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A Synchronic and Diachronic Functional Analysis of Hittite -ma

by

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B.A. (University of Colorado, Boulder) 1985
M.A. (University of California, Berkeley) 1992

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of the

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Professor Gary B. Holland, Chair
Professor Eve E. Sweetser
Professor Ruggero Stefanini

Fall 2000
A Synchronic and Diachronic Functional Analysis of Hittite -ma

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by

Michael David Meacham
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List of Abbreviations

abl: ablative
ABoT: Ankara Arkeoloji Müzesinde bulunan Boğazköy tabletleri
AH: Apology of Hattusili = Otten 1981
a.k.: alt kenar 'lower edge'
all.: allative (cf. CHD L-N:xii-xiii)
AM: Annals of Mursili = Götte 1933
ay.: arkayüz 'reverse'
BT: Bronze Tablet = Otten 1988
C: consonant
CTH: Catalogue des textes hittites = Laroche 1971, 1972
DC: dependent clause
HBM: Hethitische Briefe aus Mašat-Höyük = Alp 1991a
HFAC: Hittite fragments in American collections (Gary Beckman and Harry A. Hoffner, Jr., 1985, Journal of cuneiform studies 37, Philadelphia.)
HKM: Hethitische Keilschrifttafeln aus Mašat-Höyük = Alp 1991b
IBoT: İstanbul Arkeoloji Müzelerinde bulunan Boğazköy tabletleri
IC: independent clause
ILMS: Instruction to the LÜMESAG = von Schuler 1957:22-34
KBo: Keilschrifttexte aus Bogazköy
KUB: Keilschrifturkunden aus Bogazköy
KZ: Zeitschrift für vergleichende Sprachforschung
LPK: Letter of Puduhepa to a King = KUB 21.38 (Stefanini 1964, Helck 1963)
MC: main clause
MH: Middle Hittite (ca. 1450-1380 BCE)
NBC: Nies Babylonian Collection, Yale University
NH: Neo-Hittite (ca. 1380-1200 BCE)
obv.: obverse
oCTH: Catalogue of Hittite Texts online
OH: Old Hittite (ca. 1600-1450 BCE)
öy.: önyüz 'obverse'
Rs.: Rückseite 'reverse'
s.k.: sol kenar 'left edge'
StBoT: Studien zu den Boğazköy-Texten
StBoT 8: Studien zu den Boğazköy-Texten 8 = Otten and Souček 1969
SvKK: Staatsvertrag mit Kupanta-4KAL = Friedrich 1926:95-179
ü.k.: üst kenar 'upper edge'
u. Rd.: unterer Rand 'lower edge'
V: 1) vowel; 2) verb
Vs.: Vorderseite 'obverse'
/ indicates the end of a line on a tablet, or its approximate equivalent in a translation
§ indicates a paragraph divider on tablet
§x where x is a numeral, indicates a section of the text, or a law
(x) where x is a numeral, indicates an example within the text
#x where x is a numeral, indicates an example in the data in the appendix
1 ≤ x ≤ 100 Old Hittite attestations of -ma and -a
1001 ≤ x ≤ 1412 Neo-Hittite attestations of -ma
3001 ≤ x ≤ 3069 NH attestations of unsure or broken -ma
4001 ≤ x ≤ 4108 NH attestations of -al-ya
5001 ≤ x ≤ 5032 NH attestations of unsure or broken -al-ya
6001 ≤ x ≤ 6070 Middle Hittite attestations of -ma
7001 ≤ x ≤ 7030 MH attestations of unsure or broken -ma
8001 ≤ x ≤ 8023 MH attestations of -al-ya
9001 ≤ x ≤ 9013 MH attestations of unsure or broken -al-ya
<> text omitted by scribe, whether due to practice or error; also occasionally indicates a graphic entity
× indicates an illegible sign
Symbols such as brackets [], parentheses (), half-brackets (↑ and ↓), and others are in general used following the conventions as described in CHD (L-N:xxix-xxx).
Notes on Translation and Glossing

In general, Hittite text is presented line by line as it occurs on its tablet. When text or its translation is instead presented as continuous text, line breaks on the tablet are each represented with a slash '/'. Wrapping lines of continuous text are indented after the first, although glosses may cause some lines to be indented. The symbol '§' indicates a line on the tablet which divides the text into sections. These sections are often called paragraphs, and this line is commonly called a paragraph divider.

Translations are ordinarily quite literal and often follow an edition of the text (as given in §2.0.1, §3.0.1, §4.0.1) or one of the standard research tools (CHD, Friedrich 1952-66, Friedrich and Kammenhuber 1975ff., Puhvel 1984ff., and Tischler 1977ff.). Where additional material is adduced, it is noted with the passage in the appendix or in the notes.

Occasionally, when the adversativity in a passage does not seem strong enough to me to warrant translation with 'but', -ma or -a is rendered with 'and'. This 'and' should be construed as having of measure of adversative meaning in addition to its connective function.

An acute accent over the stressed vowel of a word is occasionally used to indicate the prosodic peak associated with a focus in English. I regret not having been able to observe gender neutrality in all translations.

References to examples within the text are indicated with numerals enclosed in parentheses, e.g., (52). References to examples in the appendix are indicated with a numeral preceded by a number sign, e.g., #52.

Readers will find cuneiform sign values that are not the most recent ones offered in Rüster and Neu 1989. These are old friends that it is difficult to do without. (Compare a less sentimental Puhvel 1984ff. 1-2:ix.)

Predeterminers will have form predeterminer:lexical item.

Singular number is unmarked; plural is specified with a p.
Symbols used in glosses are the following:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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<tr>
<td>A</td>
<td>accusative</td>
</tr>
<tr>
<td>AB</td>
<td>ablative</td>
</tr>
<tr>
<td>AL</td>
<td>allative</td>
</tr>
<tr>
<td>c</td>
<td>common gender—specified only when agreement needs to be indicated</td>
</tr>
<tr>
<td>CC</td>
<td>clause connector</td>
</tr>
<tr>
<td>DET</td>
<td>postdeterminer</td>
</tr>
<tr>
<td>DL</td>
<td>dative/locative</td>
</tr>
<tr>
<td>G</td>
<td>genitive</td>
</tr>
<tr>
<td>I</td>
<td>instrumental</td>
</tr>
<tr>
<td>MOD</td>
<td>modal</td>
</tr>
<tr>
<td>N</td>
<td>nominative</td>
</tr>
<tr>
<td>n</td>
<td>neuter gender—specified only when agreement needs to be indicated</td>
</tr>
<tr>
<td>OB</td>
<td>objective: accusative and dative-locative forms identical and case not clear</td>
</tr>
<tr>
<td>p</td>
<td>plural</td>
</tr>
<tr>
<td>PPL</td>
<td>participle</td>
</tr>
<tr>
<td>PV</td>
<td>enclitic preverb</td>
</tr>
<tr>
<td>QU</td>
<td>quotative particle</td>
</tr>
<tr>
<td>QUOT</td>
<td>quotative particle</td>
</tr>
<tr>
<td>REL</td>
<td>relative</td>
</tr>
<tr>
<td>RFL</td>
<td>'reflexive particle'</td>
</tr>
<tr>
<td>SUP</td>
<td>supine</td>
</tr>
<tr>
<td>V</td>
<td>vocative</td>
</tr>
<tr>
<td>x!</td>
<td>imperative verb, or negative used with imperatives</td>
</tr>
</tbody>
</table>
§1.1 Impetus and Inquiry

Often in linguistic study, the more common a form, the more difficult it is to describe. Consider the difficulty in developing a linguistic definition of the word or the paragraph. Grammatical articles, pervasive in many languages, can carry surprisingly complicated notions of identifiability, givenness, and referential importance (Chafe 1994:93-107). Conjunctions, too, eminently grammatical entities, are ubiquitous, but despite their commonness, they signify relationships that can be extremely complex (cf. Sweetser 1990:76-112).

Hittite, an Indo-European language of ancient Anatolia, has a large number of so-called coordinating conjunctions (see §1.4). In reality they are perhaps better termed *connectors* than conjunctions, since they function with less reference to grammatical (in)dependency than those elements we conventionally think of as conjunctions (*and* or *but*). In treating these connectors, Hittitologists have also encountered difficulties in coming to terms with their meanings and their functions.

Hittite clauses are, naturally, often linked by means of these connectors (see §1.4). One connector is *-ma*, commonly considered adversative and glossed with ‘but’ or German ‘aber’.

(1) AM II.7.A Vs. I 12-14; #1069 1

\[
\begin{align*}
\text{nuzza k\text{"a}\text{s}}ma &= dU \text{NIR.G\text{\text{"a}}L}=\text{mu }\text{BELI-YA }\text{mah\text{"a}}n \text{piran} \\
\text{h\text{"u}iyanza} &= \text{nu}=\text{mu }\text{id\text{"a}}lai \text{par\text{"a} }\text{UL} \text{tarn\text{"a}} \\
\text{\text{"a}s\text{"a}ui} &= \text{ma}= \text{mu }\text{par\text{"a} }\text{t\text{"a}mar }\text{\text{"a}rzi} \\
\{ \text{good.DL }-\text{ma }\text{me } \text{forth left has} \}
\end{align*}
\]

‘Now behold, how the mighty Storm-god, my lord, is supportive of me; he does not deliver me to evil, / but has delivered me to good’
(2) StBoT 8 Rs. IV 11-13; #31

§ [m]än LUGAL-uš SAL.LUGAL-ašš=ta taranzi ta DUMU.MES-an parnu paimi
[ takku ] natta=ma taranzi n ~ u natta paimi ...
{ if not -ma they say CC not I go }

'§ [W]hen the king and queen say (so), I go to the house of the children.
B ut [i]f they do not say (so), then I do not go. ... ' 

However, -ma sometimes seems to mean 'and':

(3) StBoT 8 Rs. III 3-6; #29

§ ta namma MUŠEN-harana nêpiša tarnaḫḫi
äppan=anda=ma=šše kê mēmāḫḫi natta=an ūk
{ after -in -ma to it these I say }
tarnaḫḫun LUGAL-š=an SAL.LUGAL-š=a tarnaš ...

'S Then I release the eagle into heaven
and after(wards) I say these (words) to it: “Not I have released it, the king and queen have released it. ... ”'

(4) AM I.A Vs. II 7-10; #1012

§ namma URU-Palḫùissaz EGIR-pa IVA URU.KÜ.BABBAR-ti ūwanun
nu=za ERĪN.MES ANŠE.KUR.RA.MES nininkun namma apēdani MU-ti IVA KUR
Arzauwa / iyanniyanan=pat ANA mŪḫḫa-LU=ma LŪTEMA uiyanun / nu=šši ḫattrānun
{ to Ūḫḫaziti -ma messenger I sent }

'S Then from Palḫùissaz I came back to Ḫattuša,
and I raised an army and a (force of) chariotry. Furthermore in that year I also marched to Arzawa. A nd to Ūḫḫaziti I sent a messenger, / and wrote to him: ... '

The equivalent 'aber' for -ma was the first early translation that gained wide
acceptance in Hittitology, and it is this meaning that predominates in text editions and other
research, including examples (2) and (4) ((1) is rendered with the even stronger 'sondem',
Götze 1933:149). Some prominent scholars use it almost exclusively even now. Yet
occasionally one will find translations of -ma with 'and' or 'und', as in the case of example
(3) (Otten and Souček 1969:31). Hints of 'and' connotations are also present when Greek
dé has been used as a gloss for -ma, to the extent that dé can be rendered with ‘and’.2 And Friedrich (1929) recognized that -ma did not mean ‘aber’ in all situations. With one exception, -ma itself has not been the object of directed study; consequently, it is understandable if, aside from Friedrich’s comments and a few observations on its syntax, the primary descriptions we have for the particle are glosses. Nevertheless, if -ma seems to mean ‘but’ in some cases and ‘and’ in others, the connector does not always appear to function as a prototypically strong adversative. This suggests the need for a principled reinvestigation of the semantics and uses of -ma.

While the translations we see in editions of texts may not be linguistic descriptions per se, they invite inferences about the meaning and the function of -ma. From these we understand -ma to be a conjunction that links clauses, most often with a connotation of adversativity. Specifying the lexical semantics of basic conjunctions can be a difficult task; providing a meaning for a grammatical item like a conjunction without resorting to glosses probably always requires some appeal to the item’s function. Compare, for example, Sweetser’s account of the semantics of but, which is closely associated with a description of that conjunction’s function (1990:100-111). If a form’s meaning is grammatical, and if grammar is how a language works, then specifying the form’s meaning may well entail specifying its function.

As stated above, most Hittitologists have accepted for -ma the conjunctive function and the adversative meaning that translations with ‘but’ or ‘aber’ imply. However, in the last 25 years newer linguistic descriptions have been proposed. In this period -ma has been characterized as a subordinating conjunction with no adversative meaning, a coordinating conjunction with pragmatically subordinating effect, a marker of correlation, a marker of discontinuity, and as an emphatic particle, a contrastive focus marker, and a topic marker (see §1.2 below). Interesting here are the virtually opposite views attributing to -ma the marking of foregrounded information (particularly focus) and of backgrounded information (‘pragmatically subordinating’). The lack of consensus among linguists as to
-ma's function makes the particle a suitable subject for research and reiterates the need for a principled investigation into its use.

The goal of this study is to determine whether -ma marks pragmatic categories as put forth in the new descriptions of its function. The primary strategy for meeting this goal is to examine the contexts in which it occurs.

The theoretical question implicit in this investigation is whether it is possible to apply contemporary pragmatic concepts, like topic, focus, and background, to a language such as Hittite, which is less well preserved and understood than Latin and Greek. We cannot, for example, carry out fine-grained investigations like those undertaken by Pinkster, Bolkestein, and others. Although fairly well understood and with a respectable amount of textual evidence, Hittite in no way compares in these categories to the Classical languages. But researchers investigating Hittite pragmatics share with their counterparts in Classics certain limitations in their work. It is not possible to ask native speakers about their intuitions about linguistic forms or to witness the interactions of speakers.

Informative qualities like intonation are only occasionally inferrable. The evidence, being written, does not preserve language as it was actually spoken, but a conventionalized form of the language (which may nonetheless be more convenient for contemporary linguists). While my results may not be as robust as those obtaining from the investigation of a living language, or of Latin or Greek, some are informative.

In the remainder of chapter 1, I will review the literature on -ma, including the recent suggestions concerning its function. I will then define the pragmatic terms used in my investigation. After this I will offer a brief sketch of Hittite syntax and basic statements concerning -ma's syntax and form. The following section deals with the selection of the texts used in analysis, and the final section lays out the course of the study.
§1.2 Previous Treatments

With one exception, -ma has received rather little attention in Hittitological studies—treatments in textual commentaries and grammatical investigations have for the most part been limited to glosses and extremely brief characterizations. This convention begins with the earliest grammatical descriptions and continues over the next five decades.

In the first such work to appear, a preliminary report on the progress of linguistic research into the finds from Boghazkoi, Friedrich Hrozny (1915:34) suggests the meaning "dann, ferner" for -ma and gives the first equation with Greek dé (via Thessalian má). In Die Sprache der Hethiter, the first book-length grammatical study to appear, Hrozny (1917) presents Hittite morphological classes and adduces Indo-European comparisons when possible. For -ma he gives the equivalence 'enklit. "dann, ferner; aber" ' (1917:185, 231). In fact, he translates -ma in his examples most often with 'ferner', for he understands -ma as primarily continuative: ‘-ma führt wohl gewöhnlich die Erzählung weiter, bedeutet somit etwa „dann, ferner“, gelegentlich auch wohl „aber“ u. ä.’ (1917:102 n.4). Variations on this basic theme are often to be found in later scholars' work. Hrozny continues to understand -ma so in his edition of the Hittite laws (1922). Here he translates -ma with French ‘alors’ (pp.9, 19), ‘puis’ (p.9), ‘mais’ (p.19), and also ‘et’ (p.31).

Ferdinand Sommer (1920) offers interpretations of selected topics in Hittite texts: Aryan numeral constructions, nāwi ('noch nicht'), and gimmanza ('Winter'), some of these diverging from Hrozny’s opinions. In discussing an example of the numerals, he writes, ‘-ma-, enklitische Partikel, bedeutet „aber“ ’ (1920:4); indeed, he asserts that -ma ‘nach meiner Prüfung an allen deutbaren Stellen „aber“ heißt’, and harshly criticizes Hrozny’s ‘bequem und charakterlos’ (convenient and without character) translation with ‘ferner’ (1920:4 n.1). Sommer expands the translational equivalents to include ‘doch’ and ‘sondem’ (1932:414) in his impressive examination of documents relating to the still unidentified land of Ahhiyawa. He also notes delay of -ma and double placement (see summary of Ungnad 1925 below), and he identifies a special use of -ma (not found in my
study), double questions (1932:77-78; cf. CHD 92-93), where -ma marks the second of a pair of questions posing contrasting alternatives.

As part of working out the details of enclitic chains (see §1.4), Arthur Ungnad (1920) analyzes the form naš as a combination of the clause-introductory particle *nu* and the enclitic 3.sg. pronoun -aš. He briefly reviews the particles involved in clause linkage, including 'das anreihende *nu* ..., das fortführende namma ..., und das mehr adversative -ma', as well as -a ‘and’, and terms these four 'konjunktionale Partikeln' (1920:417). So here appears for the first time the label adversativ with reference to -ma.

Ungnad (1925) offers the first explicit description of the syntax of -ma, namely that -ma and -a as a rule occur enclitic to the first ‘Wortkomplex’ in the clause and precede particles of other types occurring in the enclitic string (1925:104). The main thrust of his article is to show the syntax of delayed -ma and -a (see §2.2 below). Here -ma and -a attach to the second word of the clause when the clause begins with takku 'if or man 'when; if', as well as with kuš 'who(ever)', kuššan 'when', and našma ‘or’. Ungnad also observes that -ma can occur twice in the clause, attaching in delayed position as just described, and attaching also to the delaying conjunction (see §3.2.1 below).

In spite of Ungnad's explicitly linguistic accounts of -ma, scholars preferred to employ Sommer's short and simple equivalent. His gloss 'aber', with a reference to his 1920 article, became the standard translation of -ma in literary and linguistic investigations in the early decades of Hittitology. Reference to Ungnad's account of the enclitic syntax (1920) was often given immediately thereafter. Even with this standard, however, it was clear to some that -ma was not so simply dispensed with. In an article concerning hypothetical constructions, Johannes Friedrich (1929) explained the use of the modal particle man: with past-tense verbs, man renders the clause counterfactual; man with present/future verbs gives the potential. In a note relating to his discussion of antithesis in such constructions (which he finds weaker than in Classical types), Friedrich writes: 'Andererseits entspricht das heth. -ma unserem „aber“ zwar in den meisten, jedoch
keineswegs in allen Fällen, and Ähnliches gilt von anderen Konjunktionen. Eine Sonderuntersuchung darüber wäre am Platze’ (1929:293 n.3).

Albrecht Götze, in his editions of the Madduwa text (1928) and of the Annals of Mursili (1933), distinguishes occasional emphatic occurrence of -ma (‘zur Hervorhebung eines Wortes’) from the usual clause-connective use. In the latter work he also indicated that he would in future write on -ma, ‘die eine neue Person einführt’ (1933:198; cf. Houwink ten Cate 1973:134 with n.83). Hans Ehelolf (1926) noticed -ma marking complementary concepts.

Edgar Sturtevant (1936) provided the first English glossary of forms occurring in Hittite texts. Under the entry for -ma one sees: ‘(precedes other enclitics) ‘aber, [de]”; English idiom sometimes requires ‘but’, sometimes ‘and’, and frequently no English translation is possible’ (1936:95), which is a synthesis of equivalents given in his comparative grammar (1933). A similar entry is given in Sturtevant and Bechtel (1935:90).

In the section on -ma, Friedrich (1960:161-162 §§318-319 (=1940:93 §§321-322 with very minor revisions)) also gives such an equivalent in his grammar: ‘-ma entspricht unserem „aber“, ist aber gelegentlich etwas schwächer (wie griech. [de])’. Sometimes it is so weak as to be left unexpressed in translation, as in apodoses. Friedrich’s grammar is the only work available which covers a broad range of grammatical topics in a manageable size; treatments are typically brief yet very informative. As such, the second edition (1960) has remained an indispensable reference for Hittite studies, even though it is based primarily on data from Neo-Hittite. Friedrich also presents syntactic descriptions for -ma. Here the particle is a coordinating conjunction and usually occurs enclitic to the first stressed word of the clause, but can conditionally be delayed to the second word. Friedrich also notes -ma’s infrequent occurrence in apodoses and in clauses with nu, its double occurrence within a clause, and its occurrence in double questions (1960:147 §285 for the last). We see, then, a useful collection of previous observations.
In Friedrich’s dictionary we find nearly the same equivalent for -ma as in the grammar: ‘(enklitische Konj.) „aber“ ... oft schwächer und ähnlich griech. [de]’ (1952-66:132). Also like the grammar, the dictionary is a succinct but still indispensable tool for Hittite research, primarily because, in addition to lexical material from the other languages found in Hittite texts, it contains vocabulary from the entire Hittite alphabet, in contrast to more recent, detailed studies.

Reinhard Stememann (1966) discusses the semantics, functions, and syntax of several Hittite subordinating conjunctions, such as màn ‘when; if’, takku ‘if’, and mahhan ‘as, when’. In the section on syntax, he also describes the placement of stressed and enclitic clause connectives in subordinating contexts and notes their increased frequency in the later language. Here Stememann glosses -ma with ‘aber, [de]’ and confirms others’ statements on syntactic distribution, including the observations that -ma attaches to màn less frequently than to the word following màn, and that it never attaches to takku (1966:398ff.).

In his examination of Anatolian clause-introductory particles, Onofrio Carruba discusses the spatiotemporal particles -kan, -šan, -ašta, and -apa, but does not really treat most conjunctions, e.g., -ma and -a. Nevertheless it is here that we see the first attempts at a new kind of description. Comparing the two types of particle, Carruba notes that nu, -ma, and -a occur at the beginning of new action, distinct from the preceding action, where their function as coordinating and continuative (‘fortführende’) conjunctions is clear. While these three ‘einen tieferen Abschnitt der Handlung und/oder des Gedankenganges kennzeichnen, etwa unseren längerer Pausen (Punkt) entsprechend’, the other particles he investigates describe the spatial and temporal underpinnings of the predication (1969:18). The conjunctions thus signal a break with the preceding. Further on, Carruba may somewhat contradict his earlier acceptance of -ma as continuative when he compares Lycian me with ‘dem leicht adversativen -ma ... [which appears] ... ohne Fortschritt in der Handlung zu bezeichnen’ (1969:76). In more recent work on the same topic, Carruba
presents a brief characterization of -ma, which here 'eine leicht emphatische Funktion hat, und oft, vor allem in Texten aus dem Großreich mehr oder weniger leicht adversativ anmutet' (1985:82). Unfortunately, he does not discuss this emphatic function further.

Philo Houwink ten Cate (1973) establishes that non-geminating -a was a separate linguistic entity from geminating -a/-ya, i.e., an adversative emphatic enclitic. He sees an emphatic function as possible for -ma, similar to that of his primary subject, but leans toward classifying -ma as a sentence connective (pp.129-130). Houwink ten Cate also observes that -ma serves to introduce a new subject in apodoses (p.134). Given the very closely related subject matter of Houwink ten Cate's article, I will make frequent reference to it in this study.

In Frank Starke's study of Old Hittite grammatical cases expressing physical (as opposed to logical) relations, he makes observations on many topics, including some tangentially related to his investigation. For example, he initially sees -ma as a non-adversative particle marking parallel, but subsidiary, action, and later strengthens this somewhat to an element with 'exclusively subordinating, explanatory function' translatable with 'while' (1977:37, 74). So here we have the first description of -ma as serving to background information. I believe there is an element of truth here, but that Starke's position is too extreme, and I respond to it in §2.6.

The Chicago Hittite Dictionary presents the first study specifically about -ma (L-N:91-99). In CHD, -ma is a conjunction which marks a correlation between two words or phrases in adjacent clauses, or between clauses or paragraphs. On their view -ma does not function as a subordinating or coordinating conjunction. CHD offers many examples showing the different structures which -ma 'correlates', e.g., double questions. CHD presents the syntax, and many examples, of -ma attaching to the second word of the clause, as well as a few of placement later in the clause. I hold different views of the phenomena discussed in the article, but our presentations are complementary. I respond in detail to CHD's treatment of -ma in §5.4.
H. Craig Melchert (1985), in working out the etymology of Hittite *imma* ‘moreover, indeed, etc.’, appropriates Schwyzer’s (1950 2:562) description of Greek δέ to serve for -ma (and -a): *Es bezeichnet, daß (gegenüber dem Vorhergehenden) etwas Anderes, Neues kommt ...*, which description in fact coincides with my findings.

In her account of Old Hittite syntax, Silvia Luraghi (1990) considers -ma to be an e conjunction and observes its special syntax (p.14). As I understand her position, she holds that -ma indicates textual discontinuity, as in parenthetical remarks and backgrounded information, and that the enclitic frequently expresses adversativity by indicating situations that are contrary to expectations (pp.50-54). Concerning the former, she follows Starke’s ideas of the backgrounding and explanatory function of -ma. I disagree with many of Luraghi’s views, and I respond to her also in §2.6.

Finally, in his study of Anatolian pronominal clitics, Andrew Garrett (1990), with reference to all of Hittite, acknowledges some clause-connective function of -ma, but suggests that it is primarily an emphatic particle with word-scope, more specifically a contrastive focus marker (1990:15-18, 247). Garrett (1996) has also classed -ma as a topic marker, about which see §1.3.1.

§1.3 Pragmatic Preliminaries

Several concepts arise from reviewing the scholarly treatments and opinions of -ma (§1.2): -ma as adversative conjunction (most descriptions up to 1973), -ma as referent-introducing form (Götze 1933), -ma as emphatic particle (Götze 1933, a possibility per Houwink ten Cate 1973), -ma as backgrounding form (Starke 1977, Luraghi 1990), -ma as contrastive focus particle (Garrett 1990, 1992), -ma as marker of discontinuity, specifically counterexpectational (Luraghi 1990), and -ma as topic marker (Garrett 1996). These concepts are pragmatic in nature, and it is the goal of this study to determine whether -ma is used specifically to mark any of these pragmatic categories, and if so, then how it marks the category, or if not, then what it does mark (or how it does function). To achieve
this goal I will analyze texts while employing relevant concepts that have been identified in pragmatic theory. I organize the concepts mentioned above as follows: a) topic; b) focus, including contrast and adversativity, new referents, emphasis, and counterexpectation; and c) background.

The properties and structure of discourse have been the object of much research, and the body of literature has become great, but some basic themes run throughout, e.g., what is being talked about, what is being said about it, whether it is known to both speaker and hearer, whether information is in the foreground or background, etc. For the purposes of this study, basic definitions of these concepts will suffice, because it is a first attempt at such analysis, and because the absence of native speakers limits our inquiry (see below).

Of the many researchers it would be possible to follow in identifying workable definitions of these pragmatic concepts, Chafe (1994) presents a reasonable approach, appealing by virtue of his attention to actual language production. Chafe’s primary concern is the interaction between consciousness and language in speaking and writing. His conclusions are based on observations of English, and he acknowledges that they will not all hold for all languages. He demonstrates, for example, that his notion subject is not relevant for Seneca. But most properties he identifies are of a general enough nature that it would be surprising if they did not apply to all languages. Nevertheless he does not include as relevant parameters some of the areas that need to be investigated here, e.g., topic and focus per se, and it is thus necessary to include the ideas of other scholars. Such concepts are employed here at such a rudimentary level that differences among the theories used should be minimal. While I favor the approach of Chafe, there is no reason the same or similar results could not have been achieved by using the work of Prince or Lambrecht, for instance. Below are brief characterizations of the pragmatic concepts bearing on this investigation of Hittite.

An important concept in studies of discourse and information structure is the status of information in the mind of the hearer, as judged by the speaker. Chafe terms this
‘activation cost’ (1994:73), i.e., whether a discourse referent is given, accessible, or new determines the degree of mental effort required for it to become given for the hearer. Given information is what the speaker assumes to be active in the hearer’s focal consciousness. It is typically expressed by weak accent and pronouns. The speaker assumes new information to be inactive in the hearer’s consciousness at the time of its introduction into the discourse. It is typically expressed with noun phrases and with primary accent. Accessible information is judged to be semiactive in the hearer’s consciousness: it was either previously active in the discourse, is directly associated with an idea previously or currently active in the discourse, or is associated with the non-linguistic environment of the discourse. Accessible information is typically expressed with noun phrases, and with accent, which is often secondary (Chafe 1994:71-87).

Chafe’s activation states/costs correspond in most cases to categories developed by Prince under the title assumed familiarity (which she favors over shared knowledge and the point-of-view of omniscient observer that that term implies to her). Chafe’s given corresponds to Prince’s evoked (in the text), but her situationally evoked seems to compare with one of Chafe’s possibilities for accessible, being associated with the non-linguistic environment of the discourse. Chafe’s new corresponds to three categories of Prince: brand-new, brand-new-anchored, and unused. Brand-new entities are entirely new to the hearer at their introduction. Brand-new-anchored entities have the additional feature of being linked to another discourse entity, as with a relative clause. Unused entities are assumed to be known to the hearer at their introduction into the discourse. Prince also proposes the category of inferrable (with two subtypes): a discourse entity is inferrable if the speaker assumes the hearer can infer it, by logical or plausible reasoning, from other already evoked or inferrable discourse entities (Prince 1981b:232-237). This category would correspond to Chafe’s accessible.

Prince’s categories certainly form a reasonable taxonomy of information status, but some are not possible to use when investigating Hittite texts. It is as good as impossible
for us to determine whether an entity was, for instance, brand-new or unused, since we do not know for certain to what audience an author was addressing his text, or, *a fortiori*, what the information status of entities would have been for this audience. These complications would also affect the identification of inferrable entities. Given the fact that most texts contain substantial gaps due to breaks in tablets, we do well in most cases to accurately identify an entity as new. We might be able to identify brand-new-anchored entities should they occur in a relative clause. We would have a good chance of detecting evoked entities if tablet breaks do not interfere. For most cases, Chafe's taxonomy is adequate.

Chafe also finds *identifiability* to be an important discourse parameter, approximately equivalent to, but more consistent than, the notion of *definiteness* found in other studies. Formally definite expressions may in fact be generic (*The grizzly bear is an omnivore*) or indefinite (*So this guy comes up...*). A referent is identifiable if knowledge of it is directly or indirectly shared by the hearer, if the hearer can categorize it, given the speaker's verbalization, and if it is contextually salient (Chafe 1994:92-107). Its relevance to the present study is unclear, however, because it is also difficult here to determine accurately what in a Hittite text would have been identifiable to the audience for whom the text was produced.

§1.3.1 Topic

Concerning the term *topic*, one may note that it can have at least two meanings in the current context, the first referring to a referent at the clause-level in a discourse (*sentence topic*), and the second referring to larger thematic concepts of a discourse (*discourse topic*) (Givón 1983:7-8, Lambrecht 1994:117 with further references). In this study I will use the term *topic* to refer to sentence topics and the phrase *discourse topic* to refer to discourse topics.
Lambrecht carefully defines the topic as the referent that a proposition in a given situation ‘is construed as being about’; this proposition expresses ‘information which is relevant to and which increases the addressee’s knowledge of’ the referent (1994:131). In an earlier article Reinhart presents a similar, though formal, analysis of topic and ‘aboutness’ (1981:78-87).

Reinhart also observes that non-subject topics exist, and that sometimes it is difficult to determine which of two equally given referring expressions is the topic. Givón recognizes that more than one referent can be topical in a discourse at a given point, and has devised measures for the degree of topicality of a given referent, depending on how often and how far away it occurs in the preceding and succeeding context (1983, 1990). Although these three scholars have different approaches and different concerns, common to their work is the acknowledgment that the sentence topic is a relevant notion and that sentence topics have to do with entities (rather than events or states).

Following these scholars, whose work grew out of a long tradition of research into discourse (see Givón 1990:900), I will understand topic to be the referent that a given clause ‘is about’, although, in light of Lambrecht’s idea of topic, this brief description should include the notion that a proposition underlies the clause. Determination of a topic should be made with reference to more than one clause.

Givón observes that the more topical a referent, the less phonological material is necessary to (en)code it, and he presents a scale of topic instantiation that proceeds from greater to lesser topicality: zero anaphora, unstressed pronouns, stressed pronouns, full NPs (1983:18). This scale is consistent with the observation that topics are more often given, definite entities and less commonly new, indefinite ones. I will use Givón’s scale as a guide in the identification of topics.

Having determined a rudimentary, usable definition of topic, I will briefly state that I do not follow Halliday’s notion of theme, the first item in a sentence and that with which the sentence is concerned (1985). Forms other than referents, e.g., adverbs, may be
construed as the theme under this definition, so it is inconsistent with my idea of topic.

Another idea of topic is found in Garrett (1992), an analysis of the Lycian topic construction. Here topic is a 'syntactically defined notion', presumably following Hale's (1987) proposed phrase structure for Indo-European, where TOP[ic] and COMP[lement] positions precede the main part of the clause. If this same notion of topic underlies the description of -ma as a 'topic marker' (Garrett 1996), then this use of topic is obviously also incompatible with my notion of the term.

The construction Garrett (1992) analyzes concerns left-dislocation, where a referring expression occurs to the left of, i.e., before, the clause and is also 'resumed' by a pronoun in the clause proper. Prince has devoted much study to left-dislocation and to the syntactically similar topicalization, where a referring expression that is a constituent occurs to the left of its clause, but is not resumed by a pronoun within the clause (1981a, 1992, 1997, 1998, Ward and Prince 1991). In general, however, Prince does not make use of the category topic except to compare how it does or does not coincide with her analysis (e.g., Prince 1992, 1998). For instance, Prince (1998) finds that neither left-dislocated nor topicalized forms in English involve topics. Givón categorizes the two constructions as 'marked topic constructions', and finds that left-dislocation and (contrastive) topicalization do involve topics (1990:752-760).

Whichever view one follows, left-dislocation in Hittite is exceedingly rare and occurs in only one possible example in my corpus, that is, marked with -ma (see chapter 2, example (21)). Topicalized forms must occur, but detecting them is difficult because 1) clauses in general do not contain all the constituents necessary to qualify the clause as a case of topicalization (e.g., orthotonic direct object placed clause-initially before orthotonic subject), and because 2) clausal constituents in general conform to a dominant order. In some cases, clausal syntax that does not adhere to a dominant order indicates to the reader the presence of a marked construction, e.g., topicalization. Beyond this, detecting cases of topicalization would be dependent either on intonational cues, making for a difficult
situation in the absence of native Hittite speakers, or on the sensitivity of the modern-day
reader. Whether these cases then actually involve topics, as opposed to focal elements, for
example, remains to be determined.

Chafe does not find that inquiries into the nature of topic have contributed to our
knowledge about English and questions its relevance for English and other languages
(1994:84). For some languages, though, in particular some Asian ones, he recognizes
topic as a relevant notion. He reserves the term topic for use with the concept of discourse
topic (see note 10). Chafe finds that the notion subject is more relevant for studying
English. For him a subject is a starting point, a hitching post for new contributions, and he
believes the starting-point role has been grammaticalized in the subject (pp.82-92). The
subject would thus have both syntactic and pragmatic function in English.

I am not convinced that the notion of topic is irrelevant in English, especially when
it receives coherent treatment compatible with the notion of subject. Lambrecht (and
others) understand subjects as unmarked, or default, topics (1994:136; cf. Givón
1990:901-902); the subject of a sentence will most often be the topic as well, but this
convention can be overridden. There is, after all, a resemblance between Chafe’s
description of those starting points that are given in the discourse and about which a new
contribution is made and between Lambrecht’s description of (subject) topics that are given
and about which a comment is made (p.164).

Consistent with both views, whatever the importance of the topic, is the
characterization of English as a subject-prominent language (as opposed to a topic-
prominent language (Li and Thompson 1976)). As far as I can determine, Hittite is like
English in that subjects and topics correlate highly. Justus (1976) views Hittite as being
topic-prominent, and I address this matter in §2.3.1.

If the function of -ma is to mark topics, then we may expect it to cooccur with a
change of topic, since we do not see the connector in every clause with a topic. Given the
high correlation between topics and subjects, we would then expect to see -ma marking a change of subject as well.

§1.3.2 Focus

As with the term topic, Chafe avoids using focus, another term with a storied past (1994:78). Lambrecht defines focus non-technically as ‘the unpredictable or pragmatically non-recoverable element in an utterance’ (1994:207). Givón holds a similar view and states that ‘(t)he majority of sentences/clauses in connected discourse will have only one chunk—be it a nominal, predicate (verb, adjective) or adverbial word/phrase—under the scope of asserted new information’ (1984:258),12 and that this new information is ‘communicatively most salient—i.e., the focus of new information’ (p.260). One might say that the focus is the informative element in an utterance, that which informs or adds to the knowledge of the hearer, but its activation state need not be new—it may be given or accessible (cf. Lambrecht 1994:43-50). To the extent that Lambrecht or Givón’s new or non-recoverable information is actually new (inactive in the hearer’s consciousness), these descriptions are comparable to Chafe’s one new idea constraint, which limits each intonation unit in spoken language to containing no more than one new referent, event, or state (1994:108-119).

Each clause should have a focus (convey information), but since we can lack some cues, like intonation, that would have guided a Hittite audience in understanding an author’s intentions, we may not identify all foci correctly here. If -ma’s function is to mark the focus, it can signal only a subset of foci, for we do not encounter -ma in every clause. I therefore consider only certain salient contexts whose elements are more likely to function as clausal foci and which Hittite speakers might have considered special enough to mark overtly with -ma. These contexts contain a new referent, as described just above, or they are emphatic, contrastive, or counterexpectational.
I will understand as emphatic elements forms that are stressed in some way by the author. One cue to emphasis would be intonation, but since we do not have access to the intonation that a Hittite audience would have had, whether directly or via their Sprachgefühl, this cue is of limited use to us (although in some cases we can be almost certain of where in a clause prosodic prominence lay). Another cue is variant syntax, where forms do not take their 'usual' place in the clause as determined by a dominant order. A further cue to emphasis is an orthotonic personal pronoun. Hittite had enclitic pronouns, and these presumably mark topical referents; orthotonic personal pronouns are presumably focal. And a final cue to an emphasized form would be an emphatic particle, either -pat, an enclitic 'of specification, limitation, and identity' meaning 'the same; only; also' and the like (CHD P:212-230), or -a/-ya 'even, also', which marks single focal elements in addition to conjoining elements. This function is particularly clear when its host is not clause-initial.

Forms that stand in opposition will be said to contrast. Chafe has called the relation between the two (or more) forms a 'focus of contrast' (1976:35). The contrasted forms need not be focal, however, as topics may be contrasted in constructions with more than one focus of contrast (Lambrecht 1994:291-295). But, in general, contrasted forms will fall under the scope of assertion and be focal (Chafe p.35, Givón 1990:699-702). Contrast functions independently of activation state, as well, since contrasted forms may be given, accessible, or new (Chafe p.35). I follow Givón (pp.699-700) and Lambrecht (pp.290-291) and find that contrast is scalar, such that some contrasts will be stronger than others.

