.3.1.3.3). The changes to these functions, COMITATIVE (Svorou 1994, 156-157) and CAUSE (Heine and Kuteva 2004, 48), are well-known cross-linguistically.
Table 4-11: Temporal Function Sources

<table>
<thead>
<tr>
<th>BH Source</th>
<th>TEMPORAL</th>
<th>Outcome</th>
<th>Function Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>אַחַר 'ahr 'after'</td>
<td>AFTER</td>
<td>COMITATIVE</td>
<td>LOG REL</td>
</tr>
<tr>
<td>אַחֲרֵי 'ah're 'after'</td>
<td>AFTER</td>
<td>CAUSE</td>
<td>LOG REL</td>
</tr>
</tbody>
</table>

4.3.4 Further Applications of Grammaticalization

Applying grammaticalization to BH prepositions has resulted in a thorough description of the variation found within the corpus and evidence for clear developmental pathways of language change. In addition to providing an inductive, data-driven portrayal of the changes, this examination allows for an exhaustive accounting of the semantics of these morphemes. This approach led to a diachronic model for understanding the evolution of BH prepositions, including an evaluative grid for ambiguous usages and the emergence of new functions. Thus, the application of grammaticalization to this linguistic investigation has provided an outline of the origin and evolution of part of Hebrew grammar.

Two obvious directions for continued study would include an expansion of these principles of analysis to other function words within BH and an attempt to compare
more fully the Post-BH data. These extensions would allow for a more complete investigation by incorporating a larger corpus of diachronic evidence. While the present study has suggested and provided evidence for the development of Hebrew grammar through time, the addition of further studies in a broader corpus would lead to a clearer evaluation of the external affiliation between these languages and texts along with a more well-defined accounting of the internal relationship between SBH and LBH.


Brockelmann, C. 1899. "Beiträge zur hebräischen und zur aramäischen Grammatik." 
*Zeitschrift für Assyriologie* 14: 343-349.


Fischer, Olga. 2000. "Grammaticalisation: Unidirectional, Non-Reversible? The Case of to before the Infinitive in English." In *Pathways of Change: Grammaticalization in*