Clauses (or the propositions underlying them) will be said to be contrary to expectation if their semantic-pragmatic meaning is surprising or goes against that which the audience would conclude, based on having taken in the preceding context. This surprisingness or contrariety is what I understand to be equivalent to the clash or contrast of clauses conjoined with but in English, as analyzed by Sweetser (1990:100-111). The clash in the Hittite examples would consist in incompatibility between the premises.
presented and the conclusion that is actually offered. I regard the clash as informative, thus focal. Identifying instances of counterexpectation depends on understanding well the intentions of the author—counterexpectation is less obvious than mere contrast—and it may be that I correctly identify only the most obvious cases.

§1.3.3 Backgrounding

Narrative discourse reports remembered or imagined experience (Chafe 1994:231), experience which typically occurs independently of the situation in which the narrative, whether spoken or written, is conveyed (Chafe's displacement, p.32). The speaker (or author) is in the advantageous position of knowing the ‘full set of events (of the narrative) and their relationships’ (p.231), and can therefore give more prominence to some events, less to others. The former have been called foregrounded information, the latter backgrounded information. A particularly important type of backgrounded information is orientation.

The speaker (or author) must orient the hearer (or audience) with respect to time, space, participants, and ongoing states and events, otherwise the consciousness of the hearer (or audience) will not function properly (pp.128-129). Orientation with respect to time and space seem to be especially important. Temporal and spatial expressions may, for example, be adverbials or adverbial clauses. Ongoing conditions may find expression in conditional or causal clauses, among others.13 Such expressions of orientation, or setting, often occur at the beginning of clauses (p.168) or at the beginning of portions of text with a new or different discourse topic (p.202).

§1.4 Brief Sketch of Hittite Clause Syntax14

Hittite phrase structure is basically head-final. The major elements of the clause are ordered Subject–Object–Verb, thus Verb following Object. Additionally, possessed Nouns follow possessor Genitives, modified Nouns follow attributive Adjectives, Postpositions

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follow Nouns they govern, Finite Verbs follow Non-Finite Verbal forms, and Main Clauses follow Dependent Clauses. The dominant order of clausal constituents proposed by Luraghi (1990), with reference only to Old Hittite, may provisionally be accepted in the absence of such proposals for Middle or Neo-Hittite, although it is the rare example that would see all (especially NP) positions filled:

\[(5) \# \text{Adv}_{\text{temp}} \text{Adv}_{\text{loc}} \text{ S DO/Compl IO/Compl Adv}_{\text{manner/purp/instr}} \text{ V} \#^{15} \]

(Luraghi 1990:45)

The boundaries of Hittite clauses are clearly delineated, with the finite verb at the end of the clause and with one of a small number of structures at the beginning of the clause. The most obvious of these is an initial clause connector, \(nu\) (or, in Old Hittite, \(\tilde{s}u\) or \(\tilde{t}a\)) ‘and’, but such a form is not required, and regular accented words may also occur as the first constituent (or part of the first constituent phrase) at the beginning of the clause. In such a case the word (or phrase) occurs in initial position, a syntactic position inherited from Proto-Indo-European that was available for placement of communicatively salient information (topicalization).\(^{16}\) When an accented clause connector occurs clause-initially, the next constituent occurs in modified initial position, a functional variant of initial position.\(^{17}\)

In addition to their primary functions, any of a large number of enclitics placed after the first accented element in the clause (Wackernagel’s Law position)\(^{18}\) also serve through such placement to signal the beginning of clauses. These enclitics are of six types and occur in a particular order, sometimes in rather long strings. In first place may come the clause-connective enclitics: \(-a/-ya\) ‘and’, \(-ma\) ‘but, and’, and, mostly in Old Hittite, \(-a\) ‘but, and’. In the next position could come \(-man\), a particle of the optative, irrealis, and potential that also has an orthotonic variant (CHD L-N:139-143).\(^{19}\) The quotative particle \(-wa(r)\) may occupy the following position. Next would come the personal pronouns, nominative, accusative, and dative (Friedrich 1960:63 §§100, 102); these are subject to
particular sub-ordering and cooccurrence restrictions (Laroche (1957-58:161), Watkins (1963:42), Hoffner (1986:93-94)). Following these would be the so-called reflexive particle -z(a). In the last position in the enclitic string may be found one of the spatiotemporal clausal adverbs, -kan, -ašta, -šan, -an, or -apa, which, although not entirely understood, probably indicate direction, aspect, and the like (Carruba 1969, 1985, Josephson 1972, among others). Only one of the clause-connectors, and only one of the spatiotemporal adverbs may occur in a string. (Friedrich 1960:147-148 §288)

Independent clauses may be linked with one of the orthotonic or enclitic connectors described above, with the coordinating conjunction našma ‘or’, or with asyndeton. The typical dependent clause is preposed. Subordinating conjunctions include mān ‘when; if’, takku ‘if’, kuit ‘(seeing) that, because, since’, kuwapi ‘when’, maḥhan ‘when, as’, kuitman ‘while (preposed clause); until (postposed clause)’, and to these should be added the relative pronominal and adjectival form kui-. Traditional correlative structures include clauses marked with naššu...našma ‘either...or’ and -a/-ya...-a/-ya ‘both...and’. It may be noted that the orthotonic and enclitic connectors may also connect a main clause to its preceding dependent clause, thus they are not coordinating conjunctions in the traditional sense (cf. Friedrich 1960:154-162, §§302-319).

Here follow a few very general comments on miscellaneous syntactic topics. Concerning nouns, there are two genders, common and neuter; two numbers, singular and plural; and six cases, nominative, accusative, dative/locative, genitive, ablative, and instrumental (as well as a small number of vocatives) (Friedrich 1960:42-60 §§54-92, 119-127 §§197-220). In Old Hittite there was also an allative case. A verb may be basically active or mediopassive and is inflected for past or present/future tense or imperative mood. Non-finite forms include participles, supines, infinitives, and verbal nouns, the first three of which occur in a number of verbal periphrastic constructions (Friedrich 1960:73-114 §§135-188, 135-145 §§254-277).
Negative forms ordinarily precede the form they negate, and the default clausal
negation is preverbal. The indicative (and default) negator is *natta* ‘not’; negative
imperatives are formed with *lē* ‘not’ plus indicative\(^{20}\) (Friedrich 1960:145-146 §§279-283,
Hoffner 1986).

The remaining enclitic particles are not WL clitics. They attach to their host
wherever it may occur in the clause. These enclitics are *-pat* ‘the same; only; also (etc.)’,
which specifies, limits, and indicates identity (CHD P:212-230); *-al-*ya ‘and; also, even’,
which is used both as a conjunction and as a particle whose function is most readily
identifiable as to focus the element to which it attaches; and enclitic possessive pronouns,
which were more common in the older language but which are mostly replaced with
orthotonic genitive personal pronouns in the later language (Friedrich 1960:64-66 §§106-
109).

§1.4.1 Basic Syntax with regard to *-ma*

As one of the class of enclitic clause connectors, *-ma* most often attaches directly to
the first accented word of the clause (even if this is part of a constituent phrase), occurring
before any other enclitics (§2.2, §3.2, §4.2).

(6) AH I 66-72; #1141

\[
\text{kaniššūwar=ma= mu ŠA dišTA\textit{=p}at GAŠAN-YA ēšta}
\]

{ favor -\textit{ma} me of Ištar herself lady my was}

‘and the favor of Ištar herself, my lady, was on me’

When *-ma* occurs in the same clause as one of a few function words, it is delayed
to the word following the function word. These postponing forms are *mān* ‘when; if’,
*takku* ‘if’, the relative form *ku\textit{=i}-*, *nu* ‘and’, and occasionally *našma* ‘or’ (§2.2, §3.2.1-2,
§4.2.1-2).
§1.4.2 The Form of -ma

The enclitic -ma is represented with the cuneiform sign MA: 

It presumably had a phonetic form that was something like [ma]. In only three attestations out of many hundreds of occurrences, the vowel of -ma was elided (see §5.4).

§1.5 Corpus

Conducting an investigation into the pragmatics of linguistic form like -ma in three linguistic periods requires that suitable texts meet two important criteria: They must be securely dated, and they must contain sufficient material.

The first criterion for establishing a corpus was secure dating. Securely dated texts are imperative for determining how Hittite forms functioned at given stages in the language's history and how they changed over time (cf. Melchert 1984b:79). A manuscript is typically dated to Old, Middle, or Neo-Hittite periods based on the epigraphic, orthographic, and grammatical features it shows.21 It is possible to find a mix of such
features associated with different periods, as many manuscripts from earlier periods were
copied or recopied later. Textual content may also be used as an indicator, but is not as
reliable, especially when it concerns events from earlier periods or involves non-historical
genres. While only a few manuscripts have been dated absolutely to within 25 years of
their composition, e.g., the Maṣat letters (Alp 1991a: 109-112) and the Bronze Tablet (Otten
1988:3), many have been given fairly secure relative datings. This is due to the work of
several scholars, among them Otten (1953, 1973, Otten and Souček 1969), Rüster (1972),
and her students (Heinhold-Krahmer et al. 1979), Oettinger (1979), and Melchert (1984b).

To select texts for this study, I correlated the determinations for texts as found in
Oettinger (1979), who mainly follows Otten, Neu, and Rüster; Heinhold-Krahmer et al.
(1979); Melchert (1984b), who follows Oettinger in part; and Yoshida (1990) and Garrett
(1990), both of whom mainly follow Melchert. The Maṣat letters and the Bronze Tablet,
discovered relatively recently, are also included. My goal was to have a corpus comprised
of texts whose dating was agreed upon by all these scholars, and so to preempt any
controversy on this point. The dating of Middle Hittite texts is controversial (usually with
Heinhold-Krahmer et al. against everyone else), but the dating of the Maṣat letters should
be above criticism.

The second major criterion for text selection was the amount of material each text
offered that could be analyzed with relative confidence. Studying -ma requires more
textual material per occurrence than studies of orthography, phonology, or syntax. This
meant I needed manuscripts with large portions of clear, complete text. The ideal situation
would be a complete, securely dated text, but such are a distinct minority of Hittite texts in
general. I examined the Hittite autographs of the securely dated texts chosen by the method
described above in order to identify those texts which were complete or contained
significant portions of complete text.
In general, I accepted any Old Hittite text of respectable size. I included any Maṣat letter that was complete or that preserved a significant amount of text for which the context was understandable. Since there exist several lengthy Neo-Hittite texts, I excluded a number of short texts (< 20 lines) securely dated to that period. I included reconstructed texts or portions of texts only if the reconstruction was based on a contemporary copy, as in the Annals of Mursili, the Apology of Hattusili, or the Old Hittite Ritual for the Royal Couple. The texts which met both the dating and completeness criteria are listed in (8).

(8) **Securely dated and sufficiently preserved texts**
(arranged by period and CTH number):

**Old Hittite:**
- 1.A Proclamation of Anitta (Neu 1974)
- 3 Story of Zalpa: KBo 22.2 (Otten 1973)
- 272 Instruction (Archi 1979)
- 291.I.a Laws, Series one (Friedrich 1959, Hoffner 1997)
- 416 Ritual for the Royal Couple (Otten and Souček 1969, Neu 1980)
- 669.30 Festival (Neu 1980)

**Middle Hittite:**
- Uncat. Maṣat Letters (Alp 1991a, b)

**Neo-Hittite:**
- 61 Annals of Mursili (Götze 1933)
- 68 Treaty with Kupanta-ako (Friedrich 1926)
- 81 Apology of Hattusili (Otten 1981)
- 176 Letter of Puduhepa to the King of Alasiya (Stefanini 1964)
- 255 Instructions to the $\text{LÜ.MEŠSAG}$ (von Schuler 1957)
- Uncat. Treaty of Tuthaliya with Kurunta (Bronze Tablet) (Otten 1988)
The criteria regarding dating and completeness severely restrict the number of texts investigated. Initially I intended to control for variation across textual genres by including a representative of each genre from each period, but this was not entirely possible because of gaps in the preserved Hittite corpus and the necessity of maintaining the two criteria for textual selection. See (9). There are no letters or acceptable treaties among the Old Hittite texts. In Neo-Hittite, there is no thoroughly modern redaction of the laws. Since the language of rituals and festivals is questionable with regard to which features are truly archaic or contemporary (Melchert 1984b:80), none has been included for Neo-Hittite. Whether the gaps in the corpus compromise my findings depends on whether -ma was used differently in different genres. This is a very interesting question, but one that must await further study.

(9) **Texts Arranged by Genre, Period, CTH Number**

<table>
<thead>
<tr>
<th>Genre</th>
<th>Period</th>
<th>CTH Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hist. Narr</td>
<td>Treaty</td>
<td>Letters</td>
</tr>
<tr>
<td>Old Hittite:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.A</td>
<td>272</td>
<td>291.I.a</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Hittite:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maṣat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neo-Hittite:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>68</td>
<td>176</td>
</tr>
<tr>
<td>81</td>
<td>Kurunta</td>
<td></td>
</tr>
</tbody>
</table>

§1.6 Prospect

Having established the basis for studying -ma’s function, we may now turn to the study itself.

In chapter 2, I present the findings regarding -ma’s function in Old Hittite. The particle is seen to cooccur with new referents, contrasted elements, and expressions of setting. -ma’s occurrence with topic switch was exceeded by its occurrence with subject
switch. My findings support the proposal that -ma and non-geminating -a are suppletive allomorphs, functioning together differently from geminating -al-ya. Finally, -ma is shown to systematically mark contrasting conditions in the Laws.

In chapter 3, I present the findings about how -ma functions in Neo-Hittite. The enclitic continues to occur in contexts of contrast, referent-introduction, setting, and subject switch, but it also is abundantly attested in environments expressing counterexpectation, in pair- and series-marking, with paragraph-initial setting expressions, and in contexts expressing emphasis with variant syntax or with orthotonic personal pronouns. -ma has replaced its suppletive allomorph -a, which nevertheless lives on in isolated forms.

In chapter 4, I present the findings concerning -ma's function in Middle Hittite, specifically the Ma§at letters. Middle Hittite -ma functions more like Neo-Hittite -ma than like Old Hittite -ma; that is, it occurs more frequently and in a wider range of contexts. Conspicuous in the epistolary register is -ma's use in a formula that explicitly sets the discourse topic.

In chapter 5, I summarize the findings of the previous chapters and report on the changes that have occurred with regard to -ma from Old Hittite to Neo-Hittite. -ma's function actually remained fairly stable over the period of attested Hittite, although it increased in general frequency and went from incipient to frequent use in two contexts. While -ma does cooccur with pragmatic categories, it seems that the definitions of -ma's function as marking these categories are not accurate. It appears to be more cogent to say that -ma is a clause-connector signaling difference and shows an affinity for contexts containing a salient change in the discourse.

Finally, in chapter 6, I present a brief conclusion.
Notes to Chapter 1

1 Please see the List of Abbreviations and the Notes on Translation and Glossing in the front matter.

2 As in Sturtevant's glossary (1936) and Friedrich's grammar (1940) and his glossary (1952-66). See §1.2. Bakker (1993) frequently translates dé with 'and' in cases of clausal boundary marking.

3 Research such as Pinkster (1990), Bolkestein (1991), Kroon (1994), and Risselada (1993).

4 The label adversative, as a naive and pre-theoretical notion, has been applied to -ma since Ungnad's description. Fairly naive and pre-theoretical myself, I consider adversative to be more or less synonymous with contrastive, with the possibility of weaker and stronger connotations of opposition; for me, adversative is a more general term than contrastive. Adversativity in this study, then, does not immediately imply counterexpectation, as it seems to do for Halliday and Hasan (1976:250).

Beyond the definition of adversativity is another consideration not explored in this study, namely the assumed equatability of contemporary English adversative with German adversativ, either of today or of 1920. Similarly, have German aber and und shifted in meaning during the past 100 years, and are their meanings directly comparable to those of English but and and during the same period?

5 For example, Sommer and Ehelolf (1924), Götte (1925, 1928*, 1933), Friedrich (1930*), and Götte and Pedersen (1934). (The asterisk indicates reference only to Sommer.)

6 "Die Partikel =ma hat, soweit ich sehe, keine adversative Bedeutung („aber“). Vielmehr drückt der =ma-Satz eine zur Haupthandlung parallel verlaufende, meist untergeordnete Nebenhandlung aus..." (Starke 1977:31 fn.32). In contrast to a 'hat =ma ausschließlich subordinierende, erläuternde Funktion. So finden =ma-Sätze vor allem in der Ritualliteratur häufige Verwendung, da hier Vorgänge und Zustände nicht nur genannt

7 Since the body of scholarship is so great, and my needs are rather modest, i.e., workable definitions of basic concepts, I refer to but a few of the many scholars who have studied discourse: Firbas (1966a,b, 1986, 1992), following the tradition of the Prague School; Halliday (1967, 1985); Chafe (1976, 1994); Prince (1981b, 1998); Reinhart (1981); Givón (1983, 1984, 1990); and Lambrecht (1994).

8 At least one study of boundary marking in a dead language has been based on the work of Chafe, Bakker's examination of Homeric and Classical Greek \( dé \) (1993).

9 I will use the term author to refer to the person who produced the text, and the term audience to refer to the person or persons for whom the text was produced and who were intended to understand it. These terms are intended to correspond to the more common speaker and hearer. I use author-audience as an adaptation of the speaker-hearer relationship to the Hittite situation.

10 Givón and Lambrecht distinguish between sentence topic and discourse topic (although Givón’s terminology differs). In studying English, Chafe reserves the term topic or discourse topic for the ‘aggregate of coherently related events, states, and referents that are held together in some form in the speaker’s semiactive consciousness’ (1994:121). In this way the term is consistent ‘with such expressions as the topic of a paragraph, changing the topic, and the like’ (p.120). For what I am thinking of as discourse topic Givón uses the term theme, which thematic paragraphs (chains of clauses combined into larger thematic units) are about (1983:7-8).
Lambrecht would say that subjects are unmarked topic expressions, since the topic is actually a referent, not a linguistic form like the subject.

Lambrecht's technical definition of focus invokes pragmatic presupposition and pragmatic assertion: 'The semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition' (1994:213).

Mental spaces theory would term the items in this section space-builders (Fauconnier 1988), and while I do not do so in this study, investigating -ma's occurrence from this perspective could yield very interesting results, e.g., perhaps its function is to signal the building of spaces in a discourse. See also Dancygier and Sweetser (1997, 2000) for studies on conditional and causal clauses as space-builders.

As with any such sketch, exceptions to generalizations will obtain. With Hittite, pragmatic factors may underlie variant occurrence, for example, or minor rules may be in play, as when the adjective humanant- 'each, all' functions as an indefinite and follows its noun. Sumerograms and Akkadograms often follow the syntax of their respective languages, leading to apparent exceptions.

Compl in the order indicates a predicative complement or a complement of direction, location, or source (Luraghi 1990:43-44).

Regarding Indo-European topicalization, see, for example, Watkins 1963, Dressler 1969, Holland 1980. The traditional view of topicalization in IE scholarship is that it involves full lexical items that occur in initial position and are thus emphasized in some way, so IE topicalization, at least on the surface, appears to involve focal elements rather than topical elements (in the senses used in §1.3).

For another view of Proto-Indo-European and Anatolian/Hittite phrase structure, see Hale (1987) and Garrett (1990). While Garrett's account of Hittite phrase structure holds for many or most cases, it does not appear to account for the placement of the sometimes causal complementizer kuit late in the clause (cf. Holland ms.), nor does it seem to account
for the delayed placement of \textit{-ma} that occurs with certain function words (cf. §1.4.1, §2.2, §3.2.1-2, §4.2.1-2).

\textsuperscript{18}See Wackernagel (1892). According to Garrett, Hale's (1987) revised WL rules regarding positioning of enclitics have been collapsed from PIE to Anatolian (1990:38-39).

\textsuperscript{19}Since enclitic \textit{-man} reportedly does not cooccur with \textit{-ma}, it has been said to occur first in the enclitic chain, after the first accented word plus its own possessive or emphatic enclitics. The only examples of such enclitics usually offered in descriptions are with the 'emphatic' enclitic \textit{-a}, which I regard as a clause-connector (Houwink ten Cate 1973:129 fn.45, CHD L-N:142, Luraghi 1990:129 n.11).

\textsuperscript{20}Old Hittite texts preserve examples of \textit{le} plus imperative (Friedrich 1960:145 §280b, CHD L-N:56).

\textsuperscript{21}Dates for the linguistic periods of Hittite vary. I follow Neu and Rüster (1975:VII) in suggesting the following: Old Hittite—ca. 1570-1450 BCE, Middle Hittite—ca. 1450-1380 BCE, Neo-Hittite—ca. 1380-1200 BCE. These dates are approximately equivalent to those indicated by Heinhold-Krahmer et al. (1979:313-315). Gurney (1990:181-182) implies lower dates for the Neo-Hittite period based on revised Egyptian chronology.

\textsuperscript{22}Oettinger includes OH texts in MH script with MH texts (1979:576-579), but as Melchert points out (1984b:80), these must be distinguished.

\textsuperscript{23}I reviewed the editions of the Annals of Mursili (Götze 1933), Mursili's Treaty with Kupanta-dKAL (Friedrich 1926), and the Apology of Hattusili (Otten 1981) to determine the degree of completeness of each. The context of each \textit{-ma} was confirmed against the cuneiform autograph, however.

\textsuperscript{24}Considered uncatalogued by some scholars.

\textsuperscript{25}Due to considerations of time, I have not included some texts that might otherwise have met the criteria for inclusion, e.g., the Deeds of Suppiluliuma (CTH 40), the Staatsverträge other than that with Kupanta-dKAL (Friedrich 1926, 1930), the second Plague Prayer of Mursili (CTH 378.II), or the Prayer of Muwatalli to the Storm God (CTH 381). These
remain the object of possible later study. NH texts are nonetheless well represented in this corpus.

26 Although Melchert does not find appropriate for inclusion CTH 486, the Aphasia of Mursili, both Yoshida and Garrett do include it in their corpora.
§2.0 Introduction

Following the newer proposals for -ma's meaning and function (cf. §1.2), my investigation into the function of -ma in Old Hittite will center on three areas of pragmatics, namely topic, focus, and orientation. The notion of topic, discussed in §2.3.1, will be shown to be less prominent than the notion of grammatical subject for Hittite, and we will see that there is some correlation between subject switch and occurrence of -ma. Contexts expressing focus will be examined in §2.3.2, and it will be shown that -ma can occur in contrastive contexts and aid in signaling the introduction of new referents. In §2.3.3, we will see a fairly high correlation between -ma and contexts which establish the orientation for propositions.

Prior to this examination of pragmatics, the preliminary sections §§2.0.1-2.2 will deal with the OH sources for -ma, its phonological distribution, and syntax. Particularly interesting here is -ma's nearly complete restriction to occurrence after vowels.

After -ma's function has been investigated in §2.3, attention turns to the other enclitic conjunctions in §2.4. A comparison between the non-geminating conjunction -a and the geminating conjunction -al-ya will demonstrate the difference between the two. This is followed by a comparison of -a with -ma which will show that the two function as suppletive allomorphs, as Melchert has suggested (1984a, 1985).

In §2.5 I look at conditional clauses in the Laws, with the goal of showing that -ma and -a systematically aid in signaling alternate conditions in laws with complex structure.

Section §2.6 is a brief response to the views of Starke (1977) and Luraghi (1990), both of whom deal with Old Hittite.
Old Hittite is generally accepted as being the language recorded ca. 1600-1450 BCE. As described in §1.5, the texts found to be acceptable for inclusion in this study were a ritual for the royal couple, here abbreviated ‘StBoT 8’ (Otten and Souček 1969 and Neu 1980, no.2-7) and a Festritual, KBo 20.10+ (Neu 1980, no.59); historical texts: the Anitta text (Neu 1974, text A) and the story of Zalpa (Otten 1973, text A); the Laws (Friedrich 1959 and Hoffner 1997, text A); and an instruction, KBo 22.1 (Archi 1979). From these sources, 32 examples of -ma were found in contexts complete enough for confident interpretation. The number of secure and questionable attestations follows:

<table>
<thead>
<tr>
<th>Text</th>
<th>Secure</th>
<th>Context Broken or Questionable</th>
</tr>
</thead>
<tbody>
<tr>
<td>StBoT 8</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>KBo 20.10+</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Anitta</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Zalpa</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Laws</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>KBo 22.1</td>
<td>-1</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>8</td>
</tr>
</tbody>
</table>

As can be seen from this table, the secure examples of -ma came from only five texts.

§2.1 Phonological Distribution

Melchert has briefly observed that in Old Hittite -ma and adversative, non-geminating -a were in complementary distribution (except for a few conditioned exceptions) and suggests that they were suppletive allomorphs (1984a:30 with fn.9 and p.32 fn.13; 1985:202). In the OH corpus I reviewed, -ma occurred only after vowels (31/32) and one Akkadogram. -a occurred only after consonants. Non-adversative -a/-ya occurred as -a after geminate consonants, and as -ya after vowels and Sumerograms. The following are representative occurrences of these enclitics.
(2) Laws I §10 (A Vs. I 17'); #1

pēdi₃ šši₃ ma LÚ ULULUL-an pāi
{place_DL- his_DL- ma person_A he gives}

'and in his place he shall provide a person'

(3) Laws I §46 (A Vs. II 40'); #9

IŠTU É ABI- ŠU=ma ka[rpianzi]
{from house father- his -ma they? render }

'but [they shall] render (it) from the house of his father'

(4) StBoT 8 Vs. I 21'-22'; #55

weš₃ a namma anda [p]aiwani
{we-a again in we go }

'and we go in again'

(5) StBoT 8 Rs. IV 27; cf. #61

šinann₃ a ḫarmi
{figure_A-a I hold }

'and I hold a figure'

(6) StBoT 8 Rs. IV 23; cf. #33

III NINDA ḫarṣaeš išpantuzzi₃ ya marnuan kitta
{3 bread thick.N libation and marnuan lie }

'three thick breads and the libation (of) marnuan lie (ready)'

(7) StBoT 8 Vs. I 29'; cf. #26

SAL LUGAL=ya Q[A] TAMMA pāi
{queen and in that way he gives}

'and to the queen he gives the same'
This distribution holds for nearly the entire OH corpus. Using the corpus of OH texts as listed in Yoshida (1990:7-9), I collected the examples of -ma and observed the following distribution:

(8)  
-vere ma 93  
-Cere ma 3  
Akkadogram=ma 1  
indeterminate ma 8

All three post-consonantal -ma’s occur after -x and before another clitic (Melchert’s few conditioned exceptions?), an enclitic string which allows more than one parsing. Two of these post-consonantal -ma’s, both from OH ritual fragments, are in broken contexts that make it impossible to determine the composition of the string with certainty:

(9) KBo 17.22 Vs. II x+1 (Neu 1980:207)  
]x-AH-ḫa-as-ma-az x[

The sequence can be analyzed two ways: ṭhašmaaz and ṭhašmaaz, and no decision can be reached without a join or some parallel passage. On the basis of several instances of la-a-ah-ḫa ‘to battle (all.sg.)’, Neu suggests a possible restoration la-]a1-ah-ḫa-as-ma-az and opts for the first parsing above since he takes the MA as the enclitic conjunction, thus approximately ‘but to battles (dat./loc.pl.) in ...’’s own interest’. The alternate reading, lahšmaaz ‘to their battle in ...’’s own interest’, seems no worse.

(10) KUB 29.3 Vs. I 7’-11’ (Neu 1980:3)  
nu an-ku GISHIL.A LUGAL-uš ta-al-[i-] ḫe-e-a-u-e-eš-ma-aš ša-a[i-]la-nu-uš-kir ša-al-la-nu-uš-kir x[  
ša-al-la-nu-uš-kf[i-]  
$ i ne₁-e-lpš-ša-aš k[at-
The sequence he-e-a-u-e-es-ma-as is also ambiguous, between °š=?ma=š and °š=šmaš, giving 'but the rains made them great' and 'the rains made you (pl.) great'. The first reading requires interpretation as -aš as a 3.pl.acc. form, the only such occurrence in the OH ritual corpus of Neu (1983:5 with n.16). This peculiarity is counterbalanced by the only occurrence in the corpus of -aš as a 3.pl.nom. form (Neu 1983:5 with n.12), also in conjunction with -ma: ka-ru-ú-ma-aš tarkuanzi 'but already they dance' (Neu 1980:90).

Such occurrences become less strange if one considers them to be positional variants of -us and -e, respectively, the only two OH clitics that have neither initial a-vocalism nor initial consonant. Nevertheless, the second reading, hēauẹš=šmaš 'rain=š you (pl.)', should not be discounted since the trees are probably addressed directly beginning with 1.11'.

Compare the later copy, despite differences in this passage, including reduction of at least three clauses (11.8'-10' above) to one clause: nu GISH.A LUGAL-us ù-bi wēkzi hēauēš kuit tašnuškir šalluškir § nepišaš kattan uliliškiddumati 'And the king requests trees of the Storm-god, since rains made (them) strong (and) made (iliem) great. § Under the heavens you have grown' (KUB 29.1 Vs. I 26-28; Neu 1980:3).

The third attestation, from the Zukraši text, is undoubtedly -ma after consonant.

(11) Zukraši  KBo 7.14 Rs. 3' (Otten 1953)

\[Hattuež uit URU Ha-at-tu-az-ma- Š URU x\]

\[Hattu.DL came Hattu.AB -ma he ...\]

'...came to Hattu, and he ... from Hattu (to) the city of ...'

Thus an analysis Hattuaz=šmaš. Although parsing the sequence as Hattuaz=šmaš is a formal possibility, giving '...came to Hattu. From Hattu (he) ... (to) you/to them ... the city of ...', it seems much less likely.

In this last example we are probably seeing -ma's first steps toward conditionless distribution. Given the tremendous disparity in the distribution of post-vocalic and post-
consonantal -ma, however, it is worth examining whether the isofunctionality Melchert suggested for -ma and -a obtains. Such an examination is undertaken in §2.4.

§2.2 Syntax

The data in the OH corpus under examination follow the rules for placement of -ma as described above in §1.4.1. Six forms are interesting in this respect.

First are two examples where -ma occurs one word later than expected, but where this word is the second of two apparently forming a tight semi-lexicalized phrase:

(12) StBoT 8 Rs. III 3-6; #29

äppan-anda=ma=sše kē mēmahhi
{after-in -ma it.DL these.A I say }

‘and after(wards) I say these (words) to it: ...’

Here -ma appears to attach to the second word in a clause not introduced with a subordinating conjunction. Given the word space in the autograph and the placement of the clitics, appan-anda ‘after(wards)’ apparently consists of two words functioning as one constituent.8 Another example from a copy of an OH text shows the same syntax, katta-šarā=s ma ‘and up from below’ at KUB 43.23 Rs. 17’, which incidentally shows no word space.

As noted in §1.4.1, -ma attaches to the second word in the clause if the first is occupied by takku. In (13) however, -ma cliticizes to the third word, which leads to the analysis of A.ŠĀHILA kulei ‘unused’ land’ as a syntactic unit. Hoffner even takes the Sumerogram as predeterminer (1997:54-57, 190f.).

(13) Laws I §47b (A Vs. II 47’); #10

takku A.ŠĀHILA kulēi=ma ārki
{if land idle? -ma divides }

‘but if he subdivides idle’ land’
In (14) another syntactic unit may underlie $\textit{IŠTU É ABI-ŠU}$ 'from the house of his father', which should have had the Hittite form $\textit{attaš šaš parnaz}$.

(14) Laws I §46 (A Vs. II 40'); #9

$\textit{IŠTU É ABI-ŠU}=\text{ma kar[pi]anzi}$

{from house father- his -ma they re[nder]}

'but [they shall] re[nder] (it) from the house of his father'

However, it is difficult to know just how the Hittites would have read the form and thus where they would have placed -ma (but see §3.2.3). This is the only occurrence of -ma after Akkado- or Sumerogram in the OH data.

Following the rule for delayed placement, where -ma is placed on the second stressed word of the clause when certain grammatical items occur clause-initially (§1.4.1), -ma occurs on the second stressed word in (15), the only example in the OH data here in which it cooccurs with a clause-introductory particle.

(15) Anitta A Vs. 3; #15

$\text{na ašta diM-unni= ma mān aššuš ēšta}$

{CC PV Storm-god.DL=ma as dear.N he was}

'but as he was dear to the Storm-god'

Also following rule of delayed placement, the -ma in (16) attaches not to the clause-initial indefinite relative pronoun kuiš 'whoever', but to the next stressed word.

(16) Laws I §23 (A Vs. I 53'); #3

$kuiš= an āppa=ma uwa[tezzi}$

{who.N him.A back=ma brings}

'but whoever brings him back'
The occurrence of -\textit{ma} in this example may be determined in part by the suppletion described above: -\textit{ma} cannot attach to \textit{kuiš} because it ends in a consonant, and -\textit{a} cannot attach to \textit{kuiš} because being followed by -\textit{an} 'him', it would be imperceptible. This example is discussed further in §2.3.2.1.

The last of the syntactically interesting examples is (17), where -\textit{ma} has attached to what appears to be the clitic -\textit{a}, exceptional because -\textit{ma} in all other cases attaches to a fully stressed lexical item which hosts at most one enclitic possessive pronoun, as in (2).

(17) Laws I §24 (A I 55'); #4

\begin{verbatim}
SAL-šš a=ma kušan ITU.I.KAM VI GÍN K[U.BABBAR] pāi
\end{verbatim}

\begin{verbatim}
{woman.G-a -ma wage.A month.1.DET 6 shekel silver he gives}
\end{verbatim}

'\textbf{but} he shall pay a woman's wage (for) one month (of) 6 s[ilver] shekels'

It is not clear what the <\textit{a}> represents. It might be merely graphic like the representation of the particle /-ts/ with -\textit{za}, here an optional or intentional strategy employed to indicate the genitive case as distinct from the nominative. There are few other examples of the sequence \textit{za ma}. From OH ritual fragments we have LÚNAR-ši-ya-ša-ma 'and the musician?', if the MA is not to be read BA, giving the enclitic preverb -\textit{apa} (-a-pā), as is possible according to Neu (1983:257, 112 n. 392; 1980:104 n. 342). The only other example seen in the data for all periods is hingan=azma=pa 'and death [enclitic preverb]' (from the archaizing Prayer of Kantuzzili; see §5.5). There is no doubt about the morphosyntax of hingan (neut.nom.sg.), and this clear example supports the phonological reality of the <\textit{a}> in (17). It also allows us to rule out occurrence of -\textit{al-ya} in (17), an \textit{a priori} possibility when a word is written with Sumerogram and minimal phonetic complementation. Most likely -\textit{ma} is serving to reinforce -\textit{a} in these examples (see §5.5).

-\textit{ma} is not particular in terms of what grammatical category can serve as its host.

The tables in (18) and (19) summarize some basic facts of -\textit{ma}'s distribution whose relevance will become apparent in the course of examining the enclitics -\textit{a} and -\textit{al-ya} (§2.4).
(18) **Syntactic Categories of \(-ma\)'s Hosts**

<table>
<thead>
<tr>
<th>Host Position in Clause</th>
<th>Host Syntactic Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NP</td>
</tr>
<tr>
<td>First</td>
<td>8</td>
</tr>
<tr>
<td>Second</td>
<td>4</td>
</tr>
<tr>
<td>Third</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>

(19) **Conjunctions and Relatives Cooccurring with Postponed \(-ma\)**

<table>
<thead>
<tr>
<th>Host Position in Clause</th>
<th>Postponing Conjunction or Relative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>takku</td>
</tr>
<tr>
<td>Second</td>
<td>4</td>
</tr>
<tr>
<td>Third</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
</tr>
</tbody>
</table>

Houwink ten Cate (1973:128) examined four interclausal environments for enclitic conjunctions, 1a) between two independent or 1b) between two dependent clauses; 2) at the beginning of a main clause preceded by a subordinate clause; and 3) at the beginning of subordinate clause preceding a main clause. He found that \(-ma\) occurred in environments 1a-b) and 3), but not in 2) (p.134).° My results, which include instances of delayed \(-ma\), confirm this finding: 18 (independent) and 0 (dependent) of type 1, 0 of type 2, and 13 of type 3 (see also (70) in §2.4.2.3). In (16) \(-ma\) occurs at the beginning of a dependent clause preceding a main clause (environment 3), yet that dependent clause is the beginning of the apodosis following a protasis with coordinated members. It is thus also like type 2. To accommodate such examples, I distinguish a fifth environment, 2/3. In §2.4.2.5, I discuss the scope of \(-ma\).
§2.3 Pragmatics

To determine the function of -ma, it is necessary to look at the contexts in which clauses with the particle occur. -ma has traditionally been viewed as expressing adversativity, but a review of the OH data in the corpus indicates that adversativity is the preferred reading only in contrasted conditional protases (#5.5, #7, #13, #31). For the other examples, adversative readings are possible, but seem to be less natural than additive readings.10 Notions of adversativity might then be derived from context, and it is necessary to look at other pragmatic relationships if we are to discover -ma’s function.

Given the recent proposals of -ma’s function (§1.2), I turn now to an examination of the particle’s contexts in order to determine whether it marks topic; focus, particularly contrast and new referents; and background.

§2.3.1 Topic

While the definition of topic given above (§1.3) is admittedly somewhat rudimentary, the notions given there serve as a starting point for investigating the pragmatics of our texts. The OH data show that the topic can change with every clause, but it may also persist over several clauses, even leap-frogging clauses in which it is not involved.

(20) Laws I §10 (A Vs. I 16'-19'); #1-#2

§[(takk)]u LÚ.ULULU-an kuiški ḡunikzi t=an ištainikzi nu apūn
[(šāk)]tāizzi  pēdi=  šši=  ma  LÚ.ULULU-an pāi  nu Ţ-ri=šši
{place.DL- his.DL -ma person.A he gives}
anniškizzi kuitmān=āš läźziatta mān=  aš läźziatta=ma
{when he recovers-ma }
nu=šše VI GĪN KŪ.BABBAR pā[(i)] LÚ.A.ZU=ya kuššan apāš=pat pāi §

‘§ If someone injures a person and does him harm, he shall take care of that (person). And in his place he shall provide a person (who) shall work in his household until he (the injured person) recovers. And when he recovers, (the injurer) shall pay him 6 shekels of silver, and to the doctor that same one (the injurer) shall pay the fee. §’
kuiški ‘someone’ is introduced in the first clause and treated as topic in the second, indicated by zero-anaphora. Its referent persists as topic for two more clauses, at which point the second LÚ.LÚLÚ-an ‘person’, having been introduced in the clause concerning provision of temporary labor, assumes the role of topic (works in the injured party’s house). This referent is also indicated by zero-anaphora. Next, the injured party becomes topic, indicated with the enclitic personal pronoun -ας, in the clauses about recovery. This referent has remained topical since its introduction; beginning with the second clause, the referent is expressed by accusative and dative/locative enclitic and accusative orthotonic personal pronouns: -ας, απός, -σι, -τι. Last, the injurer is recalled to serve as topic in the final two clauses regarding restitution and payment. This referent is indicated in the first with zero-anaphora and in the second with the emphatic аπας ‘that one’.

Another example, (21), is notable in that a new referent is abruptly introduced into the text:

(21) StBoT 8 Rs. IV 26-29; #34, #61

ta kaluluṣšmus gāpinīt ḫulāiemi
ṢA QATI-SUNU ug-a ḫabhal ḫarmī ṣinann-a ḫarmī
Gīṣharpa= ma l-anta LUGAL-ας GĪR=ṣi kita SAL.LUGAL-ṣ=a l-anta
{wood:woodpiles-ambil.pN king.G foot-his.DL lies}
kitta ...

‘Then I wind their fingers with the thread, (i.e. fingers) of their hand(s). And I hold a twig and I hold a figurine. But (as for) woodpiles, one lies at the king’s foot and one lies (at) the queen’s.’

Gīṣharpa ‘woodpiles’ is a referent that was previously inactive in the discourse. It is the only example in the clauses with -ma considered here in which a new, non-pronominal noun phrase stands in initial position and functions as topic. This makes its appearance mildly surprising, as topics are usually already active in the discourse. Once this new topic is established, the information follows: ‘(But woodpiles, one) lies at the king’s foot’.
Twenty of the 32 OH examples with -ma have topics and a 'topic-information' structure, although none is as elaborate as (20) above, or as striking as (21). With three of the remaining 12 it is not possible to determine the topic with certainty because of obscure grammar (#29.5) or incomplete predications (#9, #21). The other nine have no topic. Three of the nine are thetic clauses, where the proposition concerns the event itself rather than a referent (Lambrecht 1994:144), as in (22):

(22) StBoT 8 Rs. IV 23-25; #33

§ III NINDA ḫarṣaeš išpantuzzi=ya marnuan kitta
       mān        luggatta=ma        nu        LOÚ.ḪUB-za        ēgg= a
       {when dawns -ma }
   paiwani        tēuš=šta        šarā        tumeni ...

'Three thick breads and the marnuan libation lie (ready).
And when it dawns, a deaf man and I go, and we take them up.'

The other two examples are #28 and #30, both with mān lukatta=ma. Six of the nine examples without topic are presentational structures introducing referents into the discourse. These fall into two groups: the first contains three nominal sentences with a deictic pronoun as subject, as seen in (23) (cf. also #5 and #6).

(23) KBo 22.1 Vs. 7', 12'-13'; #20

§ mṬaš        LÛš        URU.Kūlupp a ...
VI        PA        ZĪD. DA        ZĪZ        ANA        NINDA.KASKAL        ḫaṣṣṣzi
§ ki=        ma        ḫenkuwaš=šaš        L        NINDAḪLA ...
   {this.N-ma  allotment.G-his.G  50 breads }

'S Tā, the chariot-fighter of Kuluppa ... has been taking [list of people]
(and) as provisions ... 6 half-measures of emmer meal.
§ But this is (part) of his allotment: 50 (loaves of) bread ... '

The second group has an initial locative expression with a new subject, as seen in (24) (cf. also #26 and #27 (where the subject is distantly accessible)).
§ [ug]=a arḥari nu ḥurtiyallaḥ ḥarmi
ḥurtiyal=m a /[AN.B]AR-aš nēpiš I-EN kita URUDU-ašš=a I-EN kita
{bowl.DL -ma iron.G heaven.N 1.N lies }

'§ But [I] am standing and I have a bowl. And in the bowl lies one heaven of [iron], and one of copper lies (therein).'

Thus about a third of the clear examples in the OH data here (9/29) have -ma but no topic. Occurrence of -ma, then, would appear not to be determined by the occurrence, or rather, existence of topic. Moreover -ma cannot mark every topic, otherwise it would occur with much higher frequency.

Since -ma has been associated with adversativity, I examined whether the particle might mark topic switch, but found a similar result: Although the two cooccur, topic switch does not determine where -ma occurs. Topic switch was defined as a topical referent either leaving the discourse or being replaced by a less topical referent. Seven of the 20 examples with topics exhibit topic switch (35%), and 13 exhibit no switch (65%).

Even with an expanded definition of switch, the results remain undramatic: Allowing the 9 examples without topics, where the switch is understood as occurring from topic to non-topic, 16 of 29 have switch (55.2%), and 13 of 29 have none (44.8%).

Justus (1976) uses examples such as (20) to argue that Old Hittite was a topic-prominent language rather than a subject-prominent language, following Li and Thompson (1976). But I disagree with her identification of some topics, and it seems to me that the Hittite data she adduces could be argued to show subject prominence in the categories she cites: noun–verb agreement, initial position in the clause, deletion of a referent, pronominalization, and reflexivization. Example (20) demonstrates very well that Hittite was quite tolerant of subject-deletion and -resumption. While interpretation from sense is necessary to understand the passage, it is only through identification of the subject of a
given verb (as the referent likely to perform that action) that we can identify what (i.e., who) is being talked about, that is, the topic. As is often the case in IE languages, the subject of a clause tends to be its topic as well.

In the 20 -ma-clauses with identifiable topics, topics correlate highly with subjects according to Justus’ criteria: noun–verb agreement (19/20), deletion of a referent (16/16), pronominalization (1/1), and initial position within the clause: one of the three topics/subjects that are expressed is initial (#34); the one subject pronoun that occurs is in Wackernagel’s Law position (#2); and the one remaining subject is the first NP in the clause, although not in initial position as the clause has a special focus structure (#23). (The only non-subject topic involves a non-relativized referent in a relative protasis.) Every topic switch coincides with a subject switch, and it is the same referent in each case.

There is only one case among the clauses with -ma in which topic functions independently of subject, but subjects often operate independently of topics, as the 6 presentational examples given above demonstrate. So while 20 of the 29 clear examples have topics, 26 have subjects. Subject switch occurs in 14 of the 29 examples under discussion (48.3%), as compared with 7 showing topic switch (24.1%), and in 17 of 29 (58.6%) with an expanded definition of subject switch, where switch includes subject to no subject. Again, 16 of these 17 were also found for topic switch. Although the rates of -ma’s occurrence with topic switch and with subject switch are about equal when expanded definitions of switch are used, -ma occurs twice as often in contexts with ‘positive’ subject switch (switch from one subject to another) as it does in contexts with ‘positive’ topic switch (switch from one topic to another).

This discussion falls short of proof, but Hittite appears to be subject-prominent, and the role of topic correlates very highly with the role of subject, similar to Chafe’s proposal for English (1994:82-84).

While the notion of subject appears to be more prominent than the notion of topic in Hittite grammatical structure, mere existence of a subject does not correlate with occurrence
of -ma, as was observed for topic. And subject switch by no means determines -ma's occurrence. In (20) neither example of -ma coincides with subject switch. Still, there is an almost even chance that a clause with -ma will also have subject switch (48.3%). -ma coincides with subject switch in (21). Another such example is (25):

(25) StBoT 8 Vs. II 31'-35'; #27

... [ u]gščašššan ŠuRINMEŠ-an šēr
III-Šu waḫnumi L[Ugal-šu] II]I-Šu SAL.LUGAL-ašša a III-Šu ERINMEŠ-an
all[appah]hānzi ERINMEŠ-ti=[maššan šēr GĪR ZABAR / kita
{troop.DL -ma PV above dagger bronze lies }
MUŠENḫāran[an] ERINMEŠ-an[an]=a LUGAL-aš SAL.LUGAL-ašša šēr=xšemet
waḫnumeni ... .

'... And I wave the troop over them
three times. The king thrice and the queen thrice spit on
the troop. But above [the troop] lies a bronze
dagger. We wave the eagle and the troop over the king and queen. ...'

In the clause with -ma the subject switches from the king and queen to the bronze dagger.

I have examined the occurrence of -ma with topics and topic switch and have found unimpressive results. I have obtained better results by examining the occurrence of -ma with subject switch, as noted above. Subjects are more prominently indicated in the grammar of Hittite and are easier to identify. Therefore, in the remainder of this study, I leave aside the notion of topic and instead attend to the occurrence of -ma with subjects, more particularly subject switch.

§2.3.2 Focus

Focus is the most informative idea in a piece of discourse. To identify the focus in a clause I looked for ideas (referents, events, states) that were contrasted or whose activation status was new or accessible. New ideas are assumed by an author to be inactive in the audience's consciousness when they occur, while accessible ideas are thought to be
semiactive. Contrast involves ideas opposed to other ideas. New or contrasted items have obvious potential for being highly informative in a text.\textsuperscript{17}

Typical examples showing foci with inactive and semiactive statuses in audience consciousness are these.

(26) Anitta A Rs. 45-48; #16, #48

... š-an tālah[hun] mān=as
appezziy=an a kištanziyat š-an dḪalmaš[uitti]
dŠiuš=miš paṟa paiš š-an išpandī
nakkit dāḥ[hun] pēdi= šši= ma ZĀ.AH.LI-an anife[nun] §
\{place.DL-its.DL -ma weeds.A I sowed \}

'... I left it. But when it / later suffered starvation, my god Šiu delivered it [to] the Thr[one] god. And in the night I took it by force. And in its place I so[wed] weeds. §'

(27) Anitta A Rs. 73-77; #17

§ mān × × [(laḥha pāun)]
nu LŪ URUPuruḫ[a]{nda katti=mi ḫenku-x\textsuperscript{17a}} ]
šu=mu I GİŞŠŪ.A AN.BAR I PA.GAM AN.BAR [(ḫengur udaš)]
\mān āppa=ma URUNēša [uwan(un)]
\{when back -ma Neša.AL I came \}
nu LŪ URUPuruḫanda katti=mmī [(pēḥutenun)]

'S When I [ ] went to battle, / the man of Puruḫanda with me offer[ ]. He brought me one iron throne and one iron scepter as gift(s). And when I [cam]e back to Neša, / I brought the man of Puruḫanda with me.'

In (26) ZĀ.AH.LI-an 'weeds' is first mentioned in the text and is thus new at this occurrence. The city Nesa is mentioned several times throughout the Anitta text. After going on campaign, Anitta returns to Nesa, and the referent is recalled from semiactive to active status, as seen in (27).

In the 32 clauses containing -ma, 30 were found to contain obvious foci. Of these 30, 14 contained an idea new to the discourse, and 16 were judged to have accessible foci. Twelve of the 30 foci served as -ma's host.\textsuperscript{18} The high correlation in occurrence of -ma

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and focus is unsurprising as most clauses with and without -ma will have a focus. However, -ma occurs in 17 examples where the foci are signalled in special ways. Seven clauses involve the introduction of new referents into the discourse, and ten examples express strong contrast.

§2.3.2.1 Contrast

Of the 17 clauses with -ma which emphasize elements in special ways, ten show strong contrast. Most examples occur in the Laws (8/10), which may be expected with the presentation of different cases and various conditions. Two contrasted expressions were new, and eight were accessible. All were among the 30 foci found in the data. The item hosting -ma was the contrast of focus in nine of the ten examples. The expressions occurred as verbs opposed semantically (#5.5) and through negation (#13, #31); nouns functioning as direct object (#10), goal (#7), and genitive specifier (#4); demonstrative pronouns functioning as subject (#5, #6, #20), and an adverb of direction (#3).

Typical examples of contrasted foci are the following. In (28) parna...kuelqa ‘someone’s property’ is opposed to ukturiaš ‘incineration dumps’. parna...kuelqa is also the new information.

(28) Laws I §44b (A Vs. II 34’-35’); #7

§ takku LÚ.ULÚ.LU-an kuiški parkunuzzi [(k)]uptarr= a uk[(túriat pēda)i] takkuw=sat= an parna= ma kuška pešiezzi
{if it.A PV house.AL -ma someone.G throws}
alu[ (wanzatar DI.KUD LUGAL)] §

‘§ If someone (ritually) purifies a person, he shall convey also the remnants to the incineration dumps.
But if he throws them away onto someone’s property (lit. house), (it is) sorcery, (and is) a case for the king. §’
(29) Laws I §24 (A Vs. I 54'-55'); #4

§[(ta)]kku IR-aš našma [(GEME)-aš ūwā’iššaš-šiššaš-an kuēl hašši wemi[(yazi)]]
LŪ-naš kuššan ITU.I.KAM XII GĪN KU.BABBAR pāī
SAL-š= a=ma kušān ITU.I.KAM VI GĪN K[Ū.BABBAR] pāī
{woman.G-a -ma wage.A month.l.DET 6 shekel silver he gives}

'§ If a male slave or a female slave runs away, at whose hearth his or her owner finds him
or her, / he (the harborer) shall pay a man’s wage (for) one month (of) 12 silver shekels,
but he shall pay a wōman’s wage (for) one month (of) 6 (six) s[ilver] shekels.§'

In (29) the contrasted idea SAL-š ‘(a) woman’s’ is accessible by direct association of the
quality of being female with the previously activated idea GEME-aš ‘female slave’.

Certain structures and lexical items tend to express contrastive focus when they
cooccur with -ma. There are nine obvious cases of parallel structure between clauses in the
-ma-oriented data, and in seven of these a clause with -ma follows and expresses
contrast.20 Example (29) demonstrates this, as well as the fact that often the vocabulary
used in contrasted clauses is nearly identical.

All three instances of demonstrative pronouns functioning as subject are contrasted,
and two occur in identical contexts (cf. #5). All five occurrences of takku ‘if’ in a clause
with -ma express contrast, and three are in parallel or nearly parallel environments, as in
(30) and (31).21 In (30) taranzi ‘say (so)’ is opposed to natta taranzi ‘not say (so)’. In
(31) dividing kulei-land is opposed to buying regular land.

(30) StBoT 8 Rs. IV 11-13; #31-#32, #59

§ [m]ān LUGAL-uš SAL.LUGAL-ašš-a taranzi ta DUMUŠ-an parna paimei
[takk]u natta=ma taranzi nu natta paimi karū= ma
{if not -ma they say} {earlier -ma } [SĀ?] É DUMUŠ-an paigat kinu=sa natta kuwpikki paun §
{in house children.G I went }

'§ [Wh]en the king and queen say (so), I go to the house of the children.
But [i]f they do not say (so), then I do not go. But previously,
I used to go [in?] the house of the children, but now I have not gone at all. §'
(31) Laws I §47b (A Vs. II 45’-48’); #10

§ takku LÚ GIŠTÜKUL-āš A.ŠÂHILA-ŠU ḫūmandan kuiški wāši luzzi [(karp)]jezzi
takku A.ŠÂHILA-n=x a mekkī wāši luzzi natta karpiezzi
takku A.ŠÂHILA kuleī=ma ārki našma LŪMEŠ URU-LIM pianzi
{if land idle? -ma divides }
ta luzzi karpiezzi §

‘§ If someone buys all the land of a GIŠTÜKUL man, he shall render the luzzi service. But if he buys (only) the large(r part of the) land, he shall not render the luzzi service. But if he subdivides unused land or the men of the city give (him land), he shall render the luzzi service. §’

It seems that takku X=ma ‘but if X’ is a formula for posing an alternative condition to one or more already expressed. Such is the case in four of five examples where the formula occurs (cf. again (30) and (31) above; the other two examples are #5.5 and #13). The fifth example is (28) above, in which the takku X=ma clause is contrasted with the apodosis of the preceding condition. takku natta=ma ‘but if not’ occurs in two (#13 and (30)) of the three instances when a verb is contrasted. The third case is lexically contrasted: mimmai ‘refuses’, instead of natta tezzi ‘does not say’ (#5.5). For more findings about conditional clauses with -ma in the Laws, see §2.5.

Parallel structure allows more than one corresponding element to be contrasted. Compare again (29) above, where the genitive specifiers a man’s and a woman’s are opposed, as well the wages themselves, 12 and 6 shekels. Compare also (32), in which both subject (ki ‘this’) and predicate noun (šahhan=met ‘my šahhan obligation’) are contrasted with the subject (ki) and predicate noun (GIŠTÜKUL-li=met ‘GIŠTÜKUL-li obligation’) of the previous clause.
§1 If a GIST[UKUL] man [dies (or disappears)] and an ILKU man is designated, and the ILKU man says, "This is my GISTUKUL-[li] (obligation), but this (other) is my sahhan (obligation)," and he registers the field(s) of the GISTUKUL man, /he shall both hold the GISTUKUL-li and perform the sahhan. ..."23

Contrast in parallel structures provides a very interesting example in which the focus of contrast appears to be an entire clause.

§2 If a male slave runs away and he goes to the land of Luwiya, whoever brings him back, (the owner) shall give him 6 silver shekels. If a male slave runs away and he goes into an enemy /country, whoever (sma) brings him back, that same one shall take him for himself. § 24

The structures are rather complicated in that the protases consist of coordinated clauses and the apodoses consist of relative structures. There are two points of contrast, the land to which the slave flees (the country of Luwiya vs. the country of an enemy), and the reward which the person returning the slave will receive (money vs. the slave himself). Notice that -ma occurs in a clause with no contrasted referents. It occurs in the relative presentation of the second apodosis, which, apart from -ma, is identical to the corresponding presentation in the apodosis of the first case, kuiš=an appa uwatezzi ‘whoever brings him back’. This clause has a different subject, a different direction, and a different action from the preceding clause, and so at a local level is an appropriate environment for -ma. -ma is nonetheless helping to mark the contrast between the two cases. The particle does not signal contrast
between both cases in their entirety, otherwise we would expect to see it in the protasis of the second case. Rather, it aids in signaling the contrast between the reward clauses of the two cases. This signaling is effected over some distance, as often occurs in conditional protases, but this follows more from the repeated structure of the text itself than it does from any property of -ma, which simply signals a difference.

§2.3.2.2 New Referents

It is possible to identify special syntax devoted to focusing a new referent. Luraghi has suggested that the dominant order of constituents in the Old Hittite clause is the following:

(34) # Advtemp Advloc S DO/Compl IO/Compl Advmanner/purp/instr V #

(Luraghi 1990:45)

There are three examples with -ma in the OH data considered here which deviate from this order. It appears that focussed new entities may be signaled by being placed late in their clauses. Another four examples have new referents late in the clause, although they adhere to the proposed dominant order.

Most new referents in the Ritual for the Royal Couple appear as direct objects marked with the accusative, or as oblique complements. New referents that were subjects were in the minority: 22 of 101 new referents were subjects, as compared with 79 non-subject new referents. Fourteen of these 22 new subjects stood in initial position, and one other occurred in modified initial position. Two new subjects appeared late in their clauses. In one example the direct object (SAL.LUGAL-an=za ‘and the queen’) apparently stood in initial position, contrasting with the direct object LUGAL-un ‘king’ in the previous clause (see §2.4.1 (58)). In the other example the new subject occurred in a nominal sentence with a topicalized predicate adjective. The last 5 examples had initial locative expressions, with new subjects appearing later in the clause.
Whereas -ma occurred in only 1 of the 15 examples with initial new subject ((21), discussed above, §2.3.1), it occurred in 3 of the 5 examples with initial locative expressions and non-initial new subjects (and -a occurred in a fourth example, #56, which occurs in the following example; see also §2.4.2.3). Compare (35).

(35) StBoT 8 Vs. I 27'-32'; #26, #56

... DUMU.É.GAL-iš / Ḥant[aš]epan LUGAL-i kišarī dāī
teššumm[e]nn=a päi SAL.LUGAL=ya Q[A] TAMMA päi
NINDAšarrui= ma=ššan ERINMES-as ėšzi
{bread:šarruwa.DL -ma PV troop.N sits}
§ šer=šemet=a [ G]ÍR ZABAR kitta apatt=a[a]n? anda / pētumeni ...

'... The page / sets a Ḥantasēpa divinity in the king's hand / and gives (him) a cup. To the queen he gives likewise. / But on a šarruwa bread sits a troop.
§ And over them lies a bronze dagger. And (all) that we carry in. ...

The other examples are (24) (in §2.3.1) and #21. It is possible to interpret the syntax of these examples as focussing the new subject, since most new subjects occur in initial (or modified initial) position and since only 6 of the 15 clauses with these new subjects have location specified at all. One may adduce (25) here (see §2.3.1), also with an initial locative expression hosting -ma, the difference being that the subject is not new, but accessible. However, the GÍR ‘dagger’ was introduced approximately one entire column before (in the text preserved), so its occurrence in this structure, apparently with a referent-introducing function, is not inappropriate.

This LOC=ma-NP-V structure seems to favor introduction of new referents. In another three examples, new direct objects are introduced in clauses with such syntax, making 6 out of 8 occurrences of the structure which introduce new referents. Two of the three new direct objects were presented in §2.3.1 above, LÚ.ULULU-an ‘person’ in (20), and ZÂ.AH.LI-an ‘weeds’ in (26), both in clauses introduced by pedi=šši=ma ‘and in his/its place’. The third new direct object is ke ‘these (words)’, given in (37) below in §2.3.3. These examples adhere to Luraghi’s dominant order, as do the examples with new
subjects. The latter likely register as special because most new subjects occur clause-initially.

Special syntax is also associated with focussing new direct object nouns, and -ma occurs here, too. The examples are the much discussed clauses beginning with the verbs ḥarkanzi, wessanda, and tarueni:

(36) StBoT 8 Vs. I 21’-28’; #23-#25, #55

§ apūš ḥantezumni tēḥhi weš= a namma anda
[p]aiwani II ḥantašepuš ḥarwani GIŠ-aš ḥarkanzi= ma= an
dḤantašepuš anduš= aš ḥaršār= a GIŠ SUKURHI-A= ya
šākuwa= šmet išḫaškanta wessanda= ma
išḫarwantus TŪGHIA-uš putaliyantešš=a
§ anda= kan ḫalinaš teššummuš tarlipit šuwamuš
II-ki, 1 pētumini tarueni= ma= at ēštar DUMU.É.GAL-iš
dḤantašepuš LUGAL-i kisari dai

‘§ I lay those in the forecourt. And we go back in. / We have two Ḥantašepa divinities of wood. But the Ḥantašepa divinities / have both human heads and lances. / Their eyes (are) bloodied. And they are wearing blood-red garments and (are) girded.
§ Twice we bring in clay cups / full of tarlipa liquid. And we call it blood. The page / sets a Ḥantašepa divinity in the king’s hand.’

These three clauses show word order which varies from the dominant order suggested by Luraghi. Specifically, the difference is that in each clause the tensed verb occurs in initial position. This has the effect of emphasizing constituents in each clause, especially direct objects and the fronted verbs themselves. Holland (1980:41) has identified six categories of clause with verb-fronting in Hittite, four of which often occur with -ma: clauses with subject switch, those showing strong contrast with a preceding verb, those with contrasting or complementary pairs of verbs, and those having double accusatives and certain verbs of naming and calling.

The three examples in (36), which were among the data that Holland analyzed, can be assigned to one or more of these verb-fronting categories. The clause with ḥarkanzi ‘they have (or hold)’ switches subject, and this is emphasized by the occurrence of the full
noun subject Ḥantašepš. Fronting harkanzi opposes the act of having/holding by the Ḥantašepa divinities to the having/holding by the 1.pl. subject of the previous clause. It also causes the direct objects, andushaš haršar-ša GISŠUKURḪLA-ya ‘human heads and lances’, to occur clause-finally, and their occurrence in this non-standard position signals their importance.

In the next instance, fronting wessanda ‘they wear’ opposes the Ḥantašepas’ act of wearing to their having/holding (although I do not perceive the contrast strongly enough to translate -ma with ‘but’). Subject switch occurs here as well. Again the focussed new direct object is placed clause-finally, and this emphasizes the significance of the blood-red garments.

The last instance of a fronted verb exemplifies another of Holland’s categories, double accusatives with verbs of naming, here tar- ‘name, call’. Given the highly emphasized nature of the preceding two examples, the unusual syntax here should also connote emphasis and importance, but it is not clear to me whether the naming of blood is, for example, a transubstantiational proclamation or simply an announcement. Again the new direct object ešhar ‘blood’ is located clause-finally, marking its significance. The naming also brings to a close the discussion of blood-related referents, after which the ritual activities proceed. Verb-fronting at such a pivotal point, marking a culmination in a series of actions, is another of Holland’s categories.

These claims reflect an interpretation of the passage very different from that of Luraghi (and presumably Starke), who sees backgrounded information in the descriptions of the Ḥantašepa divinities and in the treatment of the tarlipa (1990:51-52; see §2.6). However, it seems ill-considered to conclude that descriptions of blood-red items and activities introducing blood in a ritual context are not in fact central to the proceedings.

In summary, clauses with -ma can contain contrastive or new information, that is, focussed information. -ma nearly always attaches to the focus of contrast, and when -ma occurs in clauses with parallel structure and repeated vocabulary or with certain lexical
items (*ki, takku*), the clauses tend to express contrast. -*ma* also tends to occur in clauses in which a new referent is focussed by being located late in its clause. Although -*ma* occurs in these special structures associated with emphasizing focussed information, outside these there is no particular reason to associate the particle with the notion of focus.

§2.3.3 Orientation

-*ma* often occurs with or within expressions which modify or specify the conditions within which the action of the text takes place, the orientation or setting. These expressions include adverbials and oblique nouns, as well as temporal subordinate clauses.

Twenty of the 32 examples with -*ma* contained orienting expressions. Nineteen settings were temporal (eight clauses with *mān* ‘when’ and one with an adverb), and 11 settings were locational (seven oblique nouns and four adverbs). Three of the locational orientations were metaphorical: *pedišši* ‘in his place’ (#1), which concerns the injured party’s role more than his location; and *anda>mā* ‘in addition’ (#29.5 and likely #21). In all 12 clauses without *mān*, -*ma* cliticizes to the backgrounding specifier. Some examples are the following, with adverbials:

(37) StBoT 8 Rs. III 3-6; #29

§ ta namma MUŠEN ḫāranan nēpiša tamahhi
āppan-anda>mā>sšē kē mēmahhi natta="an ūk
{after-in -*ma* it.DL these.A I say }
tamaḫḫuNI LUGAL-š=an SAL.LUGAL-š=sa tamaš ...

‘§ Then I release the eagle into heaven
and after(wards) I say these (words) to it: “Not I have released it, the king and queen have released it. ...”’
\[(38)\] StBoT 8 Rs. IV 11-13; #31-#32, #59

§ [m]ān LUGAL-uš SALLUGAL-ašša taranzi ta DUMU\(^{MEŠ}\)-an para paimi

\[takk\]u nattā=ma taranzi nu nattā paimi karū=ma

\{if not -ma they say\} \{earlier-ma\}

\[ŠĀ\] E DUMU\(^{MEŠ}\)-an paišgaḥat kinun=a nattā kuwāpikki pāun §

\{in house children.G I went\}

'§ [W]hen the king and queen say (so), I go to the house of the children.
But [i]f they do not say (so), then I do not go. But previously,
I used to go [in?] the house of the children, but now I have not gone at all. §'

In (37) \textit{appan-anda} indicates the direction towards which the speaking is done. In (38) \textit{karu} signals a change in the temporal setting for going to the house of children from a time that is hypothetical but concurrent with the composition of the text to a time prior to composition. It may seem that \textit{-ma} and \textit{-a} function correlatively here (see §2.4.2 for functions of \textit{-a}), each signaling a change by attaching to a temporal adverb and thus presenting a structure of balanced contrast. However, I interpret the \textit{-ma} as relating its clause to the not-going of the preceding clause (see also §5.4 under usage c.), and I believe the \textit{-a} relates its clause to the prior going of the clause preceding it. There are 10 instances of \textit{karu-kinun=a} pairs in the Laws, and none of these examples of \textit{karu} host \textit{-ma}. The clauses with \textit{karu} begin apodoses, and they thus occur at syntactic and pragmatic breaks where asyndesis is more common than overt conjunction (Hoffner 1997:11). In a sense, then, there is no preceding situation relative to which \textit{-ma} could indicate a change. That is not the case in (38).

Examples of \textit{-ma} with orientation specifiers in the form of oblique nouns are these:
... DUMU.É.GAL-ıš / dHan[aš]epan LUGAL-ı kišarī dāi teššumm[e]nn=a pāi SAL.LUGAL=ya Q[A]TAMMA pāi
NINDAšarrui= maššan ERİNMEŠ-az ēšzi §
{bread:šarruwa.DL -ma PV troop.N sits}

'... The page / sets a Ḥantašepa divinity in the king's hand / and gives (him) a cup. To the
queen he gives likewise. / But on a šarruwa bread sits a troop. §'

(40) Laws I §10 (A Vs. I 16'-18'); #1

§[(tak)]u LÚ.ULUL-an kuiški ḫunikzi t=an ištarnikzi nu apūn
[(šak)]tāizzī pedi= šši= ma LÚ.ULUL-an pāi nu É-rišši / anniškizzī
{place.DL- his.DL -ma person.A he gives}

'§ If someone injures a person and does him harm, he shall take care of / that (person).
And in his place he shall provide a person (who) shall work / in his household ... '

In (39) the setting changes to 'above the bread' from the dealings around the king and
queen. In (40) pedi=šši specifies the domain into which the substitute is provided, the
work role of the injured party. Temporal clauses are exemplified with the following:

(41) Laws I §10 (A Vs. I 17'-19'); #2

... nu É-rišši / anniškizzī kutrmān=āš lāzziatta mān= āš lazziatta=ma
{when he recovers- ma }
nuššē VI GIN KÚ.BABBAR pā[(i)] LÚ.A.ZU=ya kuššan apāš=pat pāi §

'... (who) shall work / in his household until he (the injured person) recovers. And when
he recovers, / (the injurer) shall pay him 6 shekels of silver, and to the doctor that same
one (the injurer) shall pay the fee. §'

(42) StBoT 8 Rs. IV 23-25; #33

§ III NINDA ḫaršaeš ispantuzzi=ya marnuan kitta
mān luggatta=ma nu LÚ.ḪUB-za ugg=a / pawi
{when dawns - ma }

'§ Three thick breads and the marnuan libation lie (ready).
But when it dawns, a deaf man and I / go ... '
Clauses with *mān* (*X* = *ma*) overtly establish the time in the clause as the time for the action of the discourse.

We see then that the clauses with *-ma* can indicate or contain establishment of a new background. Eight of the 20 examples are clauses with *mān*, clauses whose purpose it is to modify the temporal orientation of the text. The proposition expressed in these clauses serves as background for following events. But in the remaining examples it is really only the orientation-establishing adverbial or oblique noun that functions as background. Ten examples with a backgrounding specifier contain foregrounded new or accessible information, cf. (39)-(41) above. The remaining two examples involve backgrounding specifiers which are themselves foregrounded through contrast. One is (28), given above in §2.3.2.1. The other is (43); here the source for providing *luzzi* service, instead of specifying a domain for activity in the clause, is opposed to another source, the partial landholdings.

(43) Laws I §46 (A Vs. II 38'-40'); #9

§ takku URU-ri A.ŠÂHLa-an iwāru kuiški ĥarzi takku=šše A.ŠÂH[(LA d apian)za] piyanza luzzi karpiezzi takku=šše A.ŠÂHLa-šza te[(pauieš pi)yanteš] luzzi natta karpiezzi İSTU Ė ABI- ŠU=ma ka[ri pia n]i

{from house father- his -ma they² render }

’s§ If in a city someone holds land as an inheritance gift, if all the land is given to him, he shall render the *luzzi* service. But if the small(er portion of the) fields (is) given to him, / he shall not render the *luzzi* service, but [they shall] render it from the house of his father.’²⁸

So while *-ma* occurs with expressions that change the orientation for subsequent events described in subsequent clauses, it also occurs with expressions that change the orientation for the events already in the same clause.

The occurrence of *-ma* in clauses that modify orientation increases when we include conditional protases. The condition set forth in a protasis could be viewed as the new
orientation of the discourse. This would bring the total of setting-changing -ma's to 24 out of 32.

-ma occurred fairly frequently in clause-initial expressions of setting in general. The OH corpus analyzed here included 49 securely interpretable expressions of orientation which occurred in clause-initial position, or in second position with mān, takku, or kuiš in initial position. Expressions in modified initial position were excluded. -ma occurred in 21 of the 49 (42.9%) clause-initial examples of setting change (28/49, or 57.1%, including examples with -a). Such a frequency is robust when one considers that -ma occurs in only 4.2% of clauses in general (8.8% with -a).

In sum, -ma often occurs in clauses which adjust the temporal orientation for subsequent states and events. The particle also occurs in clauses that have an initial expression that adjusts the temporal or spatial orientation for states and events in the same (and subsequent) clause(s).

§2.3.4 Summary

Previous sections demonstrated that -ma occurs in clauses with specially focussed (new or contrasted) ideas (53% of -ma-clauses). -ma also occurs in clauses with subject switch (59% of -ma-clauses). And just above, it was shown that -ma occurs in clauses that adjust or contain an adjustment to the setting of the text (63-75% of -ma-clauses). The discussion in each section has centered on one functional category and has not made clear what these percentages imply, namely that a given clause with -ma will often exhibit more than one of the functional notions at one time. We see simultaneous membership in more than one category in examples (44) and (45):
§[(takk)]u ÎR-aš É-er lukkezzi ʾiššāš=šiš=*((a še)rši)t? šaminzi
[(ŠA 1)]R KA×KAK-ŠU UZNA-ŠU kukku[(raškanzi) n(=an E)]GIR-pa išši=šši
[(pian)]zi takku natta=ma šamin[(zi) n(u apûn=pat šuwi)]zzi §
{ if not -ma he compensates}

‘§ If a male slave sets fire to a house, and his owner makes compensation for [hi]m, they shall cut (off?) the slave’s nose and ears [and] give him back to his owner.
But if (the owner) does not make compensation, he shall forfeit that very (slave). §’

In example (44) the verb šaminzi ‘makes compensation’ in the conditional protasis with -ma is contrasted through (repetition and) negation with the verb šaminzi in the first protasis of the law. There is also a change in subject in the clause with -ma, from generic 3.pl. to 3.sg. (45) is an example with the special referent-introducing syntax and so exhibits a clause-initial expression of orientation, ḫurtiyali ‘in the vessel’, a referent repeated from the preceding clause; introduction of the new subject nēpiš ‘heaven’; and, obviously, subject switch.

(45) StBoT 8 Vs. I 7’-8’; #22

§ [ug]=a arḫari nu ḫurtiyallan ḫarni
 ḫurtiyali= ma / [AN.B]AR-aš nēpiš I-EN kitta URUDU-ašš=a I-EN kitta
{bowl.DL -ma iron.G heaven.N 1.N lies }

‘§ But [I] am standing and I have a bowl. And in the bowl lies one heaven of [ir]on, and one of copper lies (therein).’

The majority of clauses with -ma contain more than one of these functional notions (21/32). Of the 11 clauses with one of the notions, 5 also introduce new referents into the text (without special syntax), and the remaining 6 exhibit prototypical contrast or orientation adjustment.30 The environments in which -ma occurs, then, abound with the differences which it is -ma’s function to signal.
§2.4 -ma and the Other Enclitic Conjunctions

It has been known since the beginning of Hittitological studies that the enclitic coordinative particle meaning 'and' had two forms, -a after consonants, and -ya after vowels and logograms. It was also known that occasionally -al-ya meant 'but', and that -a was sometimes not preceded by gemination of the consonant (e.g., Friedrich 1952-66:17, 1960:154f. §§302-305). Otten and Souček then noticed a distributional difference in -a's occurrence: instances of -a attached to orthotonic clause-initial personal pronouns were written without gemination and construed as adversative, and instances of -a attached to orthotonic clause-internal personal pronouns appeared with gemination and were coordinated (1969:68f.). Houwink ten Cate's (1973) research showed a functional difference between the two forms along the lines suggested by Otten and Souček which was evident in Old Hittite but which fell out of common use in Middle and Neo-Hittite. Houwink ten Cate considered adversative -a to be an emphatic clitic, rather than a conjunction. That there were two particles in Hittite, -a and -al-ya, is now generally recognized (e.g., Puhvel 1984, Carruba 1985, Garrett 1990, Luraghi 1990; Kammenhuber reports the then recent findings without overtly taking a position in Friedrich and Kammenhuber 1975:43). Adding to this interesting situation, Melchert observed that -a and -ma seem to be in complementary distribution in Old Hittite, save for some conditioned exceptions (see note 2). He has suggested, although very briefly, that -a and -ma had the same adversative function (Melchert 1984a:30 with fn.9, p.32 fn.13; 1985:202). If this is accepted, then we have an understanding of -a which is nearly opposite to what it was 30 years ago.

It is important to determine the meaning and function of a particle like -ma not just by studying the contexts in which the conjunction itself occurs, but also by finding out how it works within the system of conjunctions. Some idea of the ways in which -ma contrasts with other conjunctions, especially the enclitic conjunctions, would help define and delimit

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its function. In order to help understand the use of -ma, as well as evaluate Melchert's claim, I look at conjunctive -a and -al-ya.

§2.4.1 -a vs. -al-ya

I collected samples of -a and -al-ya from the corpus of OH texts I used for -ma. Attestations were collected in the same manner as before. However, Sumerograms were excluded from consideration because their forms are frequently ambiguous on precisely the point in which we are interested, gemination vs. non-gemination of the consonant preceding a word-final <a>. For example, in SAL.LUGAL-ša 'queen + [-a or -al-ya]' it is unclear whether the <š> represents the only consonant or the second of two. Once results concerning gemination are obtained for clear forms, we might then attempt identification of these ambiguous forms.

-al-ya occurs clause-internally and in Wackernagel's Law position and appears to conjoin both words and clauses; -a occurs in Wackernagel's Law position and thus appears to me always to link clauses, contrary to Houwink ten Cate's view of the particle (1973). We are thus interested in seeing the distribution of the two types of function, clause conjunction and word conjunction, with regard to the two graphic representations of the final consonant preceding -a. The following table reports my findings. Given the functional equivalence of geminating -a and -ya, I include the tallies for forms with -ya. The clauses in conjoined correlative structures were considered as a separate type because of their mutual dependence.
(46)  

**Occurrences of -a and -a/-ya after Syllabic Writing**

<table>
<thead>
<tr>
<th>Text</th>
<th>Word Conjunction</th>
<th>Clause Conjunction</th>
<th>Correlative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( C=\alpha )</td>
<td>( CC=\alpha )</td>
<td>( O!!V=\alpha/-y\alpha )</td>
</tr>
<tr>
<td>StBoT 8</td>
<td>(2)²</td>
<td>35</td>
<td>2</td>
</tr>
<tr>
<td>KBo 20.10+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Anitta</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Zalpa</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Laws</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>KBo 22.1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>(2)²</td>
<td>38</td>
<td>3</td>
</tr>
</tbody>
</table>

a) Columns headed by question marks contain the tallies for unclear attestations.  
b) Includes 1 conjunct of a correlative pair (in both copies) and 1 conjoined word (in one of 2 copies—the other copy has a geminate).  
c) Includes 1 clause with -a/-ya use.  
d) Includes 10 instances of kinun\(s\)a.  
e) Includes 23 instances of parna\(s\)šše\(s\)=a šuwa\(s\)izz\(s\).  
See below for discussions of items in b)-e).

Gemination of the consonant clearly predominates in word conjunction and confirms the occurrence of -a/-ya in that function. The two word-joining, non-geminating forms referred to in the first column of the table are unusual. One occurs in a much discussed correlative construction, which would be expected to contain -a/-ya and have the form \( X-(y)a\ Y-(y)a \) 'both X and Y' (Friedrich 1960:155 §304b), as in haršarr\(s\)a GišŠUKUR\(h\)\(I\)\(A\)\(s\)=ya ‘both heads and lances’ (cf. (36)).

(47) StBoT 8 Rs. IV 30-32; (follows #33-34)

> ta ḥāḥḥallit / gāpinān dāḥhe kalulupi\(s\)mi ḥulalian kuit\(s\)a anda  
> ḥalki\(y\)a\(s\)=a ZīZ\(h\)\(I\)\(A\)-\(š\)\(s\)=a ḥaršarr\(s\)a nu apatt\(s\)=a GiR-Š\(U\)\(N\)U kitta §  
> {barley.G and emmer.G and heads.N and}

'And with the twig I take the thread, \textit{what(ever)} is wound around their finger(s), \textit{and} the "heads" of both barley \textit{and} emmer, also that lies at their foot. §'

ḥalkiya\(s\)\(a\)=a clearly occurs as the first member in the correlative ‘of both barley and emmer’ but is written without gemination. On this point the status of kuit\(s\)a is questionable. An acceptable sense can be rendered with either the indefinite relative pronoun kuit\(s\)a

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'what(ever)' or the pronoun *kuit=a* 'everything', which would be written here without gemination. Another important question for its interpretation is whether it is anaphoric or cataphoric. Most scholars accept it as anaphoric, but if it is cataphoric, it is resumed nicely by *apatt=a* 'also that' in 1.32. Questions about its syntax also exist, for example, whether or not it is clause-initial. This follows from the other big question concerning this passage, the clausal affiliation of *hulalian* 'wound'. Most scholars accept *kalulupi=šmi hulalian kuit=a anda* as a clause because it renders an acceptable sense, but I have seen no comment on its extremely unusual syntax, particularly the clause-second position of *hulalian*, which ordinarily would occur clause-finally, or clause-initially when emphasized. A definitive treatment of the passage has yet to appear (cf. Otten and Souček 1969:39; Rosenkranz 1973:322; Starke 1977:52, 178-9).

Rosenkranz (ibid.) suggests that expected geminate writings appear as single-consonant writings because of limitations of space on the tablet. Lack of space is a possible factor for the non-geminate spellings in this passage in one copy of the text (KBo 17.3), but the duplicate at KBo 17.1 Rs. IV 33 has *[ḥalki]yaš=ša ZIZ[HI]-ašš=ša ḫaršā[*]rrš=a*. The space obviously allowed geminate writing of -a/-ya, but after the Sumerogram instead of after phonetically written *ḥalkiša*.

It is not clear that space constraints precipitated the other single-consonant word-joining example, which also occurs in KBo 17.3:

(48) KBo 17.3 Vs. II 8' (=StBoT 8 Vs. II 51)

```
[(mān MUŠENhārana)]n ERÎNMES-.tan=s III-iš waḥnūm[i
| when bird:eagle.A troop.A and thrice I wave |
```

'When I wave the eagle and the troop thrice'

KBo 17.1 Vs. II 37' reads ERÎNMES-.ann=s 'and the troop’, with the usual gemination. Indicating word coordination with geminate consonants was clearly preferred, but this rule could apparently be suspended on occasion; the context should have clarified any confusion.
from such spellings (so Rosenkranz implies, p.322). There is also at least one case of non-geminating -al-ya clause coordination (discussed below).

In (46) differentiation of -a and -al-ya in clause conjunction at first seems less clear since about half of the total involve -al-ya. However, examination reveals that in all examples of clause conjunction with -al-ya, there is a connection between the two clauses that ranges from extremely close, with the same actors, objects, and actions (as noted by Rosenkranz, p.323), to fairly close, with, for example, the same actor performing parts of a larger action. Nine examples with -al-ya, all from the Ritual for the Royal Couple, deal with situations where there is an extremely close connection between two ideas in the clauses—objects of the same type are handled, actions of the same type are performed, two closely connected participants, the king and queen, are treated similarly. Examples showing this:

(49) StBoT 8 Rs. IV 19-20

... ḫalkiaš ḫaršār išhiyanda / ZĪẔī.L-ašš a ḫaršār išhiyanda ...


'... The “heads” of barley (are) bound and the “heads” of emmer (are) bound. ... '

We saw above in (47) that barley and emmer are used together. Throughout the ritual, the king and queen act together and are ‘processed’ together:

(50) StBoT 8 Vs. I 36'; (at #57)

LUGAL-uš ERĪNMEŠ-an III-Š[U alla]ppahhi SAL.LUGAL-ašš a III-ŠU all[app]ahhi

{king.N troop.A thrice he spits queen.N and thrice she spits }

'The king [sp]its (on) the troop thric[e], and the queen sp[its] thrice.'
(51) StBoT 8 Rs. IV 26-29; (at #34, #61)

\[
\begin{align*}
\text{StBoT} & \quad 8 \quad \text{Rs. IV} \quad 26-29; \quad (\text{at} \ #34, \ #61) \\
\text{ta kalulupu} & \quad \sigma^5=\text{šmuš gäpinit ḫulāliemi} \\
\text{ŠA QATI-ŠUNU} & \quad \text{ug}=\text{a ḫâphalt ḫarmi šinann= a ḫarmi} \\
& \quad \{\text{figurine.A and I hold}\} \\
\text{cīḵarpa=} & \quad \text{ma I-anta LUGAL-š= a GIR^ši kita} \text{A SAL.LUGAL-š=a I-anta} \\
& \quad \{\text{wood:woodpiles-} \text{ma 1.pN king.G foot-his.DL lies}\} \\
\text{kitta ...} & \\
\end{align*}
\]

'Then I wind their fingers with the thread, (i.e. fingers) of their hand(s). And I hold a twig and I hold a figurine. But woodpiles, one lies at the king’s foot and one lies (at) the queen’s. ...'

We see in the actions following the introduction of the ḫâphalt and the figure that they are used in close conjunction in the ceremony. For the other examples, see StBoT 8 Vs. I 5’, I 8’ (cf. (45)), I 29’ (cf. between #25 and #26), II 26, Rs. III 26, and III 31.

The one case of non-geminating clause coordination, c) in example (46), occurs in a situation with closely connected participants and actions, where we would expect -a/-ya. We probably in fact have -a/-ya written without gemination. Rosenkranz attributes this spelling to space constraints (pp.323-324):

(52) StBoT 8 Rs. III 30-33 (=StBoT 25.4 Rs. III 30-32, Neu 1980:16)

\[
\begin{align*}
\text{I-EN zuwāluwal / ANA LUGAL } & \quad \text{tēḥhe} \quad \text{tiššummin= a ḫalinaš pēḥhe} \\
& \quad \{\text{cup.A and clay.G I give}\} \\
\text{Ü I-EN z[uwāluwal] ANA SAL.LUGAL } & \quad \text{tēḥhe} \quad \text{tiššummin= a } \text{šše / pēḥhe } \\
& \quad \{\text{cup.A and her.DL I give}\} \\
\text{'}[\text{I place}] \text{ one zuwāluwal by the king, and I give (him) a cup of clay. And I p[lace] one zuwāluwal by the queen, and I give her a cup.}
\end{align*}
\]

Notice the spelling with gemination in the line above the spelling without gemination. We are again reminded that the extremely consistent orthographic convention of geminating the consonant preceding -a/-ya is suspendable on rare occasions. Here limited space as a motivation for non-geminate writing is more plausible.
Rosenkranz describes this use of *-al-ya* in clauses with closely connected ideas as word-conjoining: a word can be related to a 'parallel word' in the preceding clause (1973:323-324). This implicitly denies any clause-conjunctive function. It might be an adequate description of the situation if we had only examples like those just above, but there is a range in the closeness of the connection between the two clauses:

First, in approximate order of close to less close, we see the same subject performing actions that, while part of the same overall process, are not identical, as they are above. We see this often in the Laws. For example, 23 of the 44 clear occurrences of clause-conjoining *-al-ya* are in the formula *parnaššē=a šuwaizzi*, the precise meaning of which has not yet been determined.32 This formula always occurs as the second (or later) clause of the reward section of a law; in the previous clause a party is directed to give a sum of money (or equivalent).

(53) Laws I §5 (A Vs. 1 3'-6')

§ [t]akku LUDAM.GAR kuiški kuënzi I ME MA.NA KÛ.BABBAR päi *parnaššē=ea šuwaizzi*
takku INA KUR Luwiya našma INA KUR URUPalâ I ME MA.NA KÛ.BABBAR päi āššu=$šēt=a šarnikzi našma INA KUR URUĤatti / nu=$zza unattallan=pat arnuzzi §

'§ If someone kills a merchant, he shall pay 100 minas of silver, and he shall look to (his own) house (to provide it) for him (his estate).
If (it is) in the land of Luwiya or in the land of Pala, he shall pay 100 minas of silver, and he shall make compensation for his (the merchant's) goods; or (if it is) in the land of Ĥatti, / he shall deliver the very (body of the) merchant. §33

(53) includes another example of related, although not identical, action, namely āššu=$šēt=a šarnikzi 'and he shall make compensation for his goods', which also follows a clause specifying the amount to be paid. A similar example also occurs in Law §76.

Also from the Laws we have an example concerning land ownership:
(54) Laws I §41 (A Vs. II 23'-25'); #6

§ takku LÚ ILKI žarakzi ŽU LÚ GIŠTUKUL titianza LÚ GIŠTUKUL tætti
ki GIŠTUKUL-li=sùmet ki=ma šahha<n>=met nu A.ŠĂHILA ŠA LÚ ILKI anda šittariez[[(i)]
GIŠTUKUL-li žarzi šahha{n}= a išsai ...
{šahha{n} A and performs }

'S If an ILKU man dies (or disappears) and a GIŠTUKUL man is designated, and the
GIŠTUKUL man says, / "This is my GIŠTUKUL-li (obligation), but this (other) is my
šahha (obligation),," and he registers the field(s) of the ILKU man, / he shall hold the
GIŠTUKUL-li and perform the šahha ... '23

That the arrangement for holding land and performance of šahha are closely related is
supported by the occurrence of these two clauses in a correlative structure in Law §40:
GIŠTUKUL-li žarzi=ya šahha{n}=a išsai 'he both holds the GIŠTUKUL-li and performs
the šahha obligation'.

Also closely related are the verb and participle describing the dress of the Žantašepa
divinities, but the forms are not morphologically parallel:

(55) StBoT 8 Vs. I 24'-25'; #24

wēšsandama / išžarwantuš ŽUĞILA-uš putilyantešš=a
{girded.pNc and }

'And they are wearing / blood-red garments and (are) girded.'

Next we have subsequent action performed by the same subject where it is less
clear that the two clauses are part of a whole. Compare pattař=s a žarmi 'and I hold a
basket' in the broken example (56), which takes place among general preparations of ritual
objects:
(56) StBoT 8 Rs. III 23-25; (at #29.5)

[... hal]inaš teššumiš iemi kunkumati[^AR]
[anda tē]hi pattarr= a ḫarmi nu=ššan NUMUN-an [ ]
{basket.A and I hold}
[??. an]da kitta Glšzupāri kitta ...

'... I fashion cups of clay. I set a cucumber inside. And I have a basket, and seed (?) lies inside; a torch lies (inside).'

We also see the same actions performed by different subjects:

(57) KBo 22.1 Vs. 3'-4'

§ šumeš LÜMEŠ GIŠTUKUL tameškatteni
apē= 'ya3 [k]atta[n] / dameškiwan dāir ...
{those.N and down oppress.SUP they took}

'S You are oppressing the GIŠTUKUL men, and those [i]n tur[n] / have begun to oppress ...'

Different subjects can perform different actions on the king and queen, who are almost always treated in like manner:

(58) StBoT 8 Vs. I 35'

§ LUGAL-un=kan III-ŠU ×[ ]zi SAL.LUGAL-an=sa šawātaraš ḫalzai
{queen.A and horn-player.N he calls}

'S He [ ]s the king thrice. And the queen the horn-player calls.'

Although in the first clause of (58) the subject and the action he performs are missing, we know that the subject was different from that in the second clause because there is not enough space for a subject in the break and because šawātaraš 'horn-player' is a full noun, unlikely to be repeated if it were already subject. We know the actions in the two clauses are different because the first verb is apparently a 3.sg. present/future of the -mi-conjugation, while the second is a 3.sg. present/future of the -hi-conjugation.

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In this example there is a less clear connection between carrying the eagle away and
the events in the clauses that come before and after:

(59) StBoT 8 Vs. II 33'-43'

... [ERÍNMEŠ-]ti=ma=ššan šer GÍR ZABAR
kitta MUŠEN enhanced[an] ERÍNMEŠ-an [n]=a LUGAL-aš SAL.LUGAL-ašš=a šer=šemet
wažnumeni II DUMU MEŠ.É.GAL [a]randari kāšš=a GIŠŠUKUR ZABAR[AR ġarzi]
kāšš=a GIŠŠUKUR ZABAR ġarzi [n-e II]I-ŠU walšanzi
§ MUŠEN[arana][nn]=a=ašta [pa-ra]-a pētanzi DUMU.É.GAL
{bird:eagle.A and forth they carry}
LUGAL-aš SAL.LUGAL-ašš=a kīššar[az]=šmet teššummiš dāi
ḥalmaššuitatę; ḫašš[az ap]=š=dāi ta=ššan
NINDA šarruwantti ERÍNMEŠ-ti šer d[a]li [ERÍNMEŠ-an teššummišš=a]
Ü GIŠŠUKUR ZABAR ANA É.ŠA-na pe-[a] LUGAL SAL.LUGAL-ašš=a
kitkar=šmet dāi MUŠEN[arana][nn]=a parā ḫilam[na]/ pētumeni ta šašueni §
{bird:eagle.A and forth gate.ŁAL we carry}

... But above [the troop] lies a bronze
dagger. We wave the eagle[e] and the troop over the king and queen.
Two pages are standing. Both the one [holds] a bronze spear,
and the other holds a bronze spear. [And] they strike [them thr]ice.
§ And the eagle[e] they carry [away]. The page
takes the cups [fr]om the hands of the king and queen.
He takes also [th]ose2 from the throne (and) [from] the hearth, and he s[et]s
(them) over the troop on the ŠARRUWANT-bread. [He?] ca[rries7]
the [tro]op a[nd] the cups and the bronze spear to the inner room, [a]nd sets (them)
at the head of the king and queen. And the eagle we carry out
[to] the gate. And we sleep. §'

Neither clause in which the eagle is carried away is closely related in terms of actors or
actions with the clauses that come before or after, a situation rather unlike the first examples
in this section. This is not to say that carrying the eagle away is not the proper thing to do
at these points in the ritual; in that sense, the action is related to the other actions in its
environment. It is simply less closely related.

There are also three examples where -al-ya signals word emphasis in clause-initial
position. One occurs in a correlative comparison structure (Law §55), and another heads
an apodosis (Law §44b). These do not necessarily bear on the discussion of clause conjunction. But the last example does seem to be relevant:

(60) StBoT 8 Vs. I 30'-32'; #26, #56

\[ \text{NINDA} \text{sarrui=ma=ššan ERİNMEŠ-az ēšzi} \]
\[ \text{§ šer=šemet=a [ G]ÍR ZABAR kitta apatt=a=[a]n? anda / pēturneni ...} \]
\[ \{ \text{that.A and PV in we carry} \} \]

'But on a šarruwa bread sits a troop.
§ And over them lies a bronze dagger. And (all) that we carry in. ...'

Unlike the two instances in the Laws, where the structures in which the -al-ya’s occur allow clear interpretation of word emphasis, (60) shows ambiguity between word emphasis and clause conjunction. This example and the clause with \text{MUSEN} \text{haranann=ə=šta} in (59) have brought us some distance from the closely related examples seen at the beginning of the section. While those clearly show -al-ya functioning in a narrowly conscribed domain, these last examples demonstrate that -al-ya already functioned in Old Hittite to coordinate clauses that are less closely related. With the possible exceptions of these last two, however, the environments where we find -al-ya are not the same as those where we find non-geminating -a.

§2.4.2 -a and -ma

We have seen that -al-ya most often conjoins clauses that have a rather close connection. In contrast, -a occurs in situations like those in which -ma occurs. Before considering these contexts, however, presentation of some basic facts of -a’s distribution is in order.

The occurrences of -a in the OH corpus here number 36 and were summarized in the fifth column of the table in (46). They are repeated here for the reader’s convenience.
(61) **Attestations of -a**

<table>
<thead>
<tr>
<th>Text</th>
<th>Secure</th>
<th>Context Broken or Questionable</th>
</tr>
</thead>
<tbody>
<tr>
<td>StBoT 8</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>KBo 20.10+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Anitta</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Zalpa</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Laws</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>KBo 22.1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

§2.4.2.1 Phonological Distribution

As mentioned in §2.1, -a occurred word-finally after single consonants.\(^4\) In fact, all occurrences of either A or YA after a vowel in clause-conjunctive contexts were consistent with the use of -a/-ya.

§2.4.2.2 Syntax

-a typically occurs in Wackernagel’s Law position. In a clause beginning with a temporal or conditional conjunction, however, it cliticizes to the second word in the clause. Its syntax is thus like -ma’s syntax. (62) can be compared with (63).

(62) StBoT 8 Rs. IV 13; #59

\[
\text{kinun-a natta kuwapikki pāun} \\
\{\text{now-a not at all I went}\}
\]

‘But now I have not gone at all.’

(63) StBoT 8 Rs. IV 12-13; #32

\[
\text{kāru= ma / ŠĀ? } \text{É DUMU}^{MS}\text{-an paišgaḥat} \\
\{\text{earlier-ma in house children.G I went}\}
\]

‘But previously I used to go [in?] the house of the children.’

(64) can be compared to (65). -a cliticizes to the word following takku ‘if’.

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(64) Laws I §41 (A Vs. II 25'); #36

takku šahhan= a mimma\textsubscript{i}l

{if šahhan.A -a he refuses}

‘But if he refuses the šahhan’

(65) Laws I §40 (A Vs. II 20'); #5.5

takku GIŠTUKUL-li= ma mimma

{if GIŠTUKUL-li.A -ma he refuses}

‘But if he refuses the GIŠTUKUL-li’

Compare (66) with (67). Like -ma, -a attaches to the second word in the clause, while a pronominal clitic attaches to mān ‘when’ in Wackernagel’s Law position.

(66) Anitta A Rs. 45-46; #48

mān= aš appezziy=na kīstanziat

{when it.Nc later -a starved}

‘But when it later suffered starvation’

(67) Laws I §10 (A Vs. I 18’); #2

mān= aš lazziat=ma

{when he recovers-ma}

‘And when he recovers’

I found no example in which -a cooccurred with a clause introductory particle. However, one example shows -a cliticizing to a genitive form of the relative pronoun, but this is likely to be a generalizing form of the indefinite (gen.sg. of kuiša), rather than a freely productive clause-conjoining -a.
... nu ape[l É- ZU] / kuel(=)a Gilšeyan aški= šši šakuwān a[rūwan] §
 { CC that.G house-his who.G-a tree:eyan gate.DL-his.DL visible? exempt }

... then [the house of] that one?, / whoever eyan tree? (is) visible? at his gate, (shall be)
 e[xempt]. §'

Unfortunately the passage is broken. kuel(=)a ‘whatever’ is probably clause-initial, but
the break prevents us from being certain. The situation is doubly unfortunate since the
relative clause appears to be embedded.

-a attaches to hosts of several syntactic types (compare table (18) in §2.2):

(69) Syntactic Categories of -a’s Hosts

<table>
<thead>
<tr>
<th>Host Position in Clause</th>
<th>NP</th>
<th>Adj</th>
<th>Pronouns</th>
<th>Pers</th>
<th>Dem</th>
<th>Rel</th>
<th>Neg</th>
<th>Adv</th>
<th>PreV</th>
<th>V</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>11</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>33</td>
</tr>
<tr>
<td>Second</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>36</td>
</tr>
</tbody>
</table>

Examination of the syntactic environments in Houwink ten Cate (1973:128; cf.
§2.2 above) yielded the following results for -a, with tallies of -ma and -al-ya for
covenient comparison.

(70) Environment                  -a  -ma  -al-ya
  1a in an independent clause     29  18   45a
  1b in a protasis following another protasis 1  -    -
  2 in an apodosis               1  -    -
  3 in a protasis               5  13   -
  2/3 in the protasis of a complex apodosis -   -1c -
  Total                        36  32  45a

a) Includes one non-germantine form, (52) above. b) -al-ya interpreted as having word-
scope, cf. kuptarr= a ‘also the remnants’ in #7. c) #3 = (33).
All three enclitic conjunctions occur between independent clauses and very marginally at the beginning of main clauses preceded by dependent clauses. -a also occurs once between dependent clauses, in #44. Notably, however, -a and -ma occur at the beginning of dependent–main clause structures, whereas -al-ya does not occur in such environments.

§2.4.2.3 Functional Contexts

Turning to the contexts in which -a occurs, we find the particle in the same environments as those in which -ma occurs. Also similar is its frequent occurrence in more than one functional context at one time.

Among the 36 clear occurrences of -a we see examples with subject switch. In (71) the subject changes from 1.sg. to 1.pl.:

(71) StBoT 8 Vs. I 21'-22'; #55

§ apūš ḥantezumni tēhhi weš=a namma anda /[p]aiwani  
we -a again in we go
II  d Ḥantašepuš ḫarwani GIS-aš ...

'S I lay those in the forecourt. And we go in again. We have two Ḥantašepa divinities of wood. ...'

In (72) we see the subject change with Happi, and it changes to generic 3.pl. in the next clause. Tamnaššu contrasts with Happi, as do the events of the two clauses, escaping and capturing:

(72) Zalpa A Rs. 7'-9'; #52-#53

§ LUGAL-š=a İŞME š=as yanniš URU Ḥarahšu=aš ğarša Ü ERİNMEŠ URU Zalpa  
menaḥhanda uit š=an LUGAL-uş ñullit Ḥappiš=a išparzašta  
[Happi.N-a escaped]

mTamnaššun a ḫuṣuwanant İŞBATU š=an URU Ḥattuša uwatet §  
{Tamnaššu.Ac-a living.Ac they captured}

'S But the king heard (about this), and he marched. He arrived at Ḥarahšu. And the army of Zalpa / came against (him). And the king defeated them. But Happi escaped; but Tamnaššu they took alive. And (they) brought him to Ḥattuša. §'
In (73) we see subject switch from *hantezzias* 'first, oldest' to *appezziyas* 'last, youngest' and contrast between them:

(73) Zalpa A Vs. 16-19; #51

... nu AMA-ŠUNU
[ο o -u]§ natta ganešzi nu=zza DUMU.SAL<sup>MEŠ</sup>-ŠA ANA DUMU.NITA<sup>MEŠ</sup>-ŠA paiš
[hante]zziaš DUMU<sup>MEŠ</sup> nikuš=šmuš natta ganeššir appezziyaš=a=ššan
{last.N -a PV }
x-uš-za nekuš=šummuš daškeu[m]i n]u le šaliktumari

'... And their mother / does not recognize [the]m, and she gave her daughters to her sons. [The older sons did not recognize their sisters. But the youngest (son) [said]: “Let (us) [not] take our sisters. [ ] Do not approach? (them). ...’

*appezziyas* is also a new subject. Another new subject is introduced into the text in example (74), which is like the special referent-introducing construction seen above, in which -*ma* occurs with an initial orientation expression (cf. (35) and (45) and §2.3.2.2 above):

(74) StBoT 8 Vs. I 30'-32'; #26, #56

NINDAšarrui=maššan ERÍN<sup>MEŠ</sup>-az ešzi
§ šer=šemet=a [ G]ÍR ZABAR kita apatt=a[a]=n? anda / pētumeni ...
{over-their.n-a dagger bronze lies}

'But on a šarruwa bread sits a troop.
§ And over them lies a bronze dagger. And (all) that we carry in. ...'

The bronze dagger has not appeared in the text before this point. The unmarked version of the construction appears in (75), where a new direct object, the cloth, is introduced, comparable to examples discussed in §2.3.2.2.
(75) StBoT 8 Rs. IV 20-22; #60

... kēšan ḥumanda
[p]addanī tēḫḫi nē-e LUGAL-aš SAL.LUGAL-ašš= a kitkar=šamet tēḫḫi
šēr= a=ššan GAD-an peššiemi š=uš LŪ-aš natta aušzi §
{over -a PV cloth.A I throw }

'... All these / I put in a basket and set them at the head of the king and queen.
And over (them) I throw a cloth, and no man will (lit. a man will not) see them. §'

In (76) a clause-initial adverbial changes the setting from the general situation concerning
the house to its interior. The subject also switches from the man to kuit 'that which'.

(76) Laws I §98 (A Rs. IV 53'-55'); #43

§ takku LŪ-aš ELLUM É-er lukkezz[(i E-er) EG(IR-pa we)]tezzi
andan=a É-ri kuit ĥarakzi LÛ.U[(LÛLU-ku GUD-ku) UD(U-ku)]
{inside-a house.DL which.N dies }
'eš-eš-za nakkuš / n=at [Šamik]za §

'S If a free man sets fire to a house, he shall [r]ebuild the house.
And that which perishes inside the house, whether it be people or cattle or sheep, (it is)
damage?; / he shall [make compensation for] it. §'

Example (77) contains the adverb appezzian 'later' that modifies the time of the discourse
from 'before' (karu). The two adverbs also stand in contrast to one another, as do the two
subjects, King Uḫna and King Anitta, and the cities to and from which the divine image is
conveyed.
Earlier Uḫna, King of Zalpuwa, took the statue of our god Šiu from Nesa to Zalpuwa. But later I, Anitta, Great King, conveyed the statue of our god Šiu from Zalpuwa back to Nesa.

In (78) we see background establishment of time in a clause with màn and appezziyān ‘later’, as well as subject switch to -aš ‘it, sie’, referring to the city:

... Ḥattuša-×[ ] / [ta]k kiṣṭa š=an tālahḫun màn=as
 when it.Nc
appezziyān=sa kiṣṭanziattat š=an Ḥalmāš[uitt] / Ḡiuš=miš parā paiš š=an išpandi
 later -a starved
nakkit dāḥḫun pēdi=ššiš=ma ZÀ.AH.LI-an anīfe'[nun] §

... Ḥattuša ... [ ] / [in]flicted?. I left it. But when it later suffered starvation, my god Šiu / delivered it [to] the Thr[one] god. And in the night I took it by force. And in its place I so[wed] weeds. §’

Note also that -a in this example occurs in an exact parallel to the formula màn X=ma ‘but when X’ (cf. #2, 17-18, 20.5, 28, 30, 33).

Contrast can be seen here between adverbials which establish the setting, karu and kinun:
(79) Laws I §7 (A Vs. I 9'-10'); #35

§ takku LÚ.ULUL-an ELLAM kuiški dašuwahži našma KA×UD-ŠU láki karū I MA.NA KÚ.BABBAR peškir
kinun=a XX GÍN KÚ.BABBAR pāi parna=šše=a šuwaizzi §
{now -a 20 shekel silver he gives}

'§ If someone blinds a free person or knocks (out) his tooth, previously they would pay 1 mina of silver, but now he shall pay 20 shekels of silver, and he shall look7 to (his own) house (to provide it) for him. §'

In the Laws there are 8 further examples where a clause with karu precedes a clause with kinun=a, and two probable occurrences where the contexts are broken.34 Another example contrasting these adverbs occurs in the Royal Couple Ritual, seen above in (38).

(80) shows contrast between the rich man and the poor man and between the ways in which the addressees treat them:

(80) KBo 22.1 Rs. 26'-32'; #45

§ LÚ.MEŠNAŠI SÍDITI-a-ŠU nattu punušteni
ta LÚḫappinandaš ištēni
parna=šša paiši ezši eukši piyanazzi=a=y⇒a=tta
LÚašiwaända=a šišt dāni
{poor-man.A-a his? A you take}
DIN-ŠU nattu punuzuši ...

'§ You do not question his provision bearers. / You do (the will) of the rich man, you* go to his house, you eat, you drink, and he rewards you, but (from) the poor man you take (what is) his?. / You do not investigate his case. ... ' *From this point to the end of the passage as it is given here, the addressee(s) are 2.sg., having previously been 2.pl.

-a also occurs in two conditional clauses with takku ‘if’. Both show contrast.
§ If someone hires a person and he goes on campaign and he dies, if the wage (has been) paid, [there is no] compensation, but if the wage (has) not (been) paid, he shall give one person (lit. head). §'

In (81) the participle *piyān* ‘given’ is contrasted with its negated form. See #13 and #31 for comparable examples with *-ma*. The other example with *takku* and *-a* is in (83), which is very like that in (82).23

(82) Laws I §40 (A Vs. II 18'-22'); #5-#5.5

§ If a *GISTUKUL* man [dies] (or disappears) and an *ILKU* man is designated, and the *ILKU* man says, / “This is my *GISTUKUL*-i (obligation), but this (other) is my *sahhan* (obligation),” and he registers the field(s) of the *GISTUKUL* man, / he shall both hold the *GISTUKUL*-i and perform the *sahhan*. But if he refuses the *GISTUKUL*-i, / they shall declare the field(s) of the *GISTUKUL* man vacant, and the men of the city shall work it for themselves. / But if the king gives a person, they shall give him the land, and it shall become a *GISTUKUL*-i (arrangement). §’35

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§ takku LÚ ILKI ḫarakzi Ĉ LÚ GIŠTUKUL tittianza LÚ GIŠTUKUL tezzi
ki GIŠTUKUL-li=met ki=ma šahha=a=met nu A.ŠĀHLA ŠA LÚ ILKI anda šittarizz[(i)]
GIŠTUKUL-li ḫarzi šahha=a iššai takku šahha=a mimma[i]
{if šahha -a he refuses } A.ŠĀHLA ŠA LÚ ILKI ANA É.GAL-LIM danzi šahha=a ḫarak[(zi)] §

'§ If an ILKU man dies (or disappears) and a GIŠTUKUL man is designated, and the
GIŠTUKUL man says, "This is my GIŠTUKUL-li (obligation), but this (other) is my
šahha (obligation)," and he registers the field(s) of the ILKU man, / he shall hold the
GIŠTUKUL-li and perform the šahha. But if he refuses the šahha, / they shall take the
field(s) of the ILKU man for the palace, and the šahha shall cease. §'

This example is particularly valuable because the linguistic situation in the two laws is so
very similar, and the alternation between -ma and -a cannot reasonably be attributed to the
differences we see. There is little variation between the two laws up to and including the
conditional protasis in which we are interested. The roles of the GIŠTUKUL man and the
ILKU man are reversed from the first to the second law, and in the first GIŠTUKUL-li
obligation is refused, while in the second the šahha obligation is refused. (The correlative
in the first law is of no direct importance for occurrence of -ma or -a.) We also see -ma
attached to a vowel-final form, and -a attached to a consonant-final form, but they clearly
function in the same way in these nearly identical environments, namely to help signal the
contrast between accepting and refusing land and its obligations. -ma and -a are thus found
to function the same way in conditional protases and in temporal clauses with mān, but
-al-ya is found in neither environment.35a

The contexts in which -ma and -a are found can be summarized in the following
table. I have also included tallies for -al-ya for purposes of comparison.
Contexts in which -ma and -a Occur

<table>
<thead>
<tr>
<th>Context</th>
<th>-ma</th>
<th>-a</th>
<th>-aC-a</th>
<th>-ya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total occurrences</td>
<td>32</td>
<td>36b</td>
<td>18c</td>
<td>27d</td>
</tr>
</tbody>
</table>

Context:

- Subject switch: 17 29e 9 2
- New subject: 5 9 1 -
- Orientation: 20 16b 1 2
  - with mān: 8 1 - -
  - takku-protasis: 5 2 - -
- Focus-contrast: 10 21b 1f 2f
- special syntax: 7 1 - -

a) See note 36 for which examples are of the various types. b) Includes 10 examples with *kinun=a* from the Laws. c) Includes 1 non-geminating form in -a/-ya use, (52). d) Includes 23 examples with *parnasso=šes=a šuwaizzi* from the Laws. e) Includes 8 examples with *kinun=a* from the Laws; see note 37. f) Excludes 10 occurrences with geminating -a and 1 with -ya that show weak contrast (opposition of closely associated referents).

Subject switch is more common with -a, and orientation changes with locative expressions are more common with -ma. This distribution may be expected with the different phonological environments in which the two particles occur—more subjects in the nominative case have consonant-final forms, where we find -a, and more (sg.) oblique nouns in the dative/locative and allative cases have vowel-final forms, where we find -ma. Present/future verbal forms and the negative marker *natta* also end in vowels, so we can expect -ma rather than -a to occur with them. This distribution may obscure the similarity in the function of the two particles, hence the frequent association of -a with subject switch.

The table in (85) shows the distribution of -ma and -a by the grammatical case of the nouns, pronouns, and adjectives, and by the negative, adverbial, and verbal forms that host the particles. Occurrences for -a/-ya are given for comparison.

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(85) Distribution of Enclitic Conjunctions by Grammatical Case of Host

<table>
<thead>
<tr>
<th>Grammatical Case or Category</th>
<th>-ma</th>
<th>-a</th>
<th>-CC-a</th>
<th>-ya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>4</td>
<td>15a</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Accusative</td>
<td>2</td>
<td>5</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>Genitive</td>
<td>1b</td>
<td>[1]c</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Dative/Loc.</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>23d</td>
</tr>
<tr>
<td>Allative</td>
<td>2</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Negative</td>
<td>2</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Adverb</td>
<td>6</td>
<td>16e</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Verb</td>
<td>8</td>
<td>-</td>
<td>1f</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>31g</td>
<td>36</td>
<td>18</td>
<td>27</td>
</tr>
</tbody>
</table>

a) Includes 5 subject pronouns, 2 of 1.sg., 2 of 1.pl., and 1 of 3.sg.  
   b) -ma cliticized to a genitive with an -a of uncertain status, #4.  
   c) Possibly generalizing, indefinite -a attached to a relative pronoun in broken context, #40.  
   d) Includes 23 occurrences of *parna šše ša šuwaizzi* in the Laws.  
   e) Includes 10 instances of *kinun ša* in the Laws.  
   f) A participle (rather than a tensed verb).  
   g) Excludes the one Akkadographic host, #9.

We see for -a functions very like those we saw for -ma. The primary differences between the two are their phonological forms and their distribution associated with those forms. Given the similarities in their function, syntax, and host cliticization, and their phonologically-based complementary distribution, it is not unreasonable to conclude that they were (probably suppletive) allomorphs performing the same function in Old Hittite: linking clauses while signaling a difference between their clause and the preceding text (so Melchert 1984a:30 with fn.9, and 32 fn.13; 1985:202-203).

§2.4.2.4 More on -a and -al-ya

While -a seems to have the same function as -ma, some examples with -a exhibit uses that approach the degree of content-similarity involved in some of the uses we saw in examples of clause conjunction with -al-ya. The reader will recall that some of the examples of clause conjunction with -al-ya, e.g., (58)-(60), concerned clauses that were
somewhat less intimately connected with each other than in the prototypical examples described above ((49)-(51)) and in Rosenkranz (1973). Examples of -a with related, but less closely connected actions are these:

(86) StBoT 8 Vs. I 36'-38'; #57

LUGAL-uš ERÍNMEŠ-an III-USU alla[ppahhi SAL.LUGAL-ašš=a III-ŠU all[app]ahhi šawataras=a ḫalžaš'a DUMU.É.¹GAL LUGAL-aš SAL.LUGAL-ašš=a kī[ššara-...]{horn-player-a calls }

d[Hom-player-a calls ]

The king [sp]its (on) the troop thrice[e], and the queen sp[its] thrice. And the horn-player calls (out). The page takes the Hantasepa divinities and the cups [from] the ha[nds] of the king and queen. ...

(87) StBoT 8 Vs. II 19-20; #58

§ mān MUŠENḫaranan ḫušuwandan appanzi

n=an udanzi ug=a uilna[š ERJIN-an iyami

§ When the catch an eagle alive, / they bring it (in). And I fashion [a tr]oop [of] clay.'

In (86) the cry of the horn-player is the appropriate action at that point in the ritual, but it is not as closely connected with the events that precede it, spitting by the king and queen, as those events are to each other (and these are marked with geminating -a.) Similarly in (87), there is no obviously close connection between bringing in the eagle and fashioning an item from clay. More closely related are the clauses in these two examples, where -a coordinates parts of the apodoses:

(88) Laws I §41 (A Vs. II 25'-26'); #36-#37

... takku šahhan=a mimmaššu

A.ŠAḪI.A ŠA LÚ ILKI ANA É.GAL-LÍM danzi šahhan= a ḫarak[(zi)]

§ {šahhan. N-a ceases }

' ... But if he refuses the šahhan, / they shall take the field(s) of the ILKU man for the palace. And the šahhan shall cease. §'
§ 88-89 Laws I § 80 (A Rs. IV 14-15); #42

§ takku UDU-un UR.BAR.RA-ni kuiški peššiezzzi iššaššiššiš UZUî daî
apāšš-a KUŠ UDU daî §
{that.N-a skin sheep takes }

'S § If someone throws a sheep to a wolf, its owner shall take the fat, but that one shall take the sheepskin. § 38

In (88), subject switch, as well as different action (change of state), may have licensed the use of -a. Similarly in (89), a different subject's taking a different part of the sheep would call for -a. These examples stand in opposition to the numerous instances of parna ššē ša šuwaizzi. Although the formula is always at least the second clause of an apodosis, the subject changes only once out of 25 occurrences (from generic 3.pl. assessing the amount of damages to generic 3.sg. in §94), and the household is understood as the resource from which the reward in the preceding clause will be provided.

A final example shows rather close connection in the ritual processing of the king and queen:

(90) StBoT 8 Vs. 13'-6'; #54

§[(III-iš LUGAL-un SAL.LUGAL-ann=a ḫuyanzi
III-kišš aššmaš šīn-an / [pa]rā ṣepzi
{thrice -a them.DL figurine. A forth he grasps }
GUD-n aššmaš III-šiš parā ṣepzi LUGAL-uš
[III-iš GUD-un I šīannya a allappāḫḫi SAL.LUGAL-ašš=ša-an III-iš / [al]appāḫḫi ...}

'S [Thr]ice they run (to?) the king and queen. And thrice to them he [e]xtends a figurine, and an ox he extends to them thrice. The king spits (on) the ox and one figurine thrice, and the queen spits on them (lit. it) thrice....'

Here -a is appropriate because the actions huia- 'run' and parā ep- 'hold forth' (plus object) are different, and because there is an change in subject from 3.pl. to 3.sg.

Although the two clauses are closely connected in the ritual context, they are not as similar.
to each other as the second is to the third, where objects are extended, nor as like as the two clauses that follow them wherein the king and queen spit on the cow and the figurine.

These last few examples and examples (58)-(60) above show similar degrees of closeness, yet in the former, -a is used, while in the latter, -al-ya is used. The two enclitics thus appear to occur in the same environment. Such convergence in use is unsurprising, or even to be expected, since the boundaries between their use are not clearly defined. As Eve Sweetser observes (p.c.), construal, here of the relations determining the choice of conjunction, can always be different, even for the same contents.

§2.4.2.5 Scope of -ma and -a

Most scholars have considered -ma to be a coordinating conjunction, linking clauses under its scope (cf. §1.2). This function is implicit in the work of earlier scholars, given the frequent equivalents 'aber' and 'but', and is explicitly stated in more recent work (e.g., Sternemann 1966, Carruba 1969, Luraghi 1990). The possibility has also been raised that -ma can be used as an emphatic particle with scope over just a word, the clause-initial word to which it attaches. Houwink ten Cate (1973) understands -ma to be a sentence connective, but also sees it functioning as an emphatic particle. Carruba (1985) considers -ma to be essentially a (coordinating) conjunction, but mentions a mildly emphatic and adversative function. Garrett (1990) considers -ma to be primarily emphatic with word-scope, but acknowledges the possibility of its sentence-scope. CHD (L-N:91-99) understands -ma to be a correlative particle, and this view will be addressed below (§5.4).

Since Houwink ten Cate's identification of -a as a particle separate from -al-ya, -a has generally been considered to be an emphatic particle with scope over just its host (see Houwink ten Cate 1973, Carruba 1985:82, Garrett 1990:18-19, Luraghi 1990:54-55). Puhvel seems to see a coordinating conjunction in -a (1984 1-2:9-10). For those who
recognize emphatic function in the particle(s), \(-a/-ma\) would provide adversative emphasis to topicalized forms and have scope over just these forms.

I follow the traditional view that \(-ma\) is a coordinating conjunction with scope over its clause, and I think that \(-a\) shares this status. It does seem to me, however, that most occurrences of \(-ma\) and \(-a\) are ambiguous between having word-scope or clause-scope, such that those who advocate the former can make a case for it. If one were considering whether \(-ma\) and \(-a\) were emphatic clitics with word- or clause-scope, examples such as (91) and (92) could provide evidence for either view.

(91) Laws I §10 (A Vs. I 16'-17'); #1

\[(takk)]ju LÚ.UL.LU-an kuiški ḥunikzi t=an ištankizi nu apūn / [(šak)]'tāizzi
pe̱di= šši= ma LÚ.UL.LU-an pāi
{place.DL- his.DL -ma person.A he gives}

'§ If someone injures a person and does him harm, he shall take care of that (person).
• In his place, however, he shall provide a person.'
• But in his place he shall provide a person.'

(92) Zalpa A Rs. 7'-9'; #52-#53

§ LUGAL-š=a IŠME š=aš yanniš URUHarāššu=aš ārša Ú ERÍNMEŠ URUZalpa
menahhanda uit š=an LUGAL-uš ĥullit mḤāppiš=a išparzašta
{Ḥāppi.N-a escaped }

mTamnaššu=a ūšuwantan ISBATU š=an URUḪattuša uwatet §
{Tamnaššu.Ac-a living.Ac they captured}

'§ But the king heard (about this), and he marched. He arrived at Ḥarāššu. And the army of Zalpa / came against (him). And the king defeated them.
• Ḥāppi, however, escaped; Tamnaššu, though, they took alive.
• But Ḥāppi escaped; but Tamnaššu they took alive.
And (they) brought him to Ḫattuša. §'

The first translations are intended to convey emphatic word-scope, while the second translations are meant to convey clause-scope.
Without intuitions obtained from native Hittite speakers, it will be difficult, if not possible, to demonstrate either word- or clause-scope definitively in most examples, but evidence exists which shows that both particles can have scope over their clauses. These clauses contain focal elements to which -ma and -a do not attach, while they each attach to a word whose referent is active in the consciousness of the audience (given information), or to a word whose referent has only just become semiactive.

(93) Laws I §40 (A Vs. II 18'-22'); #5-#5.5

§́takku LU¹[(GIST)UKUL ḫar(akzi)] Ḫ LÚ ILKI tittianza nu LÚ ILKI teazzi
ki GISTUKUL[(L)-l(=met k)]li=ma šahḥan=n=mİt A.ŠĀH.LA ŞA LÚ GISTUKUL anda šittariezzi
GISTUKUL-liy̬a ḫar[(zi .spatial)]laḫḥanna=a ǧissai takku GISTUKUL-li=ma mimmai
{if GISTUKUL-li ¬ma he refuses }
LÚ GISTUKUL-š=a! A.ŠĀHL.A ḫarkantaš tananzi n=an=za LÚMES URU-LIM
anniškanz[(i)]
takku LUGAL-š=a NAM.RAHL.A-an pāi nu=sše A.ŠĀHL.A-an pianzi t=as GISTUKUL-li
kiš[(ari)] §

§ If a GISTUKUL man [di]es (or disappears) and an ILKU man is designated, and the ILKU man says, /"This is my GISTUKUL-[li]i (obligation), but this (other) is my šahḥan (obligation)," and he registers the field(s) of the GISTUKUL man, / he shall both hold the GISTUKUL-li and perform the šahḥan. But if he refuses the GISTUKUL-li, / they shall declare the field(s) of the GISTUKUL man vacant, and the men of the city shall work it for themselves. / But if the king gives a person, they shall give him the land, and it shall become a GISTUKUL-li (arrangement). §¹³⁵

In (93) a man of ILKU (=šahhan?) status may assume the situation of a man of GISTUKUL ('tool, weapon') status. These positions and their obligations are not entirely clear. Beal links the obligation of šahhan, a common tax or service owed the government, to the ILKU man, perhaps a common landowner, and connects the GISTUKUL man to the obligation of GISTUKUL-li, this being an arrangement for holding land, perhaps also with military obligations (1988:274-278).

The protasis with -ma, GISTUKUL-li=ma mimmai, contrasts with the preceding 6 clauses in which the ILKU man accepts the GISTUKUL-li arrangement. Since the
The GiSTUKUL-li arrangement and its acceptance have been under discussion, the focus of the protasis is mimmai 'refuses'. It would be odd for GiSTUKUL-li to be the focus here for two reasons. First, for GiSTUKUL-li to be the focus it would have to be contrasted with šahhan, as though the ILKU man could decline either of the obligations. However, the šahhan obligation is expected of the ILKU man, so its refusal is not a consideration here. Acceptance of the GiSTUKUL-li obligation is what is under discussion. Second, GiSTUKUL-li has just occurred in a correlative structure, so if it is not active in the consciousness of the audience, it has only just become semiactive. In either case it cannot be said to be very informative; mimmai is much more informative. In fact, assuming Hittite had prosodic indications of focus, comparable to English focal stress, it is hard to imagine mimmai not having received that focal prosody. 'But if he refuses the service' would be an appropriate gloss here. -ma signals a difference, and in this clause the refusal is what is different. If -ma had word-scope and served to emphasize its host, GiSTUKUL-li would be emphasized in this clause. However, it is quite unlikely to be emphasized. Although it serves as -ma's host, -ma's scope must extend beyond the word itself to the whole clause.

Example (94) shows that -a can have clause-scope for the same reasons.

(94) Laws I §41 (A Vs. II 23'-26'); #6, #36-#37

§ takku LÚ ILKI šarazi Ü LÚ GiSTUKUL tittiana LÚ GiSTUKUL tezzi
ki GiSTUKUL-li=met ki=ma šahha=nu=met nu A.ŠÃHLA ŠA LÚ ILKI anda šittariezzi[(i)]
GiSTUKUL-li šarazi šahha=nu=ma iššai takku šahha=nu=ma mimmai,1
{k if šahha -a he refuses }
A.ŠÃHLA ŠA LÚ ILKI ANA É.GAL-LIM danzi šahha=nu=šarazi [(zi)] §

's If an ILKU man dies (or disappears) and a GiSTUKUL man is designated, and the GiSTUKUL man says, 'This is my GiSTUKUL-li (obligation), but this (other) is my šahhan (obligation),' and he registers the field(s) of the ILKU man, / they shall take the field(s) of the ILKU man for the palace. And the šahhan shall cease. §'
Here the GIŠTUKUL man may assume the situation of the ILKU man. Contrasted with his acceptance of the arrangement, his potential refusal occurs in a protasis with the same structure as that in (93), takku šahhan = a mimmai. Again, mimmai is the focus of the protasis. Acceptance or refusal of the GIŠTUKUL-li is not being considered, because it is already associated with the GIŠTUKUL man, so šahhan is not a focus of contrast. šahhan is also active in the consciousness of the audience and thus not informative, as the focus should be. Again, mimmai would surely have received focal prosody. Here also, -a has attached to a word which is not emphasized, and must have scope over its clause.

An even clearer case for the clause-scope of -a can be made with (95):

(95) Laws I §42 (A Vs. II 27'-29'); #38

§ takku LÚ.ULÚLLU-an kuiški kuššanizzi n =aš laḫḫa paizzi n =j((aš aki))
takku kuššan piyân šarnikzil [NU.GÁL]
takku kuššan = a natta piyân I SAG.DU [(pái)] §
if wage.An-a not given.An

'§ If someone hires a person and he goes on campaign and he dies, if the wage (has been) paid, [there is no] compensation, but if the wage (has) not (been) paid, he shall give one person (lit. head). §'

Here -a has scope over its clause for reasons like those supporting clause-scope for -ma above. In the protasis with -a, kuššan ‘fee’, having been mentioned in the previous subcondition, has just recently become semiactive in the consciousness of the audience. The essential difference between the two protases is the negative in the second; natta (piyan) ‘(is) not (given)’ is the focus of the clause, and natta would surely receive focal prosody. Again, an unemphasized word hosts the adversative conjunction, here -a, which must have scope over its clause, and not just the word to which it is attached.

The scope of -ma may even extend over a following main or resumptive clause. In (96) the clause with -ma in large measure repeats the ideas of the clause before it. The
essential difference between the preceding clause and what follows, then, seems to occur in
the main clause upon which the -ma-clause depends.

(96) Anitta A Vs. 1-4; #15

mAnitta DUMU mPithâna LUGAL ÚRÜ Kûššara QÎBÎ-MA
nepišz=aš=şta 4IM-unni āššuš ēšta
n= ašta 4IM-unni= ma mân āššuš ēšta
{CC PV Storm-god.DL-/nu as dear.N he was}
ÚRÜ Nêšaš LUGAL-uš ÚRÜ Kûššaraš LUGAL-i x x x [ ] §

'Anitta, son of Pithâna, King of Kussara, speak:
He was dear to the Storm-god of Heaven.
But as he was dear to the Storm-god,
the king of Neša [ ... ] to the king of Kussara ... §'

Would that we had the full predication in 1.4 of (96)! In (97), in which the clause with -ma
also in large part repeats the information in the preceding clause, the difference is the
contrast between the notions of durativity (kuîtman 'while') and completion (mân 'when')
in the act of recovering rather than any difference between the actions before, during, or
after recovery.

(97) Laws I §10 (A Vs. I 16'-19'); #1-2

§[(takk)]u LÚ.ULULU-an kuiški ḫûnikzi t=an ištarnikzi nu apûn
[(šâk)]täizzi1 pedišši=ma LÚ.ULULU-an pâi nu É-rišši
anniškizzi kuîtman=aš lâzziatta mân= aš lâzziatta=ma
{when he recovers-ma }
nu=sše VI GÎN KÛ.BABBAR pâli[i] LU.A.ZU=ya kuššan apâš=pât pâi §

'§ If someone injures a person and does him harm, he shall take care of
that (person). And in his place he shall provide a person (who) shall work
in his household until he (the injured person) recovers. And when he recovers,
(the injurer) shall pay him 6 shekels of silver, and to the doctor that same one (the injurer)
shall pay the fee. §'}
A stronger example is (98). Here the protasis and the relative clause with -\textit{ma} repeat much information, and the essential difference in the apodosis is the resumptive clause concerning reward, contrasted with the previous reward clause, not the -\textit{ma}-clause itself. 

(98) Laws I §23 (A Vs. I 51'-53'); #3

§[(ta)]kku ĪR-aš ḫuwāį n=āš ANA KUR Luwiya paizzi kuiš=an āppa 'uwatu[(ezzi)]
nušše 6 GĪN KŪ.BABBAR pāi takku ĪR-aš ḫuwāį n=āš ANA KUR kūruri an[da]
paizzi kuiš= an āppa=ma uwatezzi n=an=za apāš=pat dāī §
\{who.N him.A back -\textit{ma} brings \}

'S If a male slave runs away and he goes to the land of Luwiya, whoever brings him back, (the owner) shall give him 6 silver shekels. If a male slave runs away and he goes in[to] an enemy country, whoever (=\textit{ma}) brings him back, that same one shall take him for himself. §'

In these cases -\textit{ma} seems to be signaling a difference between the preceding context and the content of the entire biclausal structure.

§2.4.3 Summary

The material presented §2.4.1-2 demonstrates that -\textit{ma} and -\textit{a} have the same function, namely to signal in their own clause or sentence a difference or change from the preceding discourse. The contexts in which -\textit{ma} and -\textit{a} occur are 1) clauses with subject switch; 2) clauses expressing contrast or containing particular focus structures, such as the introduction of new referents; 3) clauses which express, or contain an expression of, change in orientation. These contexts often have syntax and vocabulary identical to that in the preceding context. Also, the clause in which -\textit{ma} or -\textit{a} occurs will most often exhibit more than one of these contextual features simultaneously. Although it is not possible to predict where -\textit{ma} or -\textit{a} will occur, identifying these contexts enables us to determine the function of -\textit{ma} and -\textit{a} when they do occur.

Given that their function is to mark difference or change, the meaning of -\textit{ma} and -\textit{a} is adversative. The particles appear to have a range in adversative meaning, from very slight, as in additive contexts, to quite strong, as in contrastive contexts, but I suggest that
-ma and -a express not much more than the notion of difference per se, and that the degree of adversativity is largely derived from the context itself. This proposal bears some similarity to Holland's regarding conjunctions derived from *kw≈o- relatives in Indo-European (1984). On this analysis, a neuter singular relative could be reanalyzed as a conjunction that relativized or topicalized its entire clause and simultaneously indicated the existence of another clause. The interpretation of the relationship of the two clauses, e.g., conditional or causal for a preceding clause, was largely determined by context. The attribution of a conditional or causal meaning to the conjunction itself, which was neutral as regards the relationship of the two clauses, may in fact be more an issue in translation (cf. also Holland 1986:163).

§2.5 More on Adversative Marking in Conditional Clauses

If we accept that -ma and -a are essentially isofunctional, then some order emerges from the apparent irregularity of adversative marking in conditional clauses in the Laws. The occurrence of -ma and -a is largely regular.

Nearly every law in the Hittite code is formulated as a condition with protasis and apodosis. Nearly every law is presented as distinct, with little reference between laws. Even if two laws are similar, the second will usually include all the information relevant for that law. Compare Laws §§7-8 in (99):
(99) Laws I §§7-8 (A Vs. I 9'-12')

7 § takku LÚ.ULÚ-an ELLAM kuisiški dāsuwaḥḥi nāšma KA×UD-ŠU lāki karū I MA.NA KÚ.BABBAR peškir kinu=a XX GĪN KÚ.BABBAR pāi parna=šše=sa šuwa挤压§

8 § takku IR-nan nāšma GEME-an kuisiški dāsuwaḥḥi nāšma KA×UD-ŠU lāki X GĪN KÚ.BABBAR pāi parna=šše=sa šuwa挤压§

‘§ If someone blinds a free person or knocks (out) his tooth, previously they would pay 1 mina of silver, but now he shall pay 20 shekels of silver, and he shall look to (his own) house (to provide it) for him. §’

‘§ If someone blinds a male slave or a female slave or knocks (out) his or her tooth, he shall pay 10 shekels of silver, and he shall look to (his own) house (to provide it) for him or her. §’

As this example shows, there is no linguistic marker of continuity between the two cases.42

In laws with more than one condition, however, there are indications of linguistic continuity. Corresponding identical portions of opposed conditions are often deleted (gapping), and conditional protases often occur with -ma or -a.

There are five main types:

I: The law contains two (or more) equivalent and contrasting conditions. -ma or -a occurs in the second and following conditions. 5 examples: §§40-41, 47b, [71], and 99.

(100) Laws I §47b (A Vs. II 45'-48'); #10

§ takku LÚ GIŠTUKUL-aš A.ŠÅH³A-ŠU hūmandan kuisiški wāši luzzi [(karp)]iezzi takku A.ŠÅH³A-n=a mekkī wāši luzzi natta karpiezzzi takku A.ŠÅH³A kulei=ma ārki nāšma LÚMEŠ URU-LIM pianzi ta luzzi karpiezzzi §

‘§ If someone buys all the land of a GIŠTUKUL man, he shall render the luzzi service. But if he buys (only) the large(r part of the) land, he shall not render the luzzi service. But if he subdivides unused7 land or the men of the city give (him land), he shall render the luzzi service. §’

II: The law contains one main condition with contrasting subconditions. -ma or -a either occurs on the second subcondition (three examples) or does not occur at all (one). 4 examples: §§22, 42, 46, and 53.

(101) Laws I §42 (A Vs. II 27'-29'); #38
§ If someone hires a person and he goes on campaign and he dies, if the wage (has been) paid, [there is no] compensation, but if the wage (has) not (been) paid, he shall give one person (lit. head). §

(102) Laws I §22 (A Vs. I 48'-50')

§ [(ta)]kku IR-as huwai nsan appa kuiski uwatezzi
takkukmanninkuan ʒ((pz))i nu=šše KUŠE.SIR-uš pai
takkuket ID-az II GÍN KÜ.BABBAR pai
takkuedi ID-az nu=šše III GÍN KÜ.BABBAR pai §

§ If a male slave runs (away), and someone brings him back, if he captures (him) nearby, (the owner) shall give him (the finder) shoes; if (he captures him) on this side of the river, he shall pay 2 silver shekels; if on that side of the river, he shall pay 3 silver shekels. §

III: The law contains one main case, fully determined, and followed by additional specific subcases which may contrast with each other. -ma and -a do not occur, although našma ‘or’ occurs between subcases in one example. 3 examples, most broken to some extent: §§5, [94], [95].

(103) Laws I §[94] (A Rs. IV 40'-43')

§(takku LÚ-LUM EL[LUM'?] É-er ʒ((a))i, iezzi šakuwaššar=pat pā [(i)] karā d[a(yazilaš I)]
MANA KÜ.BABBAR peškir kinun=ä XII GÍN KÜ.[(BABBAR) pai]
takkukmekki tajie(zziz me))]kki=še išhianzi
takkutepu tajie[(zziz)] täpu=še išhianz[i] tparnaš, šše=ea šuwaïzzi §

§ If a fr[ee] man burglarizes a house, he shall return (it) exactly in full value. Previously for the theft they would pay 1 mina of silver, but now he [shall pay] 12 shekels of silver. If he st(ea)ls much, they shall impose much upon him; if he steals little, they shall impose little upon him; and he shall look? to (his) house (to provide it) for him. §
§ If someone kills a merchant, he shall pay 100 minas of silver, and he shall look to (his own) house (to provide it) for him (his estate).

If (it is) in the land of Luwiya or in the land of Pala, he shall pay 100 minas of silver, and he shall make compensation for his (the merchant’s) goods;

or (if it is) in the land of Hatti, he shall deliver the very (body of the) merchant. §

IV: The law contains one case, with coordination of members of the conditional protasis. -ma and -a do not occur, although našma occurs in one example. 5 examples:

§§57, 65-66, 70, 75. The very broken §58 is likely also of this type. Based on duplicates, §75 may have included a subcase, which would reclass it as type III.

§ If someone steals a tamed he-goat (or) a trained deer(!) (or) a tamed mountain sheep, as (it is) for the theft of a plow ox, so (shall) [also?] their case (?) (be). §

§ If someone harnesses an ox, a horse, a mule, (or) an ass, and it dies, or a wolf devours it, or it disappears, he shall replace it at exactly full value. If he says, “It died by the hand of a god,” he shall swear (to it). §
V: The law contains more than one case. There is no gapping of constituents, and other indications of continuity between the cases are minimal (two examples) or non-existent (two examples). -ma and -a do not directly link cases. 4 examples: §§23, 77a/b, [92]-[93].

(107) Laws I §23 (A Vs. I 51'-53'); #3

§[(ta)]kku IR-aš ḫuwāi n=aš ANA KUR Luwiya paizzi kuiš=an āppa 'uwat'[[ezzi]] nu=sše 6 GĪN KŪ.BABBAR pāi takku IR-aš ḫuwāi n=aš ANA KUR kūruri an[da] paizzi kuiš=an āppa=ma uwatezzī n=an=za apāš=pat dāi §

"§ If a male slave runs away and he goes to the land of Luwiya, whoever brings him back, (the owner) shall give him 6 silver shekels.
If a male slave runs away and he goes in[to] an enemy country, then whoever brings him back, that same one shall take him for himself. §"

As discussed above (§2.3.2.1), the -ma can be interpreted locally but seems to be helping to signal contrast between the reward clauses of the two cases.

(108) Laws I §77a/b (A Rs. IV 6-9)

§ [(t)]akku GUDÁB arnuandan kuiški wałatḥi ŠA ŠÀ-BI-ŠA peššiezzī II GĪN KŪ.BABBAR pāi takku ANŠE.KUR.RA arnuandan kuiški wałatḥi ŠA ŠÀ-BI-ŠA peššiezzī III GĪN KŪ.BABBAR pāi takku GUD-aš našma ANŠE.KUR.RA-aš IGÌ-SU kuiški tašuaḥḥī VI GĪN KŪ.BABBAR pāi parna=sše=a šuwaizzi §

"§ If someone strikes a pregnant cow (and) causes it to miscarry, he shall pay 2 silver shekels.
If someone strikes a pregnant horse (and) causes it to miscarry, he shall pay 3 silver shekels.
If someone blinds the eye of an ox or of a horse, he shall pay 6 silver shekels, and he shall look? to (his own) house (to provide it) for him. §"

parna=sše=a šuwaizzi probably applies to all three cases in this law.

There are some exceptions to the scheme described above, of course.
Law §40 has two equivalent conditions (type I). The third condition is a subcase of the second equivalent condition: the king may name a transplantee, but only if the ILKU man has refused the land. This subcase is marked with -a, but subcases are not usually coordinated in type III.

Laws of type II show the most variation. Law §46 is a hybrid of type II and type I.
This law begins with one main condition with subconditions, marked on the second subcondition according to the description of type II. A second condition equivalent to the main condition is presented, concerning the dividing off of unused(?) land, but without the -ma or -a we would expect if it followed the form of type I. Although it is possible, this law does not necessarily contain two distinct cases (type V), for it is reasonable to assume that the iwaruaš išṭaš 'heir' has the same generic referent as kušši ‘someone’ identified in the previous condition and is thus semiactive in audience consciousness. Apparently the expression of the full NP subject of this second condition serves adequately to break with what went before and allow appropriate comparison without the need of -a or -ma.

Also falling outside the description of type II is the -ma that occurs in the second clause of the second apodosis, helping to mark the mild contrast in the party responsible for the luzzi obligation.

Law §53 is also a special instance of type II.

(111) Laws I §53 (A Rs. III 7-11)

§ takku LÚ GISTUKUL Ü LUHALA-ȘU takšan ašanzi mam=za it[(alauššanzi)...(t)]=az É-ZUNU šarranzi
  takku gimraš=šaš X SAG.DU VII SA[(G.DU LÚ GISTUKUL dāi)] 'U³ III
  SAG.DU LUHALA-ȘU dāi GUDH.LA UDUL.LA gimraš=šaš Q[(ATAMMA)]
  šarranzi
  takku NIG.BA LUGAL TUPPI kuišši 'harzi' mam=za AŠA Nhiều a k[(aruwilin)]
  šarranzi Ü NIG.BA II QATAM LÚ GISTUKUL dau Ü I QATAM LUHARR.(A-ȘU
dā)ul] §

‘§ If a GISTUKUL man and his partner live (lit. are) together, when they have a falling out [...] and divide their household,
  if (there are) 10 people (lit. heads) on his fields, the GISTUKUL man shall take 7
  people, and his partner shall take 3 people; they shall divide the cattle and sheep on
  his fields in the same manner;
  if someone has a royal grant by tablet, then when they divide old land, the
  GISTUKUL man shall take two parts of the grant, and his partner [shall] take one
  part. §’
*takku* 'if' and *mān* 'when' are each used to express one part of the main condition. The *takku* clause contains background information for the change in relations described in the *mān* clause, with additional action following in the *ta*-clause. The first subcondition about the number of people follows, with apodosis. Another *takku-mān* pair expresses the second subcondition concerning deeded land. Again the *takku* clause contains background information for the *mān* clause, which describes the essence of the subcondition, dividing land. The *mān* clause contains -*a*, which is consistent with the syntax of *mān* clauses in Old Hittite. So this second subcondition is marked with -*a*; it is just that its structure is more complex than that in either (101) or (110).

The taxonomy presented above provides an account of most occurrences of -*ma* and -*a*, but not all of them: compare the 'unpredicted' particles in (109) and (110). And it cannot predict the non-occurrence of adversative marking in law (102) (type II). Length of the preceding text is certainly no stronger a determining factor in the particles' occurrence here than is the structure of the law. There is only a slight preference for -*ma* or -*a* to occur in the laws following long apodoses with more textual material, 5 out of 8 laws; 3 laws with -*ma* or -*a* have little material in the preceding apodosis. Rather, it seems that -*ma* and -*a* were just chosen most often for laws with a certain structure (8 out of 9 times). The laws in which -*ma* and -*a* occur, laws of types I-II, are those where a case has more than one condition and more than one primary conclusion. Types III-V, where we do not find the particles, contain cases where only one primary conclusion is given. (In type III the subcases are expressed after the primary conclusion has been given.) Evidently the Hittite author(s) of the laws judged that -*ma*-*a* were useful in signaling the difference between equivalent conditions with different endpoints. As with all attestations of -*ma* and -*a*, we may be able to explain the occurrence of either in a given clause, but we will probably never be able to predict their occurrence with certainty or to explain their non-occurrence.
§2.6 Response to Starke and Luraghi

The reader will recall from §1.2 that Starke claimed -ma had a pragmatically subordinating and explanatory function, especially in ritual texts (1977:31 fn.32, p.74). Starke’s claimed function is supposedly clear in clauses without [other] subordinating conjunctions, and in some of these sentences, translating -ma with ‘while’ renders an acceptable meaning (cf., e.g., #22-27) although I reject such an interpretation, as discussed in the section on focus above, §2.3.2. However, there are also examples in which pragmatic subordination and simultaneity obviously play no part. In (112) -ma marks a clause which must be considered of approximately equivalent importance to the preceding clause, the performative claiming of land. In (113) -ma is attached to an adverb which would only be used after the release; the action of the clause, speaking, is important, and it is subsequent to the action of the preceding clause. In (114) the clause in which -ma occurs is explicitly of anterior time and thus functions to provide background information, but simultaneity is ruled out.

(112) Laws I §41 (A Vs. II 23'-24'); #6
§ takku LÚ ILKI ḫarakzi Ü LÚ GišTUKUL tittianza LÚ GišTUKUL tezzi kí GišTUKUL-li=met kí=ma šahha=met ...

‘§ If an ILKU man dies (or disappears) and a GišTUKUL man is designated, and the GišTUKUL man says, “This is my GišTUKUL-li (obligation), but this (other) is my šahha (obligation),” ...’

(113) StBoT 8 Rs. III 3-6; #29
§ ta namma MUSENHARAN népiša tarnaḥḫi šappan-anda=ma=šše kē mēmāḫḫi natta=an ūk tarnaḥḫyun LUGAL-š=an SAL.LUGAL-š=a tarnaš ...

‘§ Then I release the eagle into heaven and after(wards) I say these (words) to it: “Not I have released it, the king and queen have released it. ...” ’
When the king and queen say (so), I go to the house of the children. But if they do not say (so), then I do not go. But previously, I used to go [in?] the house of the children, but now I have not gone at all.

Luraghi disagrees with Starke’s views regarding -ma’s semantics; she finds -ma to be adversative, marking information that is contrary-to-expectation, thus functioning to express textual discontinuity. On her view, -ma occurs in clauses that are explanations and parenthetical statements (1990:50-54), marking an introduction of ‘additional’ as opposed to ‘essential’, information (p.108). She describes a few other functions for -ma, but these can be seen to be grouped under her concept of textual discontinuity.

I agree with Luraghi that -ma is adversative, but would say that the conjunction signals difference or change rather than textual discontinuity. (‘Discontinuity’ is perhaps not the best term to use in this context since even adversative conjunctions function to provide textual cohesion.) I disagree with Luraghi on other points.

First, she regards much more information than I do as being backgrounded. Eight of 20 orientation-establishing examples with -ma occur in clauses with mān, whose purpose it is to establish the time for the following predication. The remaining 12 examples, however, merely contain some type of setting for the selfsame predication (cf. §2.3.3). It seems that Luraghi confuses this fact with the idea that the entire clause with -ma contains backgrounded information. Of the twelve clauses which contain a specifier of orientation, the entire content can be considered backgrounded information in only one, (114) above, so by far the majority of these examples also express foregrounded information. Compare that example with (112)-(113), and compare our differing interpretations of (36) above, at the end of section §2.3.2.2.
Second, I think it is difficult for us to know what to expect in many situations described in a text, such that the information in a -ma-clause would counter those expectations. I find no example in the corpus of 32 clauses with -ma that is clearly contrary-to-expectation. But one example that Luraghi cites comes closest to expressing such adversativity, although the feature she emphasizes is textual discontinuity. ‘In example ([115]c, h, f), with a strictly concatenated series of actions, -ma- has the effect of breaking the sequence’ (Luraghi 1990:53; glosses mine):

(115) OH Ritual KBo 17.43 Vs. I 10'-13' (Neu 1980:105)

... EGIR-ŠU Ḻûmeneyaš jitāa kētt-a kētt-a G[I-an]
ḥuttiannāī (c)ta[nā]- ma= an natta ī ĥalziššāī LUGAL-i parā I-ŠU
[releases -ma it.Ac not ]
apizzī (f)āpa[m]-ma=an nēa Ḻûmenean KUŠsarazzit walaḥzi
[back -ma PV turns]
(h)parā[=m]-aš[t]a nēa ḺûMEŠALAM.ZU-uš walaḥzi §
{forth -ma he goes }

‘... Behind (him) the archer7 walks. On this side and on that side he draws
an ar[row], (c)but he does not release it. He cries ‘i’. He goes forward to the king
one time. (f)And he turns around. He strikes the archer7 with the waterbag?.
(h)And he goes forth. He strikes the clowns. §’

Rather than just ‘breaking the sequence’ of concatenated actions, -ma signals a change in
direction in clause (f) and marks a change in direction and resumption of motion in clause
(h). In clause (c) -ma does not break the sequence of actions at all, but rather signals a
contrast of the verb (natta) tarna‘ releases (not)’ with hutiannai ‘draws’. It is the contrast
between the action which usually follows drawing an arrow, namely the release, and the
action which in fact follows, the non-release, that allows an interpretation of contrariness-
to-expectation here.

Although Luraghi notes the connection between -ma and verbs in initial position
(1990:52 passim), she does not relate -ma with contrast. She does not relate -ma to subject
switch. She does relate -ma to presentational constructions (pp.105-106).
Luraghi is of the opinion that -ma conveys no adversativity in the expression pedi-ši ʔma ‘and in his place’, serving instead to disambiguate between subject- and non-subject-reference for the 3.sg. dat./loc. possessive adjective -ši (1990:136 nn. 3, 12). How this function of -ma relates to its other uses is not discussed. It seems more profitable, however, to consider semantic roles in the preceding context when determining cases of 3.sg. pronominal reference in which the subject is also 3.sg. (cf. #1; #16 has 1.sg. subject), and to view occurrences of pedi-ši-ʔma as a variant of the presentational construction LOC=ma NP V, where the NP is usually new, as discussed in §2.3.2.2.

Luraghi regards the conjunction -a as weakly adversative, marking a change to another clause-initial form having the same function. On her view this indicates a ‘shift’; subject shift is the most frequent use of -a. According to Luraghi, -a does not necessarily indicate a situation contrary to expectation, and is found in only a few contexts where -ma would be used (1990:54-55). On her view, -a has scope over only its host, whereas -ma has scope over its sentence (p.88). Luraghi links -a to setting (p.93) and connects -a with contrasted constituents (pp.100ff.).

As we saw in §2.4.2, most occurrences of -a in the corpus here are associated with subject switch, and many are associated with contrast and changes in setting. These are contexts in which we have also seen -ma occur, however. Luraghi’s view that the scope of -a extends over only its host is probably influenced by its many cooccurrences with subject switch (and setting change), which in turn are due to -a’s phonologically-based distribution. Apart from this view of scope, our findings for -a are more similar than our findings for -ma. In the main I think her account of -a could have served for -ma, as well.
Notes to Chapter 2

1. I treat the Ritual for the Royal Couple as a reconstructed text since the copies all date to the OH period, and I do not indicate restorations except when a specific copy is under discussion. References are to the edition of Otten and Souček (1969, with some additional material from Neu 1980). Restorations in the Laws and the Anitta text are indicated because they come from later redactions of the texts.

2. In this table and in tables throughout, a dash '-' indicates zero (0).

3. Melchert does not discuss these conditioned exceptions, but they are not the subject of his article.

4. Houwink ten Cate (1973:134f. fn.85) presents two putative attestations of Old Hittite -ma that follow consonants, one after a relative pronoun, kuēš=ma 'but whichever (pl.)' at 2 BoTU 11 8 II 16 (= CTH 9.4), and one after a personal pronoun, ammug=ma 'but I' at 2 BoTU 3 I 8 (= CTH 311.1). Kammenhuber (1979:192) lists as Old Hittite akkiš=ma=aš 'but he/she died' at KBo 3.34 I 12 (= CTH 8.A). However, Oettinger considers CTH 8.A and 9.4 Neo-Hittite copies (1979:579), as does Yoshida (1990:16). Yoshida also considers CTH 311.1 to be a Neo-Hittite copy (p.19); Oettinger does not include CTH 311.

5. It would be difficult to discern an -a following word-final -i and -e, and probably impossible after -a. The former are assumed to be -ya, as in the phrase parna=šše=a šuwaizzi (for which see note 33).

6. Please see the Notes on Translation and Glossing in the front matter.

7. I reviewed the cuneiform autographs for all texts except for the OH ritual fragments (other than the Royal Couple Ritual) found in Neu (1980), for which I consulted the indices in Neu (1983).

8. I do not include here two other possible occurrences of -ma as the status of each is simply too questionable to do so. The first is given by Neu (1983:112) as an alternate reading of...
KA in the GUD-uš-K[A ‘your cow’ at KBo 25.122 Rs. III 14’ (1980:205). KA offers consistency within the text, but it is unusual for Akkadian possessives to follow Hittite phonetic complementation (so Neu 1983:242 with n. 26). And given the representation of KA as a ligature in the fragment, reading GUD-K[A is excluded. In any event, the sign is at a break, and its context remains unknown.

The second very questionable occurrence of -ma is in ma-a-ah-ḫa-an-m[a at KBo 25.87 7’ (Neu 1980:167), but I suggest that the putative MA is rather a DA, giving mahḥanda[?a] ‘as’. The traces suggest MA, but are also consistent with some DA’s. Such MA’s are found in the Ritual for the Royal Couple (Otten and Souček 1969) and in the Storm Ritual (Neu 1970)—compare the signs represented in Rüster (1972, sign 166) for these texts. Compare also the DA’s at KBo 25.122 Vs. II 4’, Rs. III 3’, 5’, 7’. Reading MA would yield the only occurrence in Old Hittite of -ma following a consonant that is not -š (or -ẓ). Reading MA would also yield a rare cooccurrence of -ma with clause-introductory particle, here ta. mahḥan in initial or modified initial position is rare in Old Hittite (only one example having been found in the Ḥabiru treaty in a review of several of the larger texts), whereas initial mahḥanda is not uncommon. Along with these rare or unique occurrences are the unusual composition of the clay of the fragment and the surprising appearance of 4NISABA in an OH text (Neu 1980:165).

The occurrences of appan-anda at ABoT 4 oy. II 5 (corrected in KBo 17.1 to Rs. III 4) and at KBo 17.1 Vs. I 33’ seem to show word space, but the first autograph of the latter, KUB 34.119 5’, shows no space. There is no space at KBo 17.3 Rs. III 3, but here the text is on the edge, where a word space could easily be sacrificed. Otten and Souček consider the form one word (1969:110). Neu indicates the ambiguity with a parenthesized hyphen in his transcription a-ap-pa-an(-)an-da (1980:6, 9 and similarly p.15), but comes to consider it one word (1983:23). Three of the four attestations adduced by Puhvel (1984ff. 1-2:91-92) are written with a space, so OH scribes evidently considered the form to consist of two words at some level.
The OH texts from which Houwink ten Cate cites examples for -ma in environment 2, CTH 311.2.A and CTH 371 (1973:134), have since been reclassed as Old Hittite in NH and MH copies, respectively (Yoshida 1990:11-19; Oettinger 1979:578 for CTH 371).

This description employs an opposition of qualities which are more properly conceived of as two points on a cline of continuity.

The activation status of Gishtarpa may have been accessible, but it occurs nowhere else in the text as we have it at present. It is also possible that it is a (rather weak) focus of contrast, opposed perhaps to șina- ‘figurine’ of the preceding clause. Since strong contrast is not obvious, however, I favor interpretation as a new referent.

I understand this example of left-dislocation as establishing a topic, but Givón claims that left-dislocation, while used to retrieve referents at long distance to establish them as topics, is never used to introduce new topics into the discourse (1990:757-758). If this is true, then Gishtarpa could have an accessible information status if it is associated with the non-linguistic environment (Prince’s situationally evoked). Since it apparently is a ritual prop, this is entirely possible. If accessible, Gishtarpa would be identifiable, and eligible for establishment as topic. But we may not have left-dislocation here. It is also possible that Gishtarpa is not to be separated from I-anta to the degree that the English translation implies. While the translation seems acceptable, another in which I-anta is postposed to Gishtarpa to form a unit, as in #22, is also entirely acceptable: ‘But one woodpile lies at the king’s foot...’ Knowledge of Hittite prosody would have helped here.

Examples with topics are ##1-4, 5, 5, 7, 10, 13, 15-18, 20, 25, 29, 31, 32, 34.

Examples with topic switch are ##13, 17, 18, 23, 24, 31, and 34. Examples with no topic switch are ##1, 2, 3, 4, 5, 7, 10, 15, 16, 20, 25, 29, and 32. The 9 examples included in the expanded definition of switch are the 3 thetic clauses, ##28, 30, and 33, and the 6 presentational clauses, ##5, 6, 20, 22, 26, and 27.

Examples with subjects are the same 20 clauses with topics given in note 13, plus the 6 presentational clauses, ##5, 6, 20, 22, 26, and 27. The 14 examples with subject switch are
Examples with no subject switch are #1, 2, 4, 5.5, 7, 10, 15, 16, 20.5, 25, 29, and 32. The 3 examples included in the expanded definition of switch are the 3 thetic clauses, #28, 30, and 33.

A stronger correlation between subject switch and -ma results by including the person of the narrative. -ma coincides with subject switch in 75% (15/20) of the clauses in first-person narrative (including two hypothetical quotes), while in only 22% (2/9) of the clauses in third-person narrative do the two coincide.

I have treated referents as new when they first appear, but we can be sure that a referent is new only when we have the text preserved from its beginning to the point where the referent is introduced.

Neu reads this sign as -m[u, thus henkum[uš 'gift (acc.pl.)' (1974:14, 114-116), but Puhvel reads -n[i, thus henkun[i 'gift (dat.sg.)' (1984ff. 3:291, 4:128). Puhvel apparently objects to Neu's proposed morphology, but Puhvel's gloss 'to me for a gift' points up the problem of the missing predicate. An instrumental henkunit also seems possible, but raises the same question.

Examples with new foci are #7*, 9*, 16*, 20, 20.5*, 21, 22, 23, 24, 25, 26, 28*, 29. Examples with accessible foci are #1, 3*, 4*, 5, 5.5, 6, 10*, 13*, 17, 27, 29.5, 30*, 31*, 32, 33*, 34. Asterisks indicate which foci served as host for -ma. The two examples with indeterminate foci were #2 and #15. In both cases the clause with -ma essentially repeats the proposition of the preceding clause. #2: ...kuitman = aš lazziatta mān = aš lazziatta = ma ... '...until he recovers. And when he recovers...' #15: nepišz = aš = <š>ta dIM-unni dāššuš ēšta n = ašta dIM-unni = ma mān dāššuš ēšta 'He was dear to the Storm-god of heaven. But as he was dear to the Storm-god...' The essential difference between the clauses seems to be the presence of mān 'when, as', indicating that the process is complete (#2) or that the state is relevant as regarded from a point or period of time (#15), but focus is difficult to determine here.
Examples showing strong contrast are ##3, 4, 5, 5.5, 6, 7, 10, 13, 20, 31. In ##5, 6, and 20 the subjects of these nominal sentences, in each case *ki* ‘this’, were the foci of contrast, but the foci of the sentences were *šabha*n> = *mit* ‘my *šabhan* obligation’ for ##5-6, which were also contrasted, and *henkuwaš = šaš* ‘of his apportionment’. The example where -*ma* was not hosted by the focus of contrast was #5.5, in which the claiming of the land is contrasted semantically (*mimmai* ‘refuses’) rather than through negation.

Examples exhibiting parallel structure are ##2, 3, 4, 5, 6, 10, 13, 15, 31. The two which do not show contrast are #2 and #15.

Examples with demonstrative pronoun subjects are ##5, 6, 20. Examples with *takku* are ##5.5, 7, 10, 13, 31.

To these four may be added an example which is too broken to be included among the data used to determine -*ma*’s function, but which is consistent with other examples of contrast:

Laws I §71 (A Rs. III 58-60); #11

§ *takku* GUD-un ANŠE.K[(UR.RA ANŠE.GİR.NUN.N)]A ANŠE-in kuiški wemiezzi
[(n=an LUG)]AL-w[(an aşka unnai (ta)]kku utmiya=ma wemiezzi
[(n=an LÜMEŠŠU.GI-aš ḥinkanzi n=an=za)] türizzi män=an[,

‘§ If someone finds a (stray) ox, horse, mule (or) donkey, he shall drive it to the king’s gate. But if he finds (it) in the country, they shall present it to the elders. (The finder) shall harness it for himself. When it [...]’

For more information about the terms in this passage, please see the discussion of Laws §§40-41, examples (93)-(94), in §2.4.2.5.

Since it would be difficult to render a coordinating conjunction at the beginning of an apodosis in English, -*ma* is not translated here. It could be rendered with *then* or *in that case* here to connote both cohesion and adversativity. -*a* in Law §64 (#41) is translated similarly (see note 39).
The Anitta and Zalpa texts, as well as the ritual KBo 20.10+ and the instruction KBo 22.1, have not yet been included in this portion of the investigation. The Laws were not included because in this text, new generic referents are introduced in every law, so new subject referents are much more common, not only occurring as noun phrases, but also as the indefinite pronoun kuski 'someone'. For these five texts, investigation beyond emphatic focus has not been undertaken. One example of emphatic subject placed late in the clause, apan-pat 'that very one', occurs in the Laws (cf. #2), but -ma does not cooccur with -pat in the corpus.

The examples of orientation with adverbs are ##3, 21, 29, 29.5, and 32. The examples with oblique nouns are ##1, 7, 9, 16, 22, 26, and 27. The examples with man are ##2, 15, 17, 18, 20.5, 28, 30, and 33. It is sometimes difficult to distinguish adjuncts from arguments, especially with regard to clause-initial spatial expressions, although I have attempted to do so. The number of examples would only be higher if arguments were included.

Examples of change in orientation with foregrounded new information: ##16, 21, 22, 26, 29; with foregrounded accessible information: ##1, 3, 27, 29.5, 32.

Hoffner notes that if the referent of kuski 'someone' was a woman, the iwaru 'gift, inheritance, dowry' might well refer to a dowry (1997:55 fn. 177).

The 5 examples which introduce new referents outside special syntactic structures are ##1, 9, 16, 29, 34. The 1 prototypical example of contrast is #4, and those of orientation adjustment are ##2, 15, 20.5, 29.5, and 32.

Given Puhvel's rejection of a formation of kasha(-) 'lo, behold' from kash 'this' + -a (1984ff. 4:118-119), however plausible it may seem, 5 forms are not included here: 2 of kasha and 1 of kashata from StBoT 8, and 2 instances of kashatta from KBo 22.1. The ambiguous forms ka-lu-u-lu-pi-iš-mi-ta-aš-ta (i.e., kalulupi<1> <2>šmit <3>) 'with their finger(s) + -a? + -ašta [enclitic preverb]' (at StBoT 8 V. 19') and ú-ga-an '1 + -a' +
-an [enclitic preverb] (at StBoT 8 Vs. II 45 and Rs. III 29) are also excluded, although Rosenkranz considers -a to be present in these forms (1973:321-322).

32 The 25 occurrences of *parna šše s a šuwaizzi* are located in Laws §§4, 5, 7, 8, 11, 12, 13*, 19b, 20, 25, 57, 58, 59, 60*, 61*, 62*, 63, 67, 69*, 70, 77, 81, 82, 83, and 94. An asterisk indicates a significant break, although occurrence of the formula is certain. Two probable occurrences are in §3 and §96. Two possible occurrences are in §2 and §97.

33 Hoffner translates *parna šše s a šuwaizzi* as ‘and he shall look to his house for it’, in which the subject is the injured party (or his heirs), the oblique pronoun -še rather unusually refers to the inanimate compensation, *his* in the translation refers to the offender, and the -a is adversative -a, not -a/-ya (1997:17, 168f., 268 and passim). I propose an interpretation of *parna šše s a šuwaizzi* that makes a further comment on the liability of the offender: ‘and he shall look to (his own) house (to provide it) for him’. With this translation, -a is (additive) -a/-ya. The subject remains the same as that of the preceding clause, and -še has the injured party, an animate beneficiary, as referent. Similar grammatical relations are seen in the same Law §5 (cf. *dššu ššett s a šarnikzi* ‘and he shall make compensation for his goods’) and in Law §76: (If someone seizes an ox, horse, mule, or ass as pawn, and it dies at his place,) *apūn arnuzi kušša nššett s a pāi* ‘he shall deliver (the body of) that (animal), and shall pay its price.’ (Laws I A Rs. IV 4-5). In these the referent of the subject remains the offender, and the referents of the possessive pronouns (an oblique relation) are the parties suffering (fatal) injury. Regardless of the acceptability of my suggestion for the formula, however, the obscure semantics of the verb šuwaizzi and the unusual order of the enclitic pronoun -še and -a/-ya (assuming the impossibility of an analysis noun-plus-possessive pronoun for *parna šše* (via *parna šša + -ya*)) remain problematic for any analysis.

34 Examples of a clause with *karu* followed by a clause with *kinun s a* in the Laws are §§7, 9, 19b, 25, 57 (*karu* very likely in the break), 59 (with broken *(ki n[u-na])*, 63, 67, 69, 81, and 94.
I regard the lack of LÚ ‘man’ and presence of -li in GiSTUKUL-li in the last clause as significant, thus translation with the arrangement rather than the person.

-ma and -a also function the same way in independent clauses. This is nicely illustrated in a ritual (transcribed as no.34 in Neu 1980:89-92) where the activity alternates between a single officiant and other participants. The former calls out, those (apē=ma) pray to him in like manner, that (one) (apāš=a) calls out again, those (apē=ma) pray to him in like manner, and so on.

The 29 examples of -a in conjunction with subject switch are #35, 37-39, 41-44, 46-58, 62, and another 7 examples with kinun=a from the Laws, in §§9, 19b, 25, 57, 63, 67, and 81. The 9 examples introducing a new subject are ##39, 41, 43, 44, 51, 53, 56, 62 and the Laws §9. The 16 examples with a change in orientation are the 10 clauses with unbroken kinun=a from the Laws (cf. note 23; §7=#35), and ##43, 46, 48, 56, 59, and 60. The example of -a in a clause with mān is #48. The 2 occurrences of -a in a conditional protasis are #36 and #38. The 21 examples of -a in contrastive clauses are the 10 clauses with unbroken kinun=a from the Laws (cf. note 34; §7=#35), and ##36, 38, 39, 42, 45, 46, 49, 50, 51, 53, and 59. The example of -a occurring with special syntax is #56.

In 9 of the 11 clauses with kinun=a in the Laws (incl. 1 in §59; see note 23), the subject switches to generic 3.sg. from generic 3.pl. in the preceding karu-clause. (In §69 and §94 breaks prevent us from knowing about the verb.) In addition to the change in person, the verb form changes from iterative past to non-iterative present/future. The type of payment remains the same, although the amount is usually halved. Similar but more elaborate changes occur with the two adverb pairs in §9 and §25.

For another translation of peššiya-, see CHD P:322 (8b.-c.). This meaning seems to me better suited to Law §77a/b = (108).

One law contains -a at the beginning of an apodosis, the only unambiguous occurrence in the OH data considered here.
Laws I §64 (A Rs. III 43); #41

§ takku ANŠE.KUR.RA tūriyaws kuiški tāieazzi utteršed=a kīšpat x?\[ \] §

‘§ If someone steals a draft horse, his case (shall be) the (lit. this) same [?]. §’

-\textit{a} occurred at the beginning of an apodosis in #3, but this was also the beginning of a relative clause in a biclausal relative structure. In English it is difficult to translate a coordinating conjunction in such an environment, and I left the particle untranslated. See note 24. There would be an additional two occurrences of -\textit{a} at the beginning of apodoses if we accept 1) Hoffner’s emendation from U§ to ŠA in Law §40 (#5–#5.5), and 2) his interpretation of the second clause in the coordinated protasis in Law §99 (#44) as an apodosis (Hoffner 1997:47 with fn. 42, p.97). In all these cases, there is subject switch in the -\textit{a}- or -\textit{ma}-clause. This is perfectly consistent with -\textit{ma}’s use in later stages of Hittite (cf. §3.2.5, §4.2.5, §5.1.3).

\textsuperscript{40}Data for this section included material from broken passages of the OH copy of the Laws (KBo 6.2+), supplemented with material from the later duplicates. The occurrences of -\textit{ma} and -\textit{a} in the OH copy are certain, however. Occurrences of Sumerogram-Ca in conditional and temporal protases are considered to be attestations of -\textit{a} since -\textit{a}/-ya does not occur in this environment (§2.4.2.3). The numbers of laws which are substantially broken are enclosed in brackets. Line breaks in the Hittite passages in this section do not necessarily correspond to line breaks on the tablets.

\textsuperscript{41}The only laws in text A I have found with obvious cross-reference are §§64, 65, and 68, concerning theft of domestic animals, and §84, concerning the killing of a domestic animal. In the apodosis of each of these laws, the matter of compensation is declared to be the same as that of (presumably) the preceding law. §65 overtly refers to the law before the law before it (§63).
This could be grounds for recategorizing the activation status of 4-5 focal constituents from accessible to new, if activation status were found to be relevant for some aspect of Hittite grammar.
Chapter 3

-ma in Neo-Hittite

§3.0 Introduction

My study of -ma continues with an examination of its distribution and function in Neo-Hittite. After initial reports on the data and its sources in §3.0.1, I present information on the particle’s phonological distribution in §3.1. Notable here is that the occurrence of -ma has extended to unconditioned post-consonantal environments and has become much more frequent.

In §3.2 -ma’s syntactic distribution is presented, including its occurrence with forms that defer its position. Evidence is given that in cases involving longer Akkadographic and Sumerographic strings -ma nonetheless occurred after the first word of the clause. Interclausal data is also given, showing -ma’s not infrequent occurrence in resumptive clauses.

The function of -ma, the primary area investigated, is the subject of §3.3. I will show that -ma occurs in several contexts, those involving contrast; repeated form; series; counterexpectation; new referents; special emphasis, including variant word order and orthotonic pronouns; orientation, including paragraph-initial environments; and subject switch.

A quick survey of -a/-ya’s distribution and function in §3.4 shows many similarities between the two conjunctions, but also some important differences, including the correlation of -ma especially with contexts of contrast and orientation. We also see that in many cases -a/-ya continues to be used to connect closely related clauses.

§3.0.1 Texts and Data

The texts included for analysis were chosen with an eye to completeness and consistency across linguistic periods, as described in §1.5. Such a goal is recognized as limited from the outset, as there is in Neo-Hittite neither a newly composed set of laws nor...
contemporary rituals that are distinguishably unaffected by traditions within the genre. The texts used for Neo-Hittite (NH) historical narrative, thus in continuation of Anitta and Zalpa, are the Annals of Mursili (Götze 1933) and the Apology of Hattusili (Otten 1981), as well as the Treaty of Mursili with Kupanta-\textsuperscript{d}KAL (Friedrich 1926:95-179) and the Bronze Tablet (Treaty of Tuthaliya with Kurunta; Otten 1988). Continuing the OH Instruction (KBo 22.1) is the Instruction of Tuthaliya to the \textsuperscript{LÜ.MEŠSAG} (von Schuler 1957:22-34). The diplomatic Letter of Puduhepa (Stefanini 1964, Helck 1963) has been included, but the NH correspondence is so fragmentary (cf. Hagenbuchner 1989 1:29, 35, 157) that it is not possible to match the Middle Hittite correspondence in either its completeness or its domestic administrative nature. The sections of these documents analyzed for this study are given in note 1.

The number of occurrences of \textsuperscript{-}ma found in the corpus is given in the following table.

<table>
<thead>
<tr>
<th>Text</th>
<th>Secure</th>
<th>Unsure or in Broken Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annals of Mursili</td>
<td>131</td>
<td>30</td>
</tr>
<tr>
<td>Apology of Hattusili</td>
<td>73</td>
<td>1</td>
</tr>
<tr>
<td>Treaty with Kupanta-\textsuperscript{d}KAL</td>
<td>69</td>
<td>14</td>
</tr>
<tr>
<td>Bronze Tablet</td>
<td>98</td>
<td>1</td>
</tr>
<tr>
<td>Instruction to the \textsuperscript{LÜ.MEŠSAG}</td>
<td>24</td>
<td>10</td>
</tr>
<tr>
<td>Letter of Puduhepa</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>411</td>
<td>69</td>
</tr>
</tbody>
</table>

(See the appendix for a list of the citations of \textsuperscript{-}ma in these texts.) The following table shows the frequency of occurrence of \textsuperscript{-}ma in the sections considered suitable for inclusion:
As the table shows, -ma’s occurrence ranges from about 16% to about 30%, depending on the text, with an overall average occurrence of about 20%. After adjustments are made for the 3 clauses that have 2 -ma’s, the tally of clauses beginning with -ma used in the analysis is 408.

§3.1 Phonological distribution

In Neo-Hittite -ma occurs after consonants, vowels, and Sumerographic and Akkadographic forms, examples of which can be seen in (4)-(7). The following table summarizes NH -ma’s phonological distribution in the six texts analyzed:

<table>
<thead>
<tr>
<th></th>
<th>after C</th>
<th>after V</th>
<th>after non-phonetic writing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>214</td>
<td>74</td>
<td>123</td>
<td></td>
<td>411</td>
</tr>
<tr>
<td>52.1%</td>
<td>18.0%</td>
<td>29.9%</td>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

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(4) -ma after consonant:

(a) ILMS Rs. III 16; #1305

\[ \text{apāš}=\text{ma apāt memai} \]
\{ that.N-\text{ma} that.A says \}
‘\text{and that one says this: ...}'

(b) AM I.A Rs. III 44; #1032

\[ \text{HUR.SAGA} \text{Aššarpayan}=\text{ma dannattahhun} \]
\{ mountain:Aššarpaya.A-\text{ma} I emptied \}
‘\text{and I emptied the mountain(land) of Aššarpaya}'

(c) AH I 70; #1141

\[ \text{kaniššuwar}=\text{ma}=\text{mu ŠA dIŠTRA}=\text{pat GAŠAN-YA ėšta} \]
\{ favor -\text{ma} me.DL of Ištar herself Lady my was \}
‘\text{and the favor of Ištar herself, my Lady, was on me}'

(d) SvKK § 10 D II 19 (<A I 27); #1232

\[ \text{tuk}=\text{ma} \text{dUTU-ŠI kuit KUR-TAM ADDIN} \]
\{ you.DL-\text{ma} my sun which land I gave \}
‘\text{and the land which I, My Majesty, gave you}'

(e) BT Vs. 197; #1356

\[ \text{uit}=\text{ma mahhàn ABU-YA memian IŠME} \]
\{ he-came -\text{ma} when father-my matter.A he heard \}
‘\text{but when my father came to hear of the matter}'

(f) AM II.9.A Rs. III 12; #1104

\[ [iš]pandaz=\text{ma iyahḥat} \]
\{ night.AB -\text{ma} I marched \}
‘\text{and by night I marched}'

(5) -ma after vowel:

LPK Vs. 61'; #1282

\[ \text{karū}=\text{ma kuiṭš ġaššanteš} [\text{wjemīyanun} \]
\{ already -\text{ma} which.Nc born.PPL.Nc I met \}
‘\text{and the ones already born whom I met}'

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(6) -\textit{ma} after Sumerogram:

\begin{quote}
BT Vs. II 8; \#1358

\text{MUN} = \textit{ma} \ daškiddu

\{ salt \textit{ -ma} he shall take! \}

\textit{and} he shall take the salt
\end{quote}

(7) -\textit{ma} after Akkadogram:

\begin{quote}
SvKK §2 E I 9; \#1207

\textit{ABU-YA} = \textit{ma} \ tamēdani \ KUR-e ėšta

\{ father-my-\textit{ma} another.DL land.DL was \}

\textit{but} my father was in another country
\end{quote}

Hosts formed from Sumerogram or Akkadogram plus Hittite phonetic complementation were counted as Hittite forms since the final phone in such forms is present. However, hosts formed from a combination of Sumerogram or Akkadogram plus Hittite (usually proper) noun were counted with the Sumerograms and Akkadograms since the Hittite stem form ordinarily occurs here and the actual pronunciation of the host phrase is in doubt (cf. Friedrich 1960:22-23 §§3, 5a). An example of such a form is (8).

(8) AH II 61-62; \#1166

\begin{quote}
KUR \textit{URU} Ḫakpišša = \textit{ma} = mu \ KUR \textit{URU} Ištahara = ya \ İR-anni pešta

\{ land \ Ḫakpišša -\textit{ma} me.DL land Ištahara and servitude.DL he gave \}

\textit{but} the land of Ḫakpišša and the land of Ištahara he gave me in servitude
\end{quote}

It is not certain just how the phrase KUR \textit{URU} Ḫakpišša \textit{the land of Ḫakpišša\textquoteright} was pronounced. (For more on these \textit{‘Akkadographic’} or \textit{‘stiff’ forms see §3.2.3.}) Also included with the 36 such non-phonetic hosts were five examples of combination writings with apparently inflected forms, as in (9).
(9) AM II.7.A I 40-41; #1079

Lükûr Kûr ḫôn ištâmašzi
{enemy land river:Kummišmaḫa -ma when he hears }

‘but when the enemy of the land of the river Kummišmaḫa hears (about this)’

The final -(a)š of ḫôn Kummišmaḫa seems to mark the nominative of the entire noun phrase, but could also indicate the genitive. Because the pronunciation of these complex hosts is questionable, such forms have been included with the forms in the non-phonetic group.²

§3.2 Syntax

In Neo-Hittite, as in Old Hittite, -ma typically attaches to the first accented word in the clause, as seen above in (4)-(7), and here in (10) and (11):

(10) AM I.A Rs. III 79; #1040

mPiḫḫuniyaš=ma=mu EGIS-pa kiṣšan ḫatʁāš
{Piḫḫuniya.N-ma me.DL back in this way he wrote}

‘and Piḫḫuniya wrote back to me thus: ...’

(11) BT Vs. I 49; #1342

parauwaz=ma=šši ḪUR.SAG-az URUšăliyaš ZAG-aš
{high.AB -ma him.DL mountain.AB Šaliya.N border.N}

‘and on the side of the high mountain, Šaliya shall be the border for him’

Occurrence after the first word in a clause is the predominant syntactic position for -ma, but other positions are also attested, as summarized in (12).³
Syntactic Distribution of -ma

i) after the first word: 346 84.2%

ii) after the second word, involving one constituent: 40 9.7%
   ex.: [KUR URU Arzauwa] = ma

iii) after the third word, involving one constituent: 4 1.0%
   ex.: [LÜKUR KUR URU Durmita] = ma

iv) after the second word, involving two constituents: 18 4.4%
   ex.: [män] [LÜTEMU] = ma

v) after the third word, involving two constituents: 3 0.7%
   ex.: [män] [NUMUN = Tuthaliya] = ma

411 100.0%

Delaying -ma to the second or third word of the clause occurs in Neo-Hittite in the same contexts as in Old Hittite. These are a) with clause-initial män ‘if [NH]’; b) with the clause-introductory particle nu ‘and’; and c) with Akkadographic or Sumerographic writing (cf. §2.2).

§3.2.1 -ma with män

When the conditional subordinating conjunction män ‘if [NH]’ occurs in initial position in a clause with -ma, -ma attaches to the second word in the clause:

(13) SvKK §19 D IV 6; #1263

män = kan ERIN.MEŠ = ma ANŠE.KUR.RA.MEŠ warri lammar UL a[m] utti
[if PV troops -ma chariotry aid.DL immediately not you move ]

‘but if you do not move troops (and) chariotry immediately to my aid, …’

There are also examples where -ma attaches to män:

(14) LPK Vs. 65'; #1283

män = tma = a,t ANA ŠEŠ-YA UL Z[II]-za
[if -ma it to brother-my not desirable ]

‘but if it is not desirable to (you,) my brother’
And there are two examples in which -ma attaches both to mān and to the second word in the clause:

(15) SvKK §10 C 36; #1230-#1231

mān= ma=za apašila=ma kuiški URU-aš ešari
{if -ma RFL itself.Nc-ma some.Nc city.Nc settles }
‘and if some city settles down (by) itself (i.e., without permission)’

(16) SvKK §16 C 5-6; #1249-#1250

mān= ma=ttā/ dUTU-ŠI=ma kūn AWAT BAL ŪL ḥātāmī
{if -ma you.DL my sun -ma this.A matter insurrection not I write }
‘but if I, My Majesty, do not write you (about) this matter of insurrection’

(One other example has two occurrences of -ma within one clause, the subordinator in this case being the indeterminate relative pronoun kuiš, which itself connotes conditionality in part:

(17) BT Rs. IV 27; #1409-#1410

kuiš= ma=šši uwaš= ma pēdai
{who-ma him.DL trouble.A-ma brings }
‘but whoever brings him trouble’)

In the texts analyzed for this study, there are 10 examples where -ma attaches to mān, 14 examples where -ma attaches to the second word of the clause, and the 2 examples where -ma attaches to both. The last two types, along with the example in (17), represent 17 of the 18 examples of syntactic type iv) in (12) above. All 3 examples of syntactic type v), where -ma attaches to the third word of the clause, occur in clauses with mān.
§3.2.2 -ma with nu

Two clauses in the data contain both nu and -ma, seen here in (18)-(19). Example (18) is the last of the 18 examples of type iv) in the table in (12); (19) is broken and is not among the analyzed occurrences of -ma.

(18) SvKK §18 D III 48; #1257
nu = mu ŠA mÉ.GAL.PAP=ma memían ǧūdāk IŠPUR
{CC me.DL of É.GAL.PAP=ma matter.A immediately he wrote }

'—he wrote me immediately (about) the matter of É.GAL.PAP'

(19) LPK Vs. 14*: #3047
násš duwan=ma para x-it(-)x[
{CC he/she hither -ma forth }

'he/she? up until now ['

§3.2.3 -ma with Akkadograms and Sumerograms

Of the 408 clauses with -ma, 123 are written with Akkadogram, Sumerogram, and/or uninflected Hittite form, as described above in §3.1. Of these 123, 77 constitute only one syntactic argument, 69 occurring as host to -ma in initial position (as in examples (6) and (7)), 1 occurring in modified initial position (example (18)), and 7 occurring as -ma's host following mān (as in example (13)). Thus these 77 examples fall into syntactic distribution categories i) and iv) in the table in (12).

The remaining 46 hosts of -ma are written with some combination of Akkadogram, Sumerogram, and/or uninflected Hittite form:
### Multi-Part Non-Phonetic Hosts of \( -ma \)

<table>
<thead>
<tr>
<th>Two-Part Hosts</th>
<th># of examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sumerogram–Sumerogram</td>
<td>11 (3 with Akkadian preposition)</td>
</tr>
<tr>
<td>Sumerogram–Akkadogram</td>
<td>1</td>
</tr>
<tr>
<td>Akkadogram–Sumerogram</td>
<td>1</td>
</tr>
<tr>
<td>Sumerogram–Hittite</td>
<td>28 (8 with Akkadian preposition)</td>
</tr>
<tr>
<td>Hittite–Hittite</td>
<td>1 (#1113 = example (c), note 2)</td>
</tr>
</tbody>
</table>

### Three-Part Hosts

<table>
<thead>
<tr>
<th>Three-Part Hosts</th>
<th># of examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sumerogram–Sumerogram–Hittite</td>
<td>3</td>
</tr>
<tr>
<td>Akkadian–Akkadian–Akkadian</td>
<td>1 (with Akkadian preposition)</td>
</tr>
</tbody>
</table>

The 4 three-part hosts are the 4 examples of syntactic distribution type iii) in the table in (20). Three of the two-part hosts occur with \( mān \) and comprise the 3 examples of type v). This leaves 39 two-part hosts, and these are 39 of the 40 examples of type ii). (The last example of type ii) involves a fully inflected Hittite noun derived from a verbal compound:

(21) AH II 28; \#1153

\[ \text{Lū. MES} \text{pirān ḫuīyatallūṣ = } mā \text{ ēppūn} \]

\{ before runners. A \( -ma \) I seized \}

‘and I seized the leaders’

So the 46 examples with Akkadographic and Sumerographic combinatory writing, classified in (20), constitute all but one (example (15)) of the occurrences of \(-ma\) in ‘non-standard’ positions, i.e., second position or later if the combination occurs clause-initially, third position if the combination occurs with \( mān \).

Although there is some evidence that these combination writings might have been pronounced as units (cf. §3.1 above and note 2), there is also evidence suggesting that they...
were 'decrypted' and given good Hittite values when read. A clear example comes from the Bronze Tablet. Tuthaliya, in setting the borders of Kurunta's land, often employs the syntactic formula ABLATIVE(= ma = šši) — NOMINATIVE — PREDICATE. NOMINAL: The ablative expresses the area to be delimited, the nominative instantiates the delimitation, and the predicate nominal labels the delimitation (cf. §3.3.1.2), as in (22):

(22) BT Vs. I 64-66; #1351

... ḫTIU ZAG URU Walma = ma = šši
{ from border Walma -ma him.DL }
URU ḫuwaḫḫuwarwaš URU Alluprataš URU Kaparuwaš
{ ḫ. A. K. }
URU ḫaššuwantaš URU Walippaš URU Walas ZAG-aš
{ ḫ. W. W. border.N }

'and on the side of the border of Walma, / Huwaḫḫuwarwa, Alluprata, Kaparuwa, ḫaššuwanta, Walippa, (and) Wala (shall be) the border for him'

In (22) the ablative expression is written with a combination of the Akkadian preposition ḫTIU 'from', the Sumerogram ZAG 'border', and the uninflected Hittite stem Walma-, a placename; -ma follows the entire complex. Other examples occur at BT Vs. I 60 and 61.

Example (23) offers a syntactic equivalent written in Hittite:

(23) BT Vs. I 53-55; #1346

URU ḫauwaliyaš = ma = šši ZAG-za URU Walwaraiš URU ḫAR-ḫaššuwantaš
{ ḫauwaliya.AB-ma him.DL border.AB W. ḫAR-ḫ. }
URU Tarapaš URU Šamantaš URU Tūpišaš URU Paraiyaššaš / URU Nataš upati ZAG-aš
{ T. Š. T. P. N.G estate?.N border.N }

'and on the side of the border of ḫauwaliya, Walwaraiš, ḫAR-ḫaššuwantaš, Tarapa, Šamantaš, Tūpišaš, Paraiyaššaš / (and) the estate of Nata (shall be) the border for him'

Another such example occurs at BT Vs. I 50-52. In these cases the ablative is written in Hittite or with Hittite phonetic complementation, <-az> or <-za> for /-ats/, and the syntax, an instance of partitive apposition, is Hittite as well. -ma occurs after the first member of the
partitive apposition, even though the two members are closely connected semantically and syntactically. The Hittite reading of $\text{IŠTU ZAG } \text{Walma}=\text{ma}=\text{šši}$ in (22) would then almost certainly have been $\text{Walma}=\text{ma}=\text{šši } \text{irḫaž}$.

These two examples are located in a section of text in which the ablative is represented with Hittite inflection—the last combination writing occurs in Vs. I 35, and such writing begins again in Vs. I 60. If we can assume that Hittite vs. combination writing was a choice made by the scribe, rather than the author, then the preference for Hittite forms in this section offers us fortuitous confirmation of the Hittite reading of Akkadographic and Sumerographic equivalents.

A less precisely parallel pair of examples involving a genitive relation rather than partitive apposition can be seen in (24)-(25).

(24) AM I.A Vs. II 42-43; #1017

$\text{URU KU.BABBAR-aš}=\text{ma}=\text{za } \text{EN.MEŠ ERÍN.MEŠ ANŠE.KUR.RA.MEŠ}=\text{ya}$

{ $\text{Hattuša.G } -\text{ma } \text{RFL lords troops chariotry and }$}

kuin $\text{NAM.RA.MEŠ } \text{uwatet}$

{which.A civil-prisoners (he) brought }

'but the civil prisoners that the lords, troops, and chariotry of Hattusa brought (back)'

(25) AH IV 21-23; #1188

$\text{KUR.KUR.MEŠ } \text{URU Hatti}=\text{ma}=\text{wa}=\text{ka\[an\]}$

{ $\text{lands } \text{Hattuša } -\text{ma } \text{QU PV }$}

$\text{hūmanda } \text{dIŠAR } \text{ANA mHattušili andan } / \text{ neḫḫun}$

{all.A Ištar to Hattušili in I turned}

'but all the lands of Hatti I, Ištar, have turned to Hattušili’’

In (24) -$\text{ma}$ attaches to the first word of the clause, $\text{URU KU.BABBAR-aš } (= \text{Hattuša})$ ‘of Hattuša’, a genitive form ending with Hittite phonetic writing, whereas in (25) -$\text{ma}$ cliticizes to the end of a complex of Sumerian $\text{KUR.KUR.MEŠ } \text{lands’}$ and Akkadographic $\text{URU Hatti } \text{‘of Hattuša’ (Hatti most often being transcribed as though it were}
Hittite). We may expect the Hittite equivalent to have been Ḫattušaš = ma = wa = škan utne ḫūmanda 'but all the lands of Ḫattuša'.

It may be noted that even in combination writing, -ma tends to be attached to the same word it would be attached to if the complex were written in Hittite, as the combination writing NOMINAL-GENITIVE = ma is equivalent to Hittite GENITIVE = ma NOMINAL.

§3.2.4 Further Host Syntax

The grammatical categories of the hosts of the 411 -ma's are summarized in (26).

The distribution is rather different in some respects than that for OH -ma (see §5.1.3). In order to compare the occurrence of the grammatical categories of -ma's hosts against the occurrence of grammatical categories of initial-position constituents in general, the latter distribution from the Apology of Hattusili is included.

(26) Grammatical Categories of -ma's Hosts and of Initial-Position Forms

<table>
<thead>
<tr>
<th>Category</th>
<th>-ma's Hosts</th>
<th>Initial-Position Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>136</td>
<td>33.1%</td>
</tr>
<tr>
<td>Noun Phrase</td>
<td>63</td>
<td>15.3%</td>
</tr>
<tr>
<td>Pronoun</td>
<td>67a</td>
<td>16.3%</td>
</tr>
<tr>
<td>Adjective</td>
<td>17b</td>
<td>4.1%</td>
</tr>
<tr>
<td>Adverb</td>
<td>60c</td>
<td>14.6%</td>
</tr>
<tr>
<td>Negative</td>
<td>7</td>
<td>1.7%</td>
</tr>
<tr>
<td>Preverb</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Verb</td>
<td>10</td>
<td>2.4%</td>
</tr>
<tr>
<td>Conjunction</td>
<td>50d</td>
<td>12.2%</td>
</tr>
<tr>
<td></td>
<td>411</td>
<td>99.9%</td>
</tr>
<tr>
<td></td>
<td>142f</td>
<td>97.3%</td>
</tr>
</tbody>
</table>

a) 52 personal, incl. 7 demonstrative pronouns used for 3.sg.; 2 demonstrative; 6 relative; 5 distributive; 2 other. b) 4 attributive, 10 demonstrative, 1 relative, 2 distributive. c) 20 spatial, 27 temporal, 13 other. d) 38 mahhan/GIM-an, 10 mān, 2 kuitman. e) Nouns + Noun Phrases: 54.8% of clauses as compared to 48.4% for -ma's N+NP hosts. f) The remaining 4 clauses (2.7% of total) had the modal particle man in initial position.

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The distribution of the grammatical categories of initial-position forms in the Apology of Hattusili is roughly the same as that of -ma’s hosts, but there were more noun phrases and fewer of the other categories. Negatives and verbs occurred at a higher rate because the Apology contains a majority of the occurrences of each type (5/7 and 6/10, respectively).

The grammatical relations of the substantival categories are given in (27). An increase in the occurrence of -ma with nominatives and accusatives, relative to OH -ma, coincides with the NH particle’s expanded phonological distribution.

(27) Grammatical Relations of Substantival Hosts

<table>
<thead>
<tr>
<th>Noun</th>
<th>NP</th>
<th>Pronoun</th>
<th>Adjective</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>60</td>
<td>27</td>
<td>43</td>
<td>7</td>
</tr>
<tr>
<td>Accusative</td>
<td>29</td>
<td>20</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Genitive</td>
<td>8</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dative/Locative</td>
<td>21</td>
<td>6</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Ablative</td>
<td>19</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Allative</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>138</td>
<td>61</td>
<td>67</td>
<td>17</td>
</tr>
</tbody>
</table>

§3.2.5 Syntax with respect to Neighboring Clauses

In §2.4.2.5, the scope of OH -ma was determined to extend over its clause, as well as over a following main clause in complex sentences. This holds also for NH -ma. While an association between -ma and the information in its clause is assumed for most clauses (cf. example (29)), the association can in complex sentences be closer between -ma and the following main clause—compare example (44), where the relative presentation contains information already active and the resumption contains the new, contrastive information.

Of course, the association in complex sentences may be closer between -ma and the information in the dependent clause in which it occurs, as in contrasted conditional protases, although -ma’s scope still extends over the entire sentence.

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-ma links information in its clause(s) with information in clauses that have gone before. Usually this information has occurred in the clauses immediately preceding the clause with -ma, but occasionally -ma has greater referential scope, as when the content of its clause is contrasted with that of a distantly preceding clause (cf. example (46) with discussion).

Example (28) summarizes the occurrence of NH -ma in simple and complex structures (environments after Houwink ten Cate 1973:128; cf. §2.2 above):

<table>
<thead>
<tr>
<th>Environment</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a in an independent clause IC-ma</td>
<td>204</td>
<td>50.0%</td>
</tr>
<tr>
<td>1b in a protasis following another protasis DC DC-ma...MC</td>
<td>32</td>
<td>7.8%</td>
</tr>
<tr>
<td>2 in an apodosis DC MC-ma</td>
<td>37</td>
<td>9.1%</td>
</tr>
<tr>
<td>3 in a protasis DC-ma MC</td>
<td>128</td>
<td>31.4%</td>
</tr>
<tr>
<td>2/3 in the protasis of a complex apodosis DC (DC-ma MC)</td>
<td>7</td>
<td>1.7%</td>
</tr>
<tr>
<td>Total</td>
<td>408</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

As can be seen in (28), -ma most frequently occurs in environment 1a, between independent clauses, as in (29).

(29) BT Vs. II 34-37; #1363-1365

apedani=ma / mēhuni ABU-YA ŠEŠ MAHRÚ Lûtūhukantahiti tiyan ḫarta
ammuk=ma apêdani mēhuni LUGAL-iznani nawi taparriyan
{ me.A -ma that.DL time.DL kingship.DL not-yet designated }
ḫarta m̱LAMMA-aš = ma= mu apêdani mēhuni pāḏhašanut
{ he had Kurunta.N -ma me.A that.DL time.DL he protected }

'And at that time my father had set my older brother in line for the throne, but myself he had not yet designated for the kingship at that time, and Kurunta protected me at that time'
Quite frequently -ma occurs in environment 3, at the beginning of structures composed of dependent and main clauses. In (30) -ma attaches to the subordinating conjunction mahban 'when' in such a structure.

(30) AH III 53'-55; #1179

nuza hūmandan/İR-ahḫun GIM-an=ma=mu= kan mUrḫi-ḏU-uppaš eniššan
{when -ma me.DLPV Urḫiteššup.N thus }
[Š]A DINGIR-LIM aššulan aušta n=aš=mu aršaniyat
[of god favor saw }

‘and I subjugated each one. And when Urḫiteššup thus saw the favor of the goddess for me, he envied me’

Less frequently -ma occurs at the beginning of the main clause in structures with dependent–main clauses (environment 2) (see Appendix), in which case it is often difficult to render in English, as in (31).

(31) AM I.A Vs. I 4-5; #1001

... nuza ABU-YA kuwapi DINGIR-LIM-iš DÛ-at
mArnuandaš=ma=za= kan ŠEŠ-YA ANA GIŠGU.ZA ABI-ŠU ešat
{Arnuanda.N-ma RFL PV brother-my on wood:throne father-his sat }

‘... And when my father died (lit. became a god),
Arnuanda(=ma), my brother, sat upon the throne of his father’

Here -ma is found at the beginning of the main clause that follows the dependent clause with the temporal subordinating conjunction kuwapi ‘when’.

-ma also occurs less often between dependent clauses (environment 1b), as in (32), where we see it in the second of two conditional protases with mān ‘if’.
(32) SvKK §16 C II 30, 32-34; #1245-#1246

mān andurzaša ma kuiški ... /TI\ dUTU-šī BAL iyazi dUTU-šīšaša mān / ZAG-aḫmi
nu apūn antūḫšan našma apāt / ERIN. MEŠ ANŠE.KUR.RA.MEŠ šepmi

‘but if someone inside (Ḫatti) ... rebels against My Majesty, and if I, My Majesty, am successful (on my own), I will seize that person or that army (and) chariotry’

There are 6 examples in which both dependent clauses contain overt subordinators. I have included among the clauses in environment 1b 26 examples in which one or both of the dependent clauses has no overt subordinator, as in (33). (See Appendix.) Most of these fall under the scope of a preceding mān ‘if’ or conditionally construed našma ‘or (if)’.

(33) ILMS Vs. I 33'-35'; #1296

ṣ[n]ašmašsa EĞIR-ziaz istamašzi kuiški
[k]uitki INA E.GAL-LIM=šmašša OL memai
(in palace -ma it not tells )
nušši apadda=šya NIS DINGIR-LIM GAM-an GAR-ru §

‘§ Or (if) some one of you secretly hears / something, but does not tell it in the palace, then also that will be laid to him under the oath of the god § ’

Seven examples occur simultaneously in environments 2 and 3. While in this situation -ma occurs between dependent clauses and thus qualifies for categorization in environment 1b, I think it important to distinguish cases where both dependent clauses constitute part of a complex presentation (environment 1b) from cases where the second dependent clause forms part of a complex resumption (environment 2/3). In the latter situation the resumption itself contains both presentation and resumption; the dependent clause begins the larger-scale resumption (environment 2) but also functions as presentation to the smaller-scale resumption (environment 3).

The examples occurring in environment 2/3 are of two types. The first concerns examples where a dependent–main-clause structure is itself nested within a larger dependent–main structure. In (34) -ma is found at the beginning of a clause that is the
presentation in a biclausal relative sentence, and the relative sentence itself functions as apodosis to the preceding conditional protases.

(34) BT Rs. III 28-31; #1395-#1396

mān=ma ANA NUMUN =Tuthaliya nakkēṣzi kuitki
n=āš ŠA KUR URUḪatti LUGAL-iznani awan arḫa tiyazi
NUMUN mdLAMMA=ma kuit INA KUR URUḫ-tašša LUGAL-iznani artari
{descendent Kurunta -ma which in land Tarḫuntašša kingship.DL stands }
nu ANA LUGAL KUR URUḪatti kururiyâḫdu

‘And if something becomes (too) difficult for a descendent of Tuthaliya and he steps down from the kingship of the land of Ḫatti, the descendent of Kurunta( sma) that stands in kingship in the land of Tarḫuntašša, he shall fight for the king of the land of Ḫatti.’

The other examples are #1071, #1359, #1366, and #1392.

The second type involves examples where a dependent–main-clause structure constitutes the second element in a distributive kui- kui- ‘some ... the other’ construction, as in (35).

(35) AM II.7.A Vs. II 10-14; #1081-#1082

... EGIR-az=ma URUGašgaz / kūrūḪI.A mekki niniktat
nu KUR URUḪatti dammešḥair nu kuit KUR-TUM
ḥaninkir kuit= ma=za ęšantat= pat / n=at ḫarkir=pat
{what-.ma RFL occupied also}

‘And behind him enemies from the Gašga city mobilized much and attacked the land of Ḫatti. And the one land they destroyed, and the other that they also occupied, / they also destroyed it.’

Again -ma occurs at the beginning of a relative structure that forms the second part of a larger construction. The other example is #1015.
§3.3 Pragmatics

Following on the results presented in chapter 2, the investigation of -ma's function in Neo-Hittite deals with the pragmatic notions of focus; backgrounding; and, in place of topic per se, subject switch. While -ma appears to signal difference between its clause and the preceding discourse, the degree of adversativity understood by the audience varies with the context.5

§3.3.1 Focus

Considered as instances of focus are data exhibiting contrast, including counterexpectation; new referents; and special emphasis, as manifested by variant word order and by orthotonic personal pronouns. See §3.3.1.4 for findings on -ma's attachment to focal elements.

§3.3.1.1 Contrast

Contrast was defined above as an opposition of ideas among other possibilities. Here I distinguish two degrees of contrast, strong, like those found in the OH corpus, and weak, for which see §3.3.1.1.2. Although judgments as to the precise degree of contrast may vary from reader to reader, or even from reading to reading, the presence of a contrastive opposition should not be controversial. Also considered as special situations involving contrast are cases of series marking and counterexpectation.

§3.3.1.1.1 Strong Contrast; Repeated Form

In the NH data -ma occurred in 114 cases of strong contrast and 84 cases of weaker contrast (see Appendix). Thus contexts exhibiting contrast were found in 48.5% (198/408) of the clauses with -ma. Examples follow that show clear contrast between individual ideas. In (36) there is an opposition between capturing-and-delivering a traitor and potentially not performing these actions.
In (37) there is a similar opposition of negation, although the polarity proceeds from negative to positive due to negative connotations in the semantics of the verb *idalawah*—"to harm":

(37) SvKK §20 D IV 10-14; #1264-#1265

... *dUTU-Šlu*ta / kuin ERĪN.MEŠ ašandulan kattan dalıyanun n=an=z=an katta QATAMMA uški n=an luluwiški n=an=z=an SIG₃-in ėšša *idalawahiš*ma=an le kuitki mān=an *idalawahiš* ma/kuitki

{if *it.Ac you harm -ma somehow*
nu kāšma apattay*a* ANA PAN*I DINGIR.MEŠ waštaši

‘... and which occupation force / I, My Majesty, have left with you, look after it in like manner: Sustain it and treat it well and do not harm it at all. But if you do harm it / somehow then behold, also in that you sin before the gods’

We saw such contrast in conditional protases in Old Hittite, too. Of course, opposition of individual ideas also exists in independent clauses, here between the adjectives *idalu*—‘evil’ and *aššu*—‘good’.
Now behold, how the mighty Storm-god, my lord, is supportive of me; he does not consign me to evil, but has consigned me to good.

In (39) the referents LUGAL-iznani ‘into kinship’ and kuedani pidi ‘into whichever position’ are contrasted. Although their interclausal statuses are different, i.e., conditional protasis vs. resumptive relative clause, the intraclausal structure of their respective clauses is quite similar:

... mdLAMMA-aš=ma=mu apēdani mēhuni pahḥaššanut nu ANA ZI-YA šer kiššan lenkatta ABU-KA=wa=tta mān / LUGAL-iznani ŪL=ya tittanuzi kuedani= ma=wa= tta pidi / ABU-KA tittanuzi {whichever.DL-ma QU you.A position.DL father-your places } ṭuk=ma=wa tuk=pat pahḥašhi nu=wa=za tuel ĪR-iš ammuk=ma ANA mdLAMMA šer kiššan lenkun ṭuk=ma=wa tuk pahḥašhi

... and Kurunta protected me at that time and swore thus on my account: ‘Even if your father / does not install you in the kingship, to whichever(=ma) position / your father does place you, I will protect only you. / I am your servant.’ And I swore thus to Kurunta: ‘And I will protect you.’

The passage in (39) offers us additional examples of contrast with -ma. The reports of swearing (‘he swore to me ... and I swore to Kurunta’) are opposed, as are the contents of both oaths (‘I will protect you ... and I will protect you’). In examples like these, repeated, or nearly repeated, vocabulary and syntax constitute a temporary formula which can be exploited to oppose multiple referents. Example (40) contains another such case:
§ namma apāt kuit ēššatteni* nu KUR.KUR.ḪI.A
BA[L d]apiananda' I-ē'ta naiškitten
nu K[UR.KUR.]ḪI.A LÙKUR daššanuškitten
KUR.KUR URUḪatti=ma mališkunutten
{lnds Ḫatti -ma you.p weakened }

*§ Furthermore this which you (all) do: you have united / all the rebelling lands.
You have strengthened the lands of the enemy, / but you have weakened the lands of Ḫatti’
*[NI in ēššatteni collated per CHD L-N:361.]

Here KUR.KUR.ḪI.A LÙKUR ‘enemy lands’ is contrasted with KUR.KUR URUḪatti
‘lands of Ḫatti’, and daššanu- ‘strengthen’ is opposed to mališkunu- ‘weaken’. The
occurrence of repeated forms correlates highly with contrast in the examples with -ma. Of
the 104 clauses (25.5%) with -ma showing repeated form, 89 of these cooccur with
contrast (85.6% of clauses with repeated form; 44.9% of clauses with contrast). Of the 15
that remain, 13 cooccur with counterexpectation; the last 2 are members of series. (See
Appendix.) While repeated form cannot be considered a pragmatic environment
independently associated with -ma, it is strongly associated with contrast.

Repeated form also offers examples where one of the relations of contrast is
stronger than another. Although the toponyms Taqqasta and Talmaliya are contrasted
here, the central opposition appears to be between apēz ‘on that side’ and kēzza ‘on this
side’:

(41) AH II 32-33 (with B Vs. II 16-17); #1155
... nu=šši apēz KUR URU Taqqastaš ZAG-aš ēšta
kēzza= ma= šši URU Talmaliyaš ZAG-aš ēšta
{this. AB -ma him.DL Talmaliya.N border. N was }

‘on that side the land of Taqqasta was the border for him,
but on this side Talmaliya was the border for him’
In a similar way, in (42) the predicates wherein one son remains ‘in’ the sea and the other departs from the sea contrast quite plainly, but the main opposition would seem to be between the one son and the other.

(42) AM I.A Vs. II 50-54; #1018, #1019-#1020

§ mahhan=ma ḥamesḥanza kišat nu mŪḥa-LŪ-iš kuit GIG-at
n=|[aš=ka]n aruni anda ĕšta DUMU.MEŠ-ŠU[[NJ]]=ya=šši kattan ĕšir
nu=kan mŪḥa-LŪ-iš aruni anda BA.UG6 DUMU.MEŠ-ŠU[[NJ]]=ma=za arṭa
šarrandat nu=kan I-aš ŠÀ A.AB.BA=pat ĕšta
I-aš=ma=kan / mT1Tapalazunawliš arunaz arṭa uit ...
1.N -ma PV Tapalazunawli.N sea.AB away came }

‘§ And when it became spring, since Uḥḥaziti had fallen ill, he had been (residing at a location) in the sea, and his sons were with him. Now Uḥḥaziti died ‘in’ the sea, but his sons / parted: one (stayed) ‘in’ the sea, but one, Tapalazunawli, went away from the sea’

Likewise, in (43) the primary contrast is between zik ‘you’ and anzāš ‘we/us’, rather than disloyal vs. loyal behavior.

(43) SvKK §26 A IV 14-15; #1269

... nu kiššan memir zik=wa
\[ITT\] dUTU-ŠI waštaš anzāš=ma=wa=nnas ṢR.MEŠ dUTU-ŠI= pat
{ we -ma QU us servants my sun only }

‘ ... and they spoke thus: ‘You have sinned against His Majesty, but we (are) servants of His Majesty alone’ ‘

Contrast with -ma is by no means required to be expressed with such closely parallel forms as those presented heretofore; compare the first opposition noted above in (39). In (44) Hattusili boasts about attention paid him that eluded his predecessors. Here we see repeated vocabulary, but the syntax is less similar: independent clause vs. relative structure.
n=at=mu āššauwaš=pat memiyyanaš kisantat
LŪ.MEŠ TEME=ya=mu utškiwan ti̇r uppeššar HI.A=ma=mu
uppiškiwan ti̇r uppeššar HI.A=ma=mu kue / uppiškanzi
{ gifts.pAn -ma me.DL which.pAn they send }
n=at ANA ABBAHI.A Û ABBA ABBAHI.A / ÛL kuedanikki uppir

' (those already established kings) remained in the same good relations with me:
they began sending me envoys, and they began / sending me gifts. But the gifts that they
send me, they did not send them to any of my fathers / or forefathers' 

In (45) we see an example where the influence of repeated form is negligible. Harmima,
the subject of a nominal sentence, is contrasted with Upaššana, the first object of the
ditransitive verb iya- 'to make'.

(45) BT Vs. I 45-47; #1338, #1339, #1340

... n=aš=kan ANA dUTU-ŠI āššanza URU/Zarnušaššaz=ma=šši
URU/Harmimaš ZAG-aš ēšta dUTU-ŠI= ma=šši URU/Upaššanaan ZAG-an / iyanun
{ my sun -ma him.DL Upaššana.A border.A I made }
URU/Upaššanaš=ma=kan IN A KUR İDḪulaya āššanza §

' (The TUKUL-obligation is) left to My Majesty. And on the side of Zarnušašša
Harmima was his border. But (I,) My Majesty(,) have made Upaššana his
border. But Upaššana (is) left to the land of the Ḫulaya River. §'

Repeated form, along with -ma, can also help to signal contrast at a distance.

(46) SvKK §15 C II 13-14; #1241

§ mān=ma zik mKupanta-dKAL-aš zilatiya dUTU-ŠI
{ if -ma you.N Kupanta-Kurunta.N in future my sun }
DUMU.MEŠ dUTU-ŠI AŞŠUM BELUTTIM OL pahhašti
{ sons my sun regarding lordship not you will protect }

' § But if you, Kupanta-Kuranta, do not protect My Majesty
(or) the sons of My Majesty with respect to lordship in future, ... ' 

The formulaic phrase in (46) about protecting the king and his progeny occurs often in the
treaties and the instruction, sometimes with minor syntactic variations, but normally with
positive polarity and imperative verb forms. In the text as it is preserved, the positively asserted phrase occurs most recently some four paragraphs before the attestation in (46), where it appears to have occurred twice (§11 D II 35-36, 41-?)—a break in the tablet prevents certainty. Given its frequent occurrence and the intervening gap in the text (23 lines of partial preservation plus an actual gap), it is unlikely that these were the occurrences of the phrase which the attestation in (46) parallels. However, its antecedent must have occurred at least 12 lines (13 clauses) before the attestation in (46), because it is absent from these lines. (That a paragraph (§14 C II 11-12) intervenes is of less significance since it comprises but one clause and continues the discourse topic of the final clauses of the preceding paragraph (§13) (Friedrich 1926:118-122).) This example is useful both for demonstrating that contrast can be expressed over sizeable sections of text, and for showing the devices by which this is accomplished.

§3.3.1.1.2 Weak Contrast
Whereas strong contrast is the striking opposition one typically considers to be contrast, weak contrast involves an opposition that is less robust.

In (47) there is a two-part opposition, between ŠEŠ-YA mNIR.GÁL ‘my brother Muwatalli’ and ammuk ‘I’ on the one hand, on the other between Muwatalli’s position as king and Hattusili’s position as army commander.

(47) AH I 22-24; #1132, #1133, #1134
§ mahḥan=ma=za ABU-YA mMuršiliš DINGIR-LIM-iš kišat
ŠEŠ-YA=ma=za=kan mNIR.GÁL ANA GišGU,ZA ABl-ŠU ešat
ammuk=ma=za ANA PANI ŠEŠ-YA EN.KARAŠ kišaḫat
{I -ma RFL before brother-my lord.army I became }

‘§ And when my father Muršili died (lit. became a god), my brother Muwatalli set himself on the throne of his father, and I became the commander of the army before my brother’
The contrastive force in this example is rather mild. The primary reason for this is that the role of the king and the role of the army's commander are not in opposition a priori, in fact ANA PANI ŠEŠ-YA 'before my brother' asserts the relationship of service of the latter. A secondary reason for the mild contrast is that, although Muwatalli clearly becomes king in the second clause, the word for king is absent, and this mitigates the force of the opposition.

Similarly in (48), the king and his progeny did not stand in opposition in the real world, but do so in the linguistic context, such that the force of the opposition is rather weak.

(48) ILMS Vs. I 36'-37'; #1297

§ AŠŠUM EN-.UTCUTTI dUTU-ŠI pahhašten kattam ma NUMUN dUTU-ŠI / pahhašten
{down-ma progeny my sun you.p protect!}

'§ Protect My Majesty as regards lordship, and subsequently protect the progeny of My Majesty'

The weak contrast in (49) concerns LÚKÚR 'enemy' vs. EN DINI 'legal opponent' and LÚ.MEŠ asanatalla- 'enviers'. Although the one is opposed to the two, the force of the opposition is not nearly so great as that between 'good' and 'evil' in (38) above.
... nu=mu Dingir-Lum Gāšan-Ya kwayami mējuni / UL kuwapi kki šer tiyat
ANA LuKūr=mu / piran katta UL kuwapi kki tamaš
UL=ma= mu ANA EN Dini-Ya Lu.MESš aršanatallaš / kuwapi kki piran katta
{not -ma me.A to lord case-my enviers.DL ever before down}
tamaš
{ she left }
mān=aš INIM LuKūr / mān=aš INIM EN Dini mān=aš INIM E.LUGAL kuiški
nu=mu dištar=pat Gāšan-Ya hūmandaza špalahšā UGU šarta

'... And the goddess, my lady, never left (lit. stepped over) me at a critical time,
she never abandoned me to an enemy,
Nor did she ever abandon me to my legal opponent (or) to (my) enviers.
Whether it (was) a matter of an enemy, whether it (was) a matter of a legal opponent,
whether it was some matter of the palace,
Ištar herself, my lady, protected (lit. held her palahša-garment over) me in every (matter)'

Again, the contrast comes from the linguistic presentation, rather than any internal
opposition between or among the members. This is confirmed in the following mān-
clauses, where each of the three members is listed as a separate option. In spite of repeated
form in the (mildly) contrasted clauses, the contrastive force is weak. In fact, the second
clause with -ma seems quite additive.

§3.3.1.1.3 Series

-ma can be used to signal members in a series that occur subsequent to the first
member. Here a series was considered to be three or more clauses constituting
approximately equally important components of some overarching event or situation. The
series is thus arbitrarily distinguished from structures with two members standing in
obvious opposition, as in (41)-(42), but the use of -ma in both structures should be related.
§ And the whole land of Arzauwa fled. Some inhabitants went to the mountain of Arinnanda and seized the mountain of Arinnanda. But other inhabitants went forth into Puranda and seized Puranda. But (still) other inhabitants went over the sea with Uhhaziti.'

Here we see -ma marking the last two clauses in the three-part series of kui- clauses. The distributive construction with kui- kui- ‘some...the other’ typically comes in two parts.

I identified 76 examples forming parts of series of various lengths, a frequency of 18.6% (76/408). (See Appendix.) Contrast correlates highly with series-marking -ma: 62 of the 76 examples (81.6%) exhibit some degree of contrast. It is unsurprising that repeated form is also frequently found in these examples; 47 of 76 (61.8%) show some degree of repeated form. The 76 examples occur in 17 series, which can be compared to 43 cases of -ma-marking in two-part structures. Of these 43, 33 (76.7%) showed contrast, and 16 (38.1%) had repeated form.6 (See Appendix.)

Two examples demonstrate particularly well how -ma marks series members.
(51) AM II.10 Vs. II 5-9, 14-17; #1114-#1119

... nu pāun KUR URUTaggašta/ḫarminkun
parā= ma KUR URUİštalubba/ḫarminkun
{further -ma land İštalubba I destroyed }
parā=ma KUR URUKappupuwa/ḫarminkun parā=ma KUR URUḪutpa/ḫarminkun
(6 clauses detailing events at Ḫutpa)
§ parā=ma KUR URUZagapūra ḫarminkun
parā= ma KUR URUKašiPa pāun nu KUR URUGašiPa/ḫarminkun
{further -ma land KašiPa I went }
parā=ma /INA HUR.SAGGapagapa šara / [pāun ... ]

'... And I went (and) destroyed / the land of Taggašta, and furthermore I destroyed the land of İštalubba, and furthermore I destroyed the land of Kappupuwa, and furthermore I destroyed the land of /Ḫutpa (6 clauses)
§ And furthermore I destroyed the land of Zagapūra,
and furthermore I went to the land of KašiPa and I destroyed the land of GašiPa, and furthermore I [went] up to the mountain of /Gapagapa ...

Although the parallelism in form deteriorates somewhat at the end, the series structure is clear in this description of a campaign against the troublemaking Gasga tribes.

The second example of an extended series with contrast and repeated form is (52):
(52) AM II.9.A Vs. II 20-34; #1096-#1100, #1102

(20) §[IŠTU] URU Timmūḫala kēz URU Zimummuwaš irḫāš
[kēz = ma=kan URU Tiyaḫšiltas QADU A.ŠA A.GAR-ŠU
{this.AB -ma PV Tiyaḫšiltas.Nc with field meadow-its }

(22) [AN]A URU Timmūḫala šipandūanzi anda appanza / (23)...
in Timmūḫala to sacrifice in taken.Nc }

(24) ... kēz = ma=kan (26) ... apāt BĀD.KARAŠ irḫāš
{this.AB -ma PV that fortified camp border.N }
[kēz = ma=ššī URU Tašmahaz URU Ziyantiškaš
{this.AB -ma him.DL Tašmaha.AB Ziyantiška.N }

(28) ... irḫāš edizzaz=ma=ššī URU Kazzapaz BĀD.KARAŠ
{border.N that.AB -ma him.DL Kazzapa.AB fortified camp }
ŠA ABI dUTU-ŠI irḫāš edizzaz=ma= ššī
{of father my sun border.N that.AB -ma him.DL }

(30) URU Tapapanuwaz (31) ... šarāzziyatar irḫāš / (32)...
{Tapapanuwa.AB peak.N border.N }

(33) ... edizzaz=ma=ššī URU Tamettašaza / URSA Gluhiniš irḫāš
{that.AB -ma him.DL Tamettaša.AB mountain: Gluhini.N border.N }

'S On this side (of) Timmūḫala, Zimummuwa (is) the border,
and on this side Tiyaḫšiltas with its fields (and) meadows
(is) included in Timmūḫala for sacrifice. / ...
... And on this side ... that fortified camp (is) the border.
And on this side (of) Tašmahaz, Ziyantiška
(is) the border for him, and on that side (of) Kazzapa, the fortified camp
of the father of My Majesty (is) the border for him. And on that side (of)
Tapapanuwaz, ... the (mountain) peak (is) the border for him. /...
... And on that side (of) Tamettaša, / the mountain Gluhini (is) the border for him'
*[I.21 [ke-]le-jez]

This example may be compared with the lengthy border-setting section in the Bronze Tablet
(Vs. II 26-67).

An example of a series of actions which are not contrasted with each other is (53).
Although the clauses marked with -ma are not contrastive, they are counterexpectational. The king will want to know about contacts an extradited person has, and the acts of concealing a messenger's visit and not telling the king conflict with the behavior expected in this situation. No series marked with -ma has a sustained sequence of clauses without either contrast or counterexpectation.

In (53) it is possible that the -ma's are functioning at different levels, where the first one signals a major instance of counterexpectation, expressed by its clause and the following clause. The second -ma would then link its clause locally to the preceding -ma-clause. I prefer the non-hierarchical reading where each -ma links its clause to the preceding one, as occurs among strings of conditional protases elsewhere in the NH data. Here the second -ma-clause can be taken as appositional to the first, with -ma repeated as a way of maintaining its (usual) scope. It is probably impossible to determine whether one reading occurs to the exclusion of the other, however.

A minor type of series has -ma marked on only the final member.
And all the Gašga lands made war; they entirely destroyed the land of Sadduppa and the land of Dankuwa, and (they) set down in Pittiyariga

I identified 14 examples of this type, which cannot be far from a summarizing function. I include here the colophon of the Bronze Tablet (Rs. IV 46-52). Although the disposition of the seven copies of the treaty is presented in what is technically two clauses, the first six are listed together, and -ma occurs only in the second clause dealing with the seventh and final copy.

§3.3.1.1.4 Counterexpectation

-ma occurs in clauses with information that is contrary to expectation, that is, information that conflicts in some way with the expectations that the audience has formed regarding it from interpreting the text up to that point. I identified 63 examples of clauses with counterexpectational information among the 408 -ma-clauses (15.4%) (see Appendix).

Since identifying cases of counterexpectation depends crucially on understanding the intentions of the author, more so than in cases of contrast, for example, the occurrence of which is normally rather clear, it may be that only the most obvious cases of counterexpectation are perceptible to us and that more subtle cases evade our detection. One context where counterexpectation is fairly clear is that in which someone behaves disrespectfully toward the king, as in (55).
nu tuk mKupanta-dKAL ANA mPš.TUR-wa DUMU-anni [piḫḫuN]
namma KUR URUMië KUR URUKuwaliya=ya ANA mPš.TUR-wa SAL-Muwa[ttiya]
tuqq=a ANA mKupanta-dKAL=ya šer linganunun
namma dUTU-ŠI mPš.TUR-wan pahḫasḥat n=an ŬL k[u]tki [idalauw]aḫḫuN
mPš.TUR-waš=maš=mu sšan šullit nusuš=mu KUR URUPitašša LÚ.MEŠ URUḪat(ti=ya)
{Mašḫuiliwa.N-ma me.Ob PV quarreled}
ĪR.MEŠ-YA kattan ḫarmamniyat man=mu menaḫḥanda ku[ruriaḫta] §

‘(Mašḫuiliwa requested my approval of you as his adoptive son.)
and [I gave] you, Kupanta-Kurunta, to Mašḫuiliwa (as) son.
Furthermore, I had the land of Mirā and the land of Kuwaliya
swear (allegiance) to Mašḫuiliwa, to (his wife) Muwa[tti], and to you, Kupanta-Kurunta.
Furthermore, I, My Majesty, protected Mašḫuiliwa and [harm]ed him not at all.
But Mašḫuiliwa quarreled with me and incited the land of Pitašša and the men of Ḥatti,
my servants, against me, and would have [made] w[ar] against me. §’

Here Mursili has shown Mašḫuiliwa much favor by approving the latter’s choice of heir,
securing the position of the two among their neighbors, and supporting Mašḫuiliwa in
general. As the audience we recognize that Mašḫuiliwa should behave with respect and
gratitude toward the king, and what we find instead is that he has first challenged Mursili’s
authority by quarreling with him, and then has attempted to undermine his authority by
conspiring against him. -ma occurs in the first clause that reports an act of surprising
disrespect. Another excellent example can be found at AM I.A Rs. III 77-86 (#1040), in
which Mursili receives an insolent response to his request for the return of his servants.
And above in (53) we saw an example in which -ma occurs in clauses that contain
information that is similarly contrary to expectation, describing inappropriate behavior
vis-à-vis the king.

In (56) the information that is contrary to the addressee’s expectation concerns
Kurunta’s lack of guilt.
§ ABU-YA kuwapi mḪattušiliš ANA mŪrḫiteššupaš
DUMU mMuwatalli menaḫḫanda kururiaḫta
n=an LUGAL-iznanni arḫa tittanuṭ
ANA mdLAMMA=ma=kan waštul UL kuitki āšta
{ to Kurunta -ma PV sin.Nn not any.Nn it remained
LÜ.MEŠ URUḪatti kuit imma kuit waštir
mdLAMMA-aš=ma=kan UL kuwapikki anda ėšta
{ Kurunta.N -ma PV not in any way in he was }

'§ When my father Hattušili began hostilities with Ur-hitessup, the son of Muwatalli,
and removed him from the kingship, there remained on Kurunta(=ma) no sin at all.
(In) whatever (way) the men of Ḫatti sinned, / Kurunta(=ma) was not in(volved) at all'

It is only natural to assume that in the struggle between Hattusili and Urḫiteššup for the
kingship, both men should have had supporters, and that in Urḫiteššup's case, this would
have included his brother Kurunta, as well as other Hittite individuals. These people
would have shared Urḫiteššup's 'guilt' when he did not prevail. Such co-culpability is
referred to in Mursili's treaty with Kupanta-Kurunta at SvKK §7 C I 14-17 (and implied at
§11 D II 26-31). In (56) Kurunta's lack of guilt, asserted in clauses with -ma, can be
considered to counter typical expectations of brotherly loyalty.

In (57) we find that Ḫutupiyanza succeeds in securing the land of Palā despite the
difficulties detailed in the clauses preceding the report.

(57) AM II.7.A Vs. II 20-27; #1084, #1085, #1086

... nu ABU-YA / uni mḪutupiyanzan DUMU mZidā GAL MEŠEDI INA KUR URUPalā
watarnāḫta KUR URUPalā=ma UL kuitki / paḫḫaššanuwan KUR-TUM ēšta
URU BAD EGIR-pa appannaš AŠRU NU.GAL kuiški / ēšta dagān esanta=at KUR-e ēšta
mḪutupiyanzaš=ma KUR URUPalā paḫḫaštat
{Ḫutupiyanza.N -ma land Palā secured }
KARAŠ=šši UL kuitki kattan ēšta
{army -ma him.DL not at all down it was }

'... And my father / ordered this Ḫutupiyanza, son of Zidā the chief MEŠEDI, into the land
of Palā. Now the land of Palā / was not at all a secure land.
There was no fortified city (or) place of / withdrawal. It was an (entirely lost) land.
But Ḫutupiyanza secured the land of Palā, and there was no army at all with him.'
Hutupiyanza’s achievement foils the addressee’s expectations all the more in that he apparently acted without the aid of an army. Note that -ma occurs in both clauses containing information that is contrary to expectation.

When Tuthaliya sets the borders for Kurunta, he typically names cities (townships?) that serve as the limit of Kurunta’s land, but these cities invariably remain outside his realm.

(58) BT Vs. I 26-28; #1323

\[
\begin{align*}
\text{nu} & \text{š} \text{i} \ \text{iŠTU KUR} & \text{URUPitašša iŠTU ZAG} & \text{URUArimmatta} \\
\text{URUNahḫantaš} & \text{URUHauteššaššš-a ZAG-aš} \\
\text{URUNahḫantaš-maš kan} & \text{URUHauteššaššš-a /NA KUR IDHulaya aššanteš §} \\
\text{NA} & \text{Hautašša. Nc and in land Hulaya remain. PPL. P Nc} \\
\end{align*}
\]

‘And on the side of the land of Pitašša (and) on the side of the border of Arimmatta, Nahḫanta and Hautašša (are) the border for him. But Nahḫanta and Hautašša (are) left to the land of the river Hulaya §’

In these examples, an expectation might be formed wherein the city named as a border-area will become part of Kurunta’s territory, but each time the expectation is countered, in a clause with -ma, with the city’s assignation to another country. Example (58) is the second occurrence of a border-setting formula that Tuthaliya employs for another 40 lines. With each occurrence the expectation and countereception must diminish in force; if the audience was unfamiliar with this probable formula, they would have caught on after a short while. Even so, I have included all such cases as examples of countereception (13/63 = 20.6%).

A context I have not included as countereception is one very common in the treaties and in the instruction, in which the king prescribes some action, and after so doing, describes what will happen if the action does not take place, usually in a clause with mān ŬL-ma ... ‘but if ... does not ...’, as in (36) (or (37), with opposite polarity). The direct opposition of the inappropriate action to the appropriate one is primarily a relation of contrast rather than of countereception.
§3.3.1.2 New Referents

In addition to contrasted ideas, an idea new to the discourse is fairly certain to be the focus in its clause. If a new referent is not the focus per se, it is certainly salient, thus highly informative and focus-like. Of the 408 clauses with -ma in the NH data at least 105 (25.7%) contain a referent that is inactive in the audience’s consciousness and is thus new when it occurs. Of these 105, 65 have new subjects (61.9%). Twenty-three of these 65 subjects occur in initial position (35.4%), and 42 (64.6%) occur in at least second position. (See Appendix.) Of the latter, 21 examples occur in either of two similar border-setting formulae employed in four of the six NH documents analyzed.

The first formula, employed by Mursili and Hattusili, has this form, as seen in (59):

ABL.DEM.PRO=ma=DAT/LOC.PRO—(ABL—)NOMINATIVE—PREDICATE.NOMINAL.

(59) AM II.9.A Vs. II 27-28; #1098

[kē]z= ma= šši URU Tašmaḥaz URU Ziyantiškaš / irḫaš
{this.AB-ma him.DL Tašmaḥa.AB Ziyantiška.N border.N }

‘And on this side (of) Tašmaḥa, Ziyantiška is / the border for him’

The ablative demonstrative pronoun is either kēz(za) ‘on this side’ or edizza ‘on that side’; the optional ablative complement can be considered a specification of the pronoun standing in partitive apposition to it (cf. Götze 1933:260-261). The dative-locative pronoun is usually -ši ‘to him’, i.e., the person governing the land whose borders are being determined. The nominative argument is the place forming the boundary, and the predicate nominal is either irḫaš or ZAG-ás ‘border’. The copula is normally absent. There are 5 examples of this formula with new subjects in AM, AH, and SvKK. Example (59) shows a clause already given in (52), where other examples of the formula can be seen.9

Tuthaliya favors a variation without ablative pronoun, as seen in (60): ABL=ma=DAT/LOC.PRO—NOMINATIVE—PREDICATE.NOMINAL. Here the ablative complement may have either ablative inflection or appear with the Akkadian preposition IŠTU ‘from’. The
formula appears 16 times with new subject in the Bronze Tablet, as in (60). Other examples can be seen in (11), (22)-(23), and (45).

(60) BT Vs. I 32; #1327

URUššaz= ma= šši URUZaratāš ZAG-aš
{ Šša.AB -ma him.DL Zaratā.N border.N}

‘And on the side of Ušša, Zarata (is) the border for him’

Both variants of this formula provide a strategy for introducing new subjects in a position other than initial position, although the orienting ablative is not necessarily any more active in the audience’s consciousness than is the subject. The formula may occur without -ma if it is the first (or only) delimitation, and the occurrence of -ma may thus be attributed also to series marking. Another construction, which we saw in chapter 2, in which new subjects are introduced late in the clause, DATA(X*ma-SUBJECT(-COPULA), occurs 10-15 times among the clauses with -ma. In these cases, -ma does not mark the focal constituent per se, but does occur with focal new referents.

New referents also occur in relative clauses, the primary function of which is to (re)introduce a referent not currently active in the consciousness of the audience. Typically a referent is introduced or recalled, depending on its activation status, in a relative clause, and so becomes active (or topical) for the following resumptive clause, as evidenced by the referent’s instantiation there as a personal or demonstrative pronoun, or as zero (Holland 1984:617).
... And on the side of Wanzataruwa / and Kunzinasa, the mountain Arlanta (and) the city of Alana (are) the border for him. And Alana (is) left in the land of the river Hulaya. But the water which (is) up in the mountain Arlanta, it (is) left to the land of the river Hulaya and to the land of Hatti both §'

The noun *watar* 'water' is first mentioned in the relative clause, where identifying information about it is also presented. It becomes topical for the resumptive clause and is there referred to with the pronoun -at 'it'.

Among the 408 -ma-clauses there are 48 non-distributive relative clauses (11.8%). (See Appendix.) Information about 3 of these is compromised by breaks, but of the 45 clear examples, 32 relativized referents are new (71.1%), and 13 have semiactive status (28.9%). Seven of the new referents are indeterminate relative forms, and 12 are referents that are mentioned earlier in their texts but that are specified further in their relative clauses. For example, Tuthaliya mentions his progeny, NUMUN =Tuthaliya, at BT Vs. II 69, but later at BT Rs. III 21-22 (#1391) he makes this more specific: ...NUMUN =Tuthaliya = ma kuit INA KUR URUHatti LUGAL-iznani artari '...the progeny of Tuthaliya that stands in kingship in the land of Hatti'. Tuthaliya may have meant the former to be understood in the restricted sense of the latter, but then again he may not have.

Indeterminate relative pronouns and adjectives seem to have some affinity for -ma, probably because such forms will always be new. There are 7 in the data. In the Apology, -ma occurred with 1 of the 2 indeterminate relative pronouns, and with 12 of the 24 determinate relative forms, rates of 50.0%. In the Bronze Tablet, -ma occurs with only 8
of 33 determinate relative forms (24.2%), but occurs with 50% of the clear indeterminate relative pronouns and adjectives (4/8).

The remaining examples with new referent do not appear to form any other coherent category. Occurrence of a new referent nevertheless seems sufficient to trigger the use of -ma:

(60b) AM I.A Vs. II 7-10; #1012

§ namma URUPal'huišaz EGIR-pa /NA URUKU.BABBAR-tiúwanun
nu=za ERIN.MEŠ ANŠE.KUR.RA.MEŠ nininkun namma apědani MU-ti /NA KUR
Arzauwa / iyanniyanun=pat ANA mŪ̄̄hā-LŪ=mama LÜTEMA uyanyun / nu=sši ẖatrānun
(to Uhhaziti -ma messenger I sent )

§ Then from Pal'huiša I came back to Ḥattuša,
and I raised an army and a (force of) chariots. Furthermore in that year I also marched to Arzawa. And to Uhhaziti I sent a messenger, / and wrote to him: ... '  
*[Götze emends TI to ŠI to give Hattuši, arguing that there is no city Ḥatti (1933:44), but perhaps only KUR ‘land’ need be restored, as he does for KBo 5.8 Vs. II 6 (p.152).]

Uhhaziti is first mentioned in this portion of the text, as is the LÜTEMA ‘messenger’. No other environment favoring -ma is present—there is no contrast, orientation, subject switch, or special emphasis. The slightly marked word order, where the dative object occurs before the accusative object, may be explained if we understand that Uhhaziti, as ruler of Arzawa, is less novel in the context (accessible) than is the messenger (new). There is no way to be sure, however, which referent is the focus.
§ mānn-a ḪUL-lun memian kuinki ŠA BAL piran / parā ištamašti ... (2 clauses)
memian=ma ANA 4TU-ŠI piran parā ħūdāk / ŪL ḥatraši ... (3 clauses)
... našna kinun GIM-an mPIŠ.TUR-aš
iyat nu= mu ŠA mÉ.GAL.PAP=ma memian ħūdāk 1SPUR
{CC me.DL of  E.GAL.PAP -ma matter.A immediately he wrote }
mÉ.GAL.PAP-aš=wa=za=kan BAL zikkizzi namma=z=š=kan* EGIR-anda
memiyani šer karušsiyattat nu=mu namma ŪL kuitki ḥatrašš
* [sic; cf. Friedrich 1926:128 with fn.17]

'S And if you hear about some dastardly matter of revolt / in advance, ... (2 clauses)
but you do not write to My Majesty right away / beforehand, ... (3 clauses)
... or now as Mašhuiliwa
did: Now he wrote me about the matter of E.GAL.PAP(=ma) right away:
"E.GAL.PAP-a is inciting revolt," then he was silent
about the matter afterwards and wrote me nothing more'

As in the preceding example, here -ma attaches to a referent, mÉ.GAL.PAP, that has not
been mentioned in the text before. Again, other contexts favoring the occurrence of -ma are
absent. Notifying the king immediately about matters of revolt is the discourse topic, and
the new referent is the most salient thing about the clause. (Of course, the cooccurrence
with the clause connector nu ‘and’ is rare and seems to diminish greatly the connective
force of -ma.) These are the only two examples in which presence of a new referent is the
only factor favoring the occurrence of -ma. While new referents will most often occur with
other such factors, e.g., contrast, subject switch, orientation, and the like, these two
demonstrate that the mere occurrence of a new referent licenses the use of -ma.

§3.3.1.3 Emphasis
§3.3.1.3.1 Variant Word Order

An especially emphasized idea is likely to be the focus of its clause, or at least to
possess some degree of focality. Such special focus can be signaled with syntax that
diverges from the norm (as sketched in §1.4), e.g., clause-initial verbs or direct objects that
precede their subjects. It is not clear that the occurrence of -ma correlates particularly with
the occurrence of special focus, although examples where the two cooccur are to be found.
Among the 408 clauses with -ma there are 9 with verbs in initial position; two of these are phraseological verbs and will not be considered here.\textsuperscript{12} The remaining 7 clauses are all rather short. Five can be shown to be emphatic in some way, but 2 are relative clauses with determinate relative pronouns (Held 1957): \textit{āšta\=ma\=kan kuit} 'and that which was left' (LPK Vs. 11', #1275) and \textit{memai\=ma\=at kuedani} 'and the one to whom he says it' (ILMS Rs. III 11; #1304). In these cases, given the rhetorical choice of the author, the verbs must occur clause-initially, and the relative pronouns must follow them.

The 5 remaining clauses are either counterexpectational (#1243, #1400, and #1182–including the following clause) or contrastive (#1264 = example (37), #1387). Three of these (#1243, #1264, #1400) occur with post-verbal negatives, regarded by Friedrich as placement for emphasis, especially in short sentences (1960:146 §282b; cf. Holland 1980:100-101 and Garrett 1990:77ff.); compare (61).

\textbf{(61) BT Rs. III 39-42; #1399-\#1400}

\begin{verbatim}
man\=ma ANA LUGAL KUR URU Hatti annawliš kuiški arāi
našna \=U\=TU-\=ŠI kēzza Ī\=STU KUR URU\=ŠAP\=LI\=TI laḫhiyaizzī
nu\=ššī II ME KARA\=Š nininkandu
ašandulanzi\=ma\=at le §
\{they shall occupy -ma it.A not! \}
\end{verbatim}

'\textit{And if some (king of) equal rank rises against the king of the land of Hatti, or My Majesty makes war this side of the Lower Land, they shall raise a 200(-man) army from him, but (the army) shall not serve as an occupation force §}'

It might be reasonable to expect that an army raised for combat would be used to occupy territory they conquer, but the clause with initial verb and postverbal negative emphatically counters that expectation. In the 5 examples with initial verb, the relation of the clause to its preceding context is one of contrast or counterexpectation, and the nonstandard syntax does appear to add emphasis to this relation. If counterexpectation is understood to be a type of contrast, then these 5 examples are consistent with Holland's categorization of
verb-initial data, fitting under the category of contrasted verb cooccurring with -ma (Holland 1980:41).

Beside examples with initial-position verbs, I have noted 13 clauses with some other deviation from the usual word order: subject NP preceded by accusative object NP (#1049, #1187, #1188 = example (25), #1381-#1382 = example (65), #1412) or by dative/locative NP (#1078 = example (71), #1399 = example (61)); a clause with the order S--Abl--DO--V (#1120); a clause-initial negative separated from indefinite adverb (#1137, #1139 = example (49)); a clause-initial predicate noun (#1197); and a postverbal adverb (#1073 = example (62)). The last 3 types (consisting of 4 examples) can be distinguished from those preceding them in that they involve focal syntactic positions rather than focus-marking word order. All of these clauses exhibit at least one of the contexts in which -ma occurs (e.g., contrast, series-marking, counterexpectation, repeated form), and 9 have at least two such contexts, so it is difficult to establish a clear connection between variant word order and occurrence of -ma. Additionally, some of the variant word orders apparently have less to do with special focus than with typical ways of presenting information: in 6 (or probably 7) of the 8 examples with accusative or dative/locative constituent placed before the subject, that constituent is more topical than the subject.

Nevertheless, the expression of special focus is evident in other cases:

(62) AM II.7.A Vs. I 21-23; #1072-#1073

... maḫhan=ma ŠA KUR URU Taggašta ERÌN.MEŠ NARARE
arḫa parâš̄esš̄ir ammûk=ma IŠTU MUŠEN tamattat namma
nu INA KUR URU Taggašta pān ... 

' ... And when the auxiliary troops of the land of Taggašta had dispersed?, for me(-ma) it was allowed by the bird(-oracle) (to march) further, and I marched to the land of Taggašta ... ' 

Here namma 'further' is placed postverbally and should express special emphasis. Aside from the verb-initial clauses, however, I have not collected these examples systematically,
so it is not possible at present to know the extent of the cooccurrence of -ma with special focus or to form opinions about their correlation. The picture is made even murkier by the presence of other contexts favoring the use of -ma.

§3.3.1.3.2 Orthotonic Personal Pronouns

I have also assumed that orthotonic personal pronouns, by their very presence in a clause, express some degree of special emphasis since under normal circumstances an author could choose to use enclitic pronouns (or to rely on subject-verb agreement where subject pronouns are absent). Often these pronouns occur with -ma (Houwink ten Cate 1973). I have identified 52 such examples: 22-1.sg., 20-2.sg., 7-3.sg., and 1 of each person in the plural.13 (See Appendix.) Most of these coincide with subject switch (45/52 = 86.5%, including 31/34 nominative pronouns). Contrastive contexts are well represented among these examples (21/52 = 40.4%), and other contexts favoring -ma also occur in small numbers.

The emphasis that I believe orthotonic pronoun with -ma expresses can be seen in (63). There is no change in subject here, and any contrast that is present, say, between war spoils and Mursili as discourse subtopic, is exceedingly mild.

(63) AM II.7.A Rs. III 37-41; #1093-#1094

§ mahḥan=ma EGIR-pa uwanun nu šāru kuit NAM.RA
GUD UDU AKŠUD LUMESŠU.DIB=ya kuin ēppir
n=an INA URU Altanna arhafta dalahšun
ammuk=ma INA HURSAGKaššu ANA mPittipara
{I -ma in mountain:Kaššu DL Pittipara}
Ū ANA NAM.RA EGIR-anda päun ...
{and DL people after I went}

'§ And when I came back, the booty, civil prisoners, cattle, (and) sheep that I had taken, and the military prisoners that they had seized, I left them in Altanna.
And I marched to the mountain Kaššu after Pittipara / and (his) people ... '
A similar example is #1050. In these cases without subject switch, strong contrast, or other environments that favor -ma, I consider the collocation to express emphasis.

§3.3.1.4 -ma’s Attachment to Focal Elements

While -ma often attaches to the focal element in a clause, it is not required to do so. The degree to which it attaches to the focal element varies by context. -ma will almost always attach to a focus of contrast (or one of them, for there are frequently more than one), as it does in 32 of 33 examples of contrast in the Apology of Hattusili (and in 9 of 10 examples in Old Hittite—cf. §2.3.2.1). -ma attaches less consistently to focal new referents: only 48 of 107 new referents (44.9%) host -ma (23 subjects and 25 non-subjects), while 59 of 107 new referents occur later in the clause (55.1%; 42 subjects and 17 non-subjects). In series, -ma will again more often attach to a focus of contrast, since series members will often show similar form but be contrastive (but see example (51)). In cases of counterexpectation, it is unlikely that -ma will attach to a focal element, because the entire proposition, or at least the predicate, is often focal.

§3.3.2 Orientation

In addition to being used with various types of focus, NH -ma also marks adjustments to backgrounded information. The particle frequently occurs in clauses which contain a linguistic expression that changes the orientation for that clause and potentially for clauses that follow. I found that 153 of 408 clauses with -ma, or 37.5%, contain such expressions. In more than half of the cases the adjusting expression is an adjunct of a clause with other propositional content and occurs clause-initially (94/153, 61.4%), whereas in 65 cases the entire clause is devoted to adjusting the setting (65/153, 42.5%). The two types coincide in 6 clauses. (See Appendix.)
There are examples which adjust the orientation with respect to time and location, as well as some that are ambiguous between these. In (64)-(65) we see changes being made to the temporal setting.

(64) AM I.A Vs. I 4-6; #1001-#1002

... nu=za ABU-YA kuwapi DINGIR-LIM-ıš DÜ-at
mArnuandaš=ma=za=kan ŠEŠ-YA ANA GIšGU.ZA ABI-ŠU ešat
EGIR-an=ma=aš / irmaliyattat= pat ...  {after -ma he he fell ill also}

'... And when my father died (lit. became a god), Arnuanda, my brother, sat upon the throne of his father. And thereafter he / also fell ill'

In (64) EGIR-an (appan) 'afterwards' changes the time of events from a point in the past to point nearer, though still antecedent to, the time of composition. The adverb kinun 'now' in (65) adjusts the setting from the reign of Tuthaliya's father Hattusili to the time of the composition of the Bronze Tablet.

(65) BT Vs. II 86-89; #1381-#1382

... nu ȚUPPU RIKILTı kuwapi iër
apūn=ma=za SAL-an mdLAMMA-ǝš ANA PANI ABI-YA datta=pat nawi
kinun=ma=za apūn SAL-an mdLAMMA-ǝš mān ēāi
{now -ma RFL that.Ac woman.Ac Kurunta.N whether he takes }
mān=za=an ÜL ēāi nu apāš memiyas ÜL dattāri

'when they made the treaty tablet, Kurunta had not yet taken this woman (as wife) before my father, but now, whether Kurunta takes this woman or he does not take her, this matter will not be considered'

Of the 94 examples with an initial expression that adjusts the setting, 35 are temporal changes. Twenty-seven of these involve adverbs, and 8 involve oblique noun phrases.

In (66)-(67) the spatial orientation is modified. Of the 44 such examples, 24 are expressed with productively-formed oblique noun phrases, as in (66), and 20 are expressed with adverbial forms, as in (67).
§[p]arā=ma INA URU Hurna pāun nu KUR URU Hurna URU Hurnann=a / ḫarninkun
INA URU Hurna=ma السلان kuit É dU URU Hurna / EGIR-an ēsta
{in ḫurna -ma PV which.N house Storm-god ḫurna behind it was}
n=at ḥuldalānun / n=at OL šaruwār ... 

'S And furthermore I marched to the land of ḫurna, and I destroyed the land of ḫurna and the city of ḫurna. And in the city of ḫurna, the temple of the Storm-god of ḫurna which remained (lit. was behind), I spared it, / and they did not plunder it ...'

In the second clause with -ma the initial dative/locative ‘phrase’ INA URU Hurna ‘in the city of ḫurna’ adjusts the orientation for events from the land of ḫurna to the city of the same name. Here the city is changed from foregrounded information, one of the geographic entities suffering destruction, to backgrounded information, the area in which the temple is located.

(67) AM I.A Rs. IV 27-30; #1041

... nu=za URU Yahressan / [URU-an tar]ahhun [na]mmā=an arēa wārmunun
parā=ma / [INA KU]R Piggainareṣṣa pāun
{forth-ma in land Piggainareṣṣa I went }
nu ŠA KUR Piggainareṣṣa / [o URG]aškan GUL-un

'and I [con]quered / [the city of] Yahressa, furthermore I burned it down, and I went forth [into the land] of Piggainareṣṣa and attacked the Gašga [city] / of the land of Piggainareṣṣa’

In (67) parā ‘forth’ indicates direction further along the path of a military campaign.

The 15 remaining orientation-modifying adverbial expressions are less clearly spatiotemporal, but rather are ambiguous between spatial and temporal modification (#1105, #1280), or have become metaphorical to the point where they adjust the setting in other ways, as by providing orientation within the text.

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"§ Then I marched forth into the city of Taḥappisūna and burned it down, but seized it with (its) people, cattle, (and) sheep. And furthermore I burned Karassuwa and seized it with (its) people, cattle, (and) sheep."

In this example, parā 'furthermore' indicates progress along a trail of the events of the text, rather than progress along an actual path of destruction, as in (67), which could, incidentally, be ambiguous between the physical and metaphorical readings.

In (69) the adverb namma 'furthermore, moreover' adjusts the orientation for its clause by indicating that it follows on and relates to the clauses preceding it.

Sixty-five of the 153 orientation-changing examples involve entire clauses, all but one of which contain a subordinating conjunction (#1068). Most frequent are clauses with temporal mahhan/GIM-an 'when', of which there are 44, followed by clauses with kuit 'because; the fact that; when' (16), kuitman 'while' (3), and kuwapi 'when' (1). (See Appendix.) In (70) the clause with mahhan=ma advances the time of the events from when Mursili sets out for Taptina to when he arrives at Tarkuma.
The clause with -ma and kuit in (71) presents a situation which I interpret as motivation for Mursili’s remaining in Takkuwahina and Taňantattipa.

In the Bronze Tablet Tuthaliya wants to justify Kurunta’s position as king of Tarhuntassa and does so in part by describing the good relations between the two that began long before Tuthaliya ascended to the throne of Hatti. The clause with -ma and kuitman in (72) orients the audience’s consciousness to that time period.

‘And before I, Tuthaliya, Great King, even became king, the god led (me) and Kurunta even then into friendship’
In describing Kupanta-Kurunta's adoption as heir, Mursili gives background leading up to the event by setting the time of the discourse to when Maššuiluwa brought up the subject, as we see in the clause with -ma and kuwapi in (73):

(73) SvKK §4 D I 21-22; #1213

§ aniišan=ma kuwapi mšaššuiluwan ANA KUR U R U Mirā AŠŠUM BELUT<TIM>
{ first -ma when Maššuiluwa.A in land Mira concerning lordship}
tittanunun nu=mšaššš TUR- waš kisšan IQBL DUMU.NITA=s wa NU.[GÁL o]
{I installed}

'S § And when I had first placed Maššuiluwa in lordship in the land of Mirā,
Maššuiluwa spoke thus to me: "(I have) no heir."'

As in (73), five other orientation-adjusting clauses contain orientation-adjusting initial adverbs.

To these cases of modification of orientation can be added examples with conditional protases because they specify one or more new conditions for the ensuing discourse. There are 32 conditional protases with man 'if' in the clauses with -ma and 9 clauses without subordinators under the scope of a preceding man. Four of these 41 clauses have initial adverbs and were included in the totals above. There are also 12 -ma-clauses without subordinators under the scope of a preceding conditional nasma 'or (if)', and 1 of these contains an initial setting expression included in the totals above. (See Appendix.)

In a way the relative clause can be thought of as orienting because it affects the basic organization of the text by adding a new referent or reactivating a dormant one. A relative clause is more typically orienting in the sense used in this study in that the information presented about the new or recalled referent describes the conditions which relate it to the discourse. Since this information need not bear directly on the current part of the text, it functions as background; the resumptive clause will ordinarily continue the main thrust of the discourse. In clauses with kuit 'in that, seeing that, since, as', this feature of
relative clauses extends to entire propositions. In a *kuit* clause the entire proposition is
topicalized (Holland 1984, 1995), but the information then functions as background for the
following resumptive clause.

§3.3.2.1 Paragraph-Initial *-ma*

Neo-Hittite *-ma* frequently occurs at the beginning of paragraphs, as can be seen in

(74):

(74) **Clause-Connectors at the Beginning of Paragraphs**

<table>
<thead>
<tr>
<th>Text</th>
<th>-ma</th>
<th>-ya</th>
<th>nu</th>
<th>other</th>
<th>none</th>
<th>broken</th>
<th>Total</th>
<th>% with -ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>33</td>
<td>-</td>
<td>16</td>
<td>9</td>
<td>1</td>
<td>14</td>
<td>73</td>
<td>45.2%</td>
</tr>
<tr>
<td>AH</td>
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<td>1</td>
<td>2</td>
<td>-</td>
<td>2</td>
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<td>61.5%</td>
</tr>
<tr>
<td>SvKK</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>18</td>
<td>50.0%</td>
</tr>
<tr>
<td>LPK</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>7</td>
<td>42.9%</td>
</tr>
<tr>
<td>ILMS</td>
<td>-</td>
<td>3*</td>
<td>-</td>
<td>10*</td>
<td>1</td>
<td>4</td>
<td>17*</td>
<td>0.0%15</td>
</tr>
<tr>
<td>BT</td>
<td>15</td>
<td>9</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>27</td>
<td>55.6%</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>14</td>
<td>21</td>
<td>24</td>
<td>10</td>
<td>19</td>
<td>155*</td>
<td>43.9%</td>
</tr>
</tbody>
</table>

*1 clause beginning with namma = ya counted as 1 instead of 2 in text Total.

Since *-ma* occurs in only about 20% of clauses in general in the data, the ~44% rate of
occurrence at the beginning of paragraphs shows a definite tendency for *-ma* to be favored
in this environment.

There are 68 paragraph-initial examples with *-ma*, 16.7% of the clauses with *-ma*. (See Appendix.) Of the 68 examples, 55 establish the orientation (80.9%), and 53 exhibit
subject switch (77.9%); 36 (52.9%) do both. In the 408 clauses with *-ma*, orientation
occurs roughly half as often as subject switch (37.5% as against 69.1% of examples), so a
correlation between orientation and its occurrence paragraph-initially would seem more
relevant than a correlation between subject switch and its occurrence paragraph-initially.

Moreover, it is natural for a statement of orientation to occur at the beginning of an episode
(Chafe 1994:138-139), assuming that Hittite paragraphs are more or less coherent episodes. Subject switch is nonetheless relevant because it occurs in so many of the paragraph-initial examples and because it is the strongest motivation for occurrence of -ma in the cases that do not adjust the setting.

(75) AM II.10 Rs. III 23-27; #1122

nu INA URU Maraššantiya gimmandarı[y]a[n]n
§ 'mAparruš=ma LÚ URU Kalas̲ma URU Hatušā / MAHAR dUTU-ŠI ūet
{ Aparru.N -ma man Kalas̲ma Ḥattuša.DL before my sun he came }
n=an parā ḫuṭitiyanun
n=an EN-LAM iyanun nu=šši KUR URU Kalas̲ma / maniyahḥūwanzi peḥḥun

'...(and My Majesty returned to Ḥattuša (from this campaign)), and I wintered in Maraššantiya.

§ And Aparru, the man of Kalas̲ma, came
before My Majesty at Ḥattuša. And I (treated) him (preferentially):
I made him a lord, and I gave him the land of Kalas̲ma / to administer'

Here we see a clear example of a new episode beginning without statement of orientation, but with subject switch. The previous paragraph dealt with a campaign of Mursili, and the next covers his new dealings with Aparru. While such examples show that subject switch cannot be disregarded here, they make up only 13 of the 68 paragraph-initial examples, and 4 of these are conditional protases that can be construed as orientation-establishing.

Of the 55 orientation-establishing expressions with -ma in paragraph-initial position, 42 establish the temporal setting (30 with subordinating conjunctions, 12 with adverbial expressions); 6 establish the spatial setting (5 ablative nouns and 1 adverb); 2 establish the textual setting (1 dative/locative phrase and 1 adverb); and 5 establish causal conditions (all with kuit ‘since, given that’). A thoroughly typical example of paragraph-initial orientation with mahhān ‘when’, of which there are 27, can be seen in (76).

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‘and I burned down Ḥalila and Duddušga. And when the Gašga-land heard about the destruction of Ḥalila and Duddušga, the whole Gašga-land (came to their aid)’

Here the paragraph-initial clause with mahḥan=ma changes the temporal setting from the preceding activities, Mursili’s burning of Ḥalila and Duddušga, to the later time when the Gašgas learn of their destruction. It also begins a new episode, as the ensuing narrative describes the reaction of the Gašga folk to the attack.

Using an expanded definition of orientation, i.e., including conditional protases as described in the preceding section, increases the number of setting-changing examples by 4 to 59 (86.8%) and further strengthens the correlation of orientation and paragraph-initial position.

§3.3.3 Subject Switch

Neo-Hittite -ma frequently occurs in clauses whose subject changes. Of the 408 clauses with -ma, 279 (68.4%) contain subject switch. By far the majority of these occur in contexts with other of the pragmatic categories discussed above, and only 11 (2.7% of 408) seem to have subject switch as the sole factor licensing the use of -ma. (See Appendix.)

In (77) we see an example where subject switch is the sole category present:
(77) BT Vs. I 14-18; #1317, #1318, #1319

§ mahḥan=ma ABU-YA mUrḫiteššupan LUGAL-iznani arḫa tittanut
mdLAMMA-an=ma ABU-YA dāš n=an INA KUR UR kadU-tašša LUGAL-iznani tittanut
nu=šši ABU-YA kuit ʾištiḵuʿ iyat ZAG.MEŠ-iš=šši mahḥan daš
nu=šši ABU-YA ʾTU PPPAHILA RIKILTĪ iyat n=at mdLAMMA-aš ḫarzi
ZAG.MEŠ=ma=šši kiššan tiyanteš ʾĪŠTU KUR URḫUPitašša=tta
{borders -ma him.DL in this way set.PPL.pN}

'§ And when my father removed Urḫiteššup from the kingship,
my father took Kurunta(=ma) and installed him in the kingship in Tarḫuntašša.
And the treaty which my father made for him, how he set the borders for him,
now my father made treaty tablets for him, and Kurunta has (them).
And the borders (are) set for him in this way: On the side of Pitašša ... for you ... ' 

In this example the previously mentioned ZAG.MEŠ ‘borders’ becomes subject in a
clause, marked with -ma, that shows no contrast, repeated form, counterexpectation, new
referents, special emphasis, series marking, or setting—the adverb kiššan ‘thus, in this
way’ is textually deictic, but conveys foregrounded orientation. kiššan’s pointing forward
is part of the predicate rather than a setting for the action of the predicate. A similar
example is to be found in #1371.

In comparison with the unsurprising progression in change of subject in (77), (78)
shows an abrupt and strong subject switch.
... nu=mu 4IŠTAR GAŠAN-YA
GIM-an kaniššan ġarta nu=za=kan IGL.HI.A-wa kuwattan
ANA KUR LŪKUR andan nāškinun nu=mu=kan IGL.HI.A-wa LŪKUR
EGIR-pa UL kuiški nāš nu=za KUR.KUR.MES LŪKUR taraḫšiškinun
kaniššūwar=ma=mu SA 4IŠTAR=pat GAŠAN-YA ēšta
{favor.N -ma me.DL of Ištar herself lady - my it was }
nu=kan ŠA KUR.KUR.MES URU Hatti LŪKUR kuiš kuiš anda ēšta
n=an=kan IŠTU KUR.KUR URU Hatti arḫa=pat uiyanun

‘... And as Ištar, my lady, / had favored me, wherever I would turn my eyes
on an enemy land, no enemy at all / could return my gaze (lit. turned his eyes back on me)
and I conquered the lands of the enemy.
And the favor of Ištar herself, my lady, was on me.
And whichever enemy was inside the lands of Hatti,
I also sent him away from the lands of Hatti’

Despite the abrupt switch from dominance over the enemy to the ideas of Ištar and her
favor, the latter have only very recently become semiactive by the time the -ma-clause
occurs, having been mentioned only four clauses before, so no new ideas are introduced
here. In fact, Hattusili considers Ištar’s favor as the factor generally underlying his
successes, and he includes such acknowledgments throughout the Apology. Also absent
from the -ma-clause are expressions of orientation, counterexpectation, and series marking.
But other pragmatic categories are present. The clause repeats in different form the
previous clause concerning Ištar and her favor. Ištar is made emphatic through cliticization
of the particle -pat. Further, in addition to using the clause as humble refrain and interim
conclusion, Hattusili may have intended it to function as a transition between details of
offensive and defensive warfare, in which case contrast is present. Apparently presence of
subject switch alone is a sufficient condition for the occurrence of -ma, but such a situation
is rather rare as subject switch tends to occur with other pragmatic categories.

A correlation appears to exist between subject switch and Houwink ten Cate’s
syntactic environment 2, the beginning of a main clause following a preceding dependent
clause (observed by Houwink ten Cate 1973:134). There were 44 clauses with -ma in
environment 2 (including 7 simultaneously in environment 3, cf. §3.2.5), and 37 (84.1%) of these had a change in subject from the preceding clause, as in (79).

(79) AH II 39-41; #1160-#1161 16

... LÜ-LUM=ma kuir̲ š piraɾ̲ huiy̲anza
ěšta nu anda pennu[...] n=an=kan GIM-an kuenun
L^KUR=ma= za piddaiš...
<enemy -ma RFL he fled>

‘... and the man who was / the leader and (drefove) them on), when I slew him, the enemy(e=ma) fled...’

Here there is a change in subject from the dependent adverbial clause to the main clause. The clause-coordinative force of -ma seems to be greatly reduced, its occurrence apparently conditioned rather by the subject switch. Other clear examples can be seen above in (31), (47), and in #1374.

The 7 examples without subject switch remaining from the 44 clauses in syntactic environment 2 all show some degree of contrast, and 5 cooccur with a third category of -ma use: two-member and series marking or counterexpectation.

§3.4 A Brief Look at Neo-Hittite Clause-Connective -al-ya

A complete description of -ma would be situated among a study of all the Hittite clause connectors. In this section I briefly describe the characteristics of Neo-Hittite clause-connective -al-ya ‘and’, but I exclude its uses as subclausal conjunction ‘and’ and as emphatic particle ‘even, also’ (unless these should occur in Wackernagel’s Law position and thus exhibit at least formal identity with the clause connector). This particle deserves its own study, but here I have examined it primarily with regard to the categories that I have found to be associated with -ma with the intention of shedding light on that particle’s function.
In the areas of frequency, phonology, and syntax, the distribution of NH -a/-ya is rather like that of NH -ma. Its functional distribution, too, shows many similarities to -ma's, but with some important differences.

§3.4.1 Frequency, Phonological Distribution, and Syntactic Distribution

The number of occurrences of -a/-ya found in the corpus is given in the following table.

<table>
<thead>
<tr>
<th>Text</th>
<th>Secure</th>
<th>Unsure or in Broken Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annals of Mursili</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Apology of Hattusili</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>Treaty with Kupanta-4KAL</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Bronze Tablet</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td>Instruction to the LÜMEŠSAG</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Letter of Puduhepa</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>29</td>
</tr>
</tbody>
</table>

With 106 attestations, -a/-ya occurs about one-fourth as many times as -ma, with 411 attestations. The following table shows the frequency of occurrence of -a/-ya in the sections considered suitable for inclusion:
(81) Frequency of -a/-ya

<table>
<thead>
<tr>
<th>Text</th>
<th>Clauses with -a/-ya</th>
<th>Number of Clauses</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annals of Mursili</td>
<td>26&lt;sup&gt;a&lt;/sup&gt;</td>
<td>814</td>
<td>3.2%</td>
</tr>
<tr>
<td>Apology of Hattusili</td>
<td>23</td>
<td>368</td>
<td>6.3%</td>
</tr>
<tr>
<td>Treaty with Kupanta-dKAL</td>
<td>16&lt;sup&gt;b&lt;/sup&gt;</td>
<td>332</td>
<td>4.8%</td>
</tr>
<tr>
<td>Bronze Tablet</td>
<td>33</td>
<td>329</td>
<td>10.0%</td>
</tr>
<tr>
<td>Instruction to the LUMESAG</td>
<td>10&lt;sup&gt;c&lt;/sup&gt;</td>
<td>130</td>
<td>7.7%</td>
</tr>
<tr>
<td>Letter of Puduhepa</td>
<td>3</td>
<td>104</td>
<td>2.9%</td>
</tr>
<tr>
<td>Total</td>
<td>111</td>
<td>2077</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

a) Includes 2 -a/-ya's, each of which is the second member of a correlative pair (#5031, #5032). b) Includes 1 -a/-ya in broken context (#5010). c) Includes 2 -a/-ya's in broken context (#5023, #5024).

As the table shows, -a/-ya's occurrence ranges from about 3% to about 10%, depending on the text, with an overall average frequency of about 5%, compared with about 20% for -ma (cf. (2)). After adjustments are made for the 5 secure attestations in correlative constructions and in broken sections of the accepted portions of the texts, the tally of clauses beginning with -a/-ya used in the analysis is 106 (408 for -ma). (See Appendix.)

The following table summarizes NH -a/-ya's phonological distribution in the six texts analyzed:

(82) Phonological Distribution of -a/-ya

<table>
<thead>
<tr>
<th></th>
<th>after C</th>
<th>after V</th>
<th>after non-phonetic writing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>41&lt;sup&gt;18&lt;/sup&gt;</td>
<td>14</td>
<td>51</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>38.7%</td>
<td>13.2%</td>
<td>48.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>(52.1%)</td>
<td>18.0%</td>
<td>29.9%</td>
<td>distribution of -ma from (3))</td>
</tr>
</tbody>
</table>

As compared to -ma, -a/-ya occurs less frequently after consonants and vowels and more frequently after non-phonetic writings.
As with -ma, the predominant syntactic position for -a/-ya is after the first word in a clause, but other positions are also attested, as summarized in (83). (Cf. note 3.)

(83) Syntactic Distribution of -a/-ya

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>%</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) after the first word:</td>
<td>84</td>
<td>79.2%</td>
<td>84.2%</td>
</tr>
<tr>
<td>ii) after the second word, involving one constituent:</td>
<td>15</td>
<td>14.2%</td>
<td>9.7%</td>
</tr>
<tr>
<td>ex.: [IR.MEŠ DINGIR-LIM] -ya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) after the third word, involving one constituent:</td>
<td>5</td>
<td>4.7%</td>
<td>1.0%</td>
</tr>
<tr>
<td>ex.: [ANA LUGAL KUR URU-tašša] -ya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv) after the second word, involving two constituents:</td>
<td>2</td>
<td>1.9%</td>
<td>4.4%</td>
</tr>
<tr>
<td>ex.: [nu] [ABU-YA] -ya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v) after the third word, involving two constituents:</td>
<td>106</td>
<td>100.0%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

The table shows the intraclausal syntactic distribution of -a/-ya and -ma to be rather similar. -a/-ya delayed to the second or third word of the clause occurs in Neo-Hittite in the same contexts as delayed -ma. These are a) with clause-initial mān ‘if [NH]’—1 occurrence; b) with the clause-introductory particle nu ‘and’—1 occurrence; and c) with Akkadographic or Sumerographic writing—20 occurrences.

The grammatical categories of the hosts of the 106 -a/-ya’s are summarized in (84).
Grammatical Categories of -a/-ya's Hosts

<table>
<thead>
<tr>
<th>Category</th>
<th>#</th>
<th>%</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>37</td>
<td>34.9%</td>
<td>33.6%</td>
</tr>
<tr>
<td>Noun Phrase</td>
<td>26</td>
<td>24.5%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Pronoun</td>
<td>18a</td>
<td>17.0%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Adjective</td>
<td>1b</td>
<td>0.9%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Adverb</td>
<td>8c</td>
<td>7.5%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Negative</td>
<td>-</td>
<td>0.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Preverb</td>
<td>2</td>
<td>1.9%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Verb</td>
<td>3</td>
<td>2.8%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Conjunction</td>
<td>11</td>
<td>10.4%</td>
<td>12.2%</td>
</tr>
</tbody>
</table>

106 99.9%

a) Pronouns: 12 personal, 4 demonstrative, 1 relative, 1 distributive. b) Adjective: 1 attributive. c) Adverbs: 2 spatial, 1 temporal, 5 other.

The distribution of -a/-ya and -ma with respect to their hosts is also rather similar. Two notable differences are 1) the higher percentage of -a/-ya's hosted by noun phrases, which is consistent with the more frequent cooccurrence of -a/-ya and non-phonetic writing seen in (82); and 2) the higher percentage of -ma's hosted by adverbs, which is consistent with -ma's greater association with the orientation function (see below).

The grammatical relations of the nominal-type categories is given in (85).

Grammatical Relations of Nominal Hosts

<table>
<thead>
<tr>
<th>Category</th>
<th>Noun</th>
<th>NP</th>
<th>Pronoun</th>
<th>Adjective</th>
<th>Total</th>
<th>%</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>16</td>
<td>8</td>
<td>13</td>
<td>-</td>
<td>37</td>
<td>34.9%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Accusative</td>
<td>14</td>
<td>12</td>
<td>2</td>
<td>1</td>
<td>29</td>
<td>27.4%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Genitive</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>2.8%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Dative/Locative</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>-</td>
<td>12</td>
<td>11.3%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Ablative</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>0.9%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Allative</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.0%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>26</td>
<td>18</td>
<td>1</td>
<td>82</td>
<td>77.4%</td>
<td>67.2%</td>
</tr>
</tbody>
</table>

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We see relatively more ablative forms for -ma, the result of the long border-setting section of the Bronze Tablet. Proportionately -a/-ya occurs about twice as often with accusative forms as does -ma, but no explanation for this is evident at present.

As regards interclausal syntax, -a/-ya occurs as follows in these environments (after Houwink ten Cate 1973:128; cf. §2.2. above):

(86) **Interclausal Environments for -a/-ya**

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>%</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>in an independent clause IC-ya</td>
<td>50</td>
<td>47.2%</td>
</tr>
<tr>
<td>1b</td>
<td>in a protasis following another protasis DC DC-ya...MC</td>
<td>9</td>
<td>8.5%</td>
</tr>
<tr>
<td>2</td>
<td>in an apodosis DC MC-ya</td>
<td>7</td>
<td>6.6%</td>
</tr>
<tr>
<td>3</td>
<td>in a protasis DC-ya MC</td>
<td>39</td>
<td>36.8%</td>
</tr>
<tr>
<td>2/3</td>
<td>in the protasis of a complex apodosis DC (DC-ya MC)</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>106</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Also here the distribution of -a/-ya is quite similar to that of -ma.

§3.4.2 Functional Contexts

The figures below show the occurrence of -a/-ya in the functional contexts that I have claimed favor the use of -ma. -a/-ya is attested in all these environments (see the Appendix for the attestations in each context), and in some environments it occurs at a rate equal to that of -ma. However, there are some important differences. Most obviously, -ma occurs much more frequently, both absolutely and relatively, in contexts of contrast and orientation, and in their respective special subcategories of counterexpectation and paragraph beginnings.
Although -ma and -a/-ya occur with new referents at about the same rate, -a/-ya occurs much less frequently with new subjects and with new relativized referents than does -ma.

Proportionately -ma occurs somewhat more frequently in environments with repeated form and in cases of series marking.
In cases involving special emphasis, as manifested by variant word order and by orthotonic personal pronouns, \(-a/-ya\) and \(-ma\) occur with approximately the same relative frequency. The same holds true for cases of subject switch. Different here, though, is the more frequent occurrence of \(-a/-ya\) in cases where subject switch is the only of the pragmatic categories present. This can be viewed as consistent with the typical additive function of \(-a/-ya\) (see below).

<table>
<thead>
<tr>
<th></th>
<th>(-a/-ya)</th>
<th>(-ma)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special focus:</td>
<td>16</td>
<td>69</td>
</tr>
<tr>
<td>variant word order</td>
<td>≥ 2*</td>
<td>≥ 18*</td>
</tr>
<tr>
<td>orthotonic pronouns</td>
<td>14</td>
<td>52</td>
</tr>
<tr>
<td>Subject switch:</td>
<td>69</td>
<td>279</td>
</tr>
<tr>
<td>As only factor</td>
<td>10/106</td>
<td>11/408</td>
</tr>
</tbody>
</table>

*Not comprehensively collected.

Although the two particles may occur with nearly the same frequency in several pragmatic environments, including subject switch, repeated form, and series marking, the much more frequent occurrence of \(-ma\) in absolute terms is likely to foster an association (in the consciousness of the audience) between \(-ma\) and a given pragmatic category that is stronger than any association between \(-a/-ya\) and the category. Even when \(-ma\) occurs relatively less frequently than \(-a/-ya\), as with personal pronouns, the absolute number of occurrences with \(-ma\) outnumbers those that occur with \(-a/-ya\) by almost 4 to 1 and encourages a strong connection between the particle and the environment.

Examining \(-a/-ya\) in the environments with which \(-ma\) is associated sheds light on which are the \(-ma\)'s primary functions, e.g., contrast, orientation, particular new referents. In a similar way, examining \(-ma\) in contexts typically associated with \(-a/-ya\) can confirm the main functions of \(-a/-ya\) (at least in part).
In §2.4.1, Old Hittite -a/-ya was considered to be a clause conjunction that in most cases joined clauses closely connected in terms of referents and/or actions. I examined the NH examples with -a/-ya for similar close connections, clauses in which the same referent(s) performed the same or different actions, or in which different referents performed the same action(s). The cases I accepted as showing a close connection were approximately of the same type as examples (49)-(58) in chapter 2, but fall short of exhibiting the sort of connection between clauses in the eagle examples in (59) (also chapter 2); (91) is an example with such a close connection:

(91) SsKK §21 DIY 28-EIV 14; #4064

... man-kan mān ANA dUTU-ŠI kuwapi ŠUL-uanni kkitat man-ša dUTU-ŠI apiya=pat arḫa pessiyanun man-ša=kkan* Ǝ ABI-KA KUR-TUM=ya kinun=pat arḫa dāḫun m[an=ša] damēdani pīṣhun ANA KUR-TI=ya= man/ tamaši EN-an iyanun §
{ in land and MOD another.A lord.A I made }'*

... If I, My Majesty(dat./loc.), had somehow been laid to evil, I, My Majesty, could have dismissed you also in that (situation). I could have taken your father's house and country away from you even now: I could have given [it] to another and could have made another (person) lord in the country §’* [m[a-(an-tak-kan)]]

In listing reasons why Kupanta-Kurunta should be loyal to him, Mursili reminds Kupanta-Kurunta that his situation could be far different. The closely connected clauses deal with Mursili's potentially awarding Kupanta-Kurunta's country to another, and with his potentially making this new recipient the ruler of the country.

Working with this fairly limited notion of connectedness, I found that -a/-ya examples occurred at a rate more than three times as high as those with -ma. (See Appendix.)
For purposes of comparison, I include an example of close connection with -ma. This is one of only four examples that do not show contrast or counterexpectation, and these four are most like examples with -a/-ya.

(92)  
<table>
<thead>
<tr>
<th></th>
<th>-a/-ya</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close connection:</td>
<td>33</td>
<td>31.1%</td>
</tr>
<tr>
<td>showing contrast</td>
<td>20/33</td>
<td>60.6%</td>
</tr>
</tbody>
</table>

Since ERIN.MEŠ ‘troops’ and ANŠE.KUR.RA.MEŠ ‘chariots, horses’ are so often mentioned together in texts, it is natural to report on their numbers when describing military attacks. A contrastive reading for these clauses is possible, but seems less contrastive when they are compared to the clauses describing Hattusili’s much less favorable situation. Other examples of -ma in clauses with close connection have been presented above.

A difference between the particles’ distribution, as can be seen in the table, is that the examples of close connection with -ma occur in contrastive environments much more frequently than do the examples with -a/-ya. Moreover, the examples with -ma mostly fall into a few classes: a) formulaic clauses concerning the guilt of the father applying automatically to the son; b) formulaic clauses concerning the progeny of one referent
protecting the progeny of another; c) distributive ‘some ... the other’ clauses; and d) 
maḥḥan-QATAMMA ‘as x ... so y’ correlative pairs.

There are 4 examples with -a/-ya of types c) and d) and 6 with a near formula, but the remaining cases, about a fifth of all the examples with -a/-ya, are not so easily classifiable. Exhibiting no formulae and not particularly associated with any of the -ma-oriented pragmatic contexts examined, these 23 examples point to a more productive, more general clause-connective function for -a/-ya. Twenty of the 33 examples of close connection with -a/-ya have subject switch, a nearly average rate of occurrence of 60.6%. The incidence here of contrast, repeated form and two-part clause marking is higher than the average for -a/-ya (60.6%, 39.4%, and 39.4%, respectively), but this may be expected in cases of close connection. Occurrence of other -ma-oriented categories is minimal here.

The 9.4% of -a/-ya-clauses where subject switch is the only -ma-oriented pragmatic factor present can also be viewed as consistent with a general, additive function for -a/-ya. On this view, the subject may change, but it is evidently not new or contrastive, the action performed is not contrastive, and so on with the other pragmatic contexts.

Also supporting the idea that -a/-ya has a more general, additive function are 3 examples with -a/-ya (2.8%) that do not exhibit any of the -ma-oriented categories examined above. These clauses report actions that are natural, expected continuations of the actions preceding them, as in (94).
(94) AM I.A Vs. II 68-73 (with I.B Rs. IV 25'-31'); #1022, #4005

... n=as=kan URUPurandaza GE-ag katta ḥuwaits [DAM-ZU=ya=za DUMU.MEŠ-ŠU] NAM.RA.MEŠ=ya šaramnaz= piran ḥuinit [n]=an=kan URUP[andaz]a katta peḫutet §[ma]=ṭhan=ma q[UTU-ŠI ist]amaššun m'Dapalazunawiš=wa=kan [katta] ḥuwaits DAM-ZU=ya= wa= za DUMU.MEŠ-ŠU NAM.RA.MEŠ=ya [wife-his and QU RFL sons- his people and] šarāmnaza piran ḥuinit nu=war=an=kan katta peḫutet [palace.AB before he sent]

'... (Tapalazunawli, son of Uḫḫaziti,) escaped ‘down’ from Puranda in the night [and] he sent ahead [his wife, his children,] and people from the palace? [and] brought (them) down from Puranda.

§ And [w]hen I, M[y Majesty, he]ard: “Dapalazunawli has escaped ‘[down]’ and has sent ahead his wife, his children, and people from the palace? and has brought (them) down”, / (I sent troops and horses after them)’ *[šaramna- ‘palace’ after Alp 1979; cf. Neu 1983:160]

It is reasonable for Tapalazunawli to see to the well-being of his household under conditions of evacuation during a siege, so it is unsurprising that a clause describing his solicitations would follow a more general one opening the report of his escape. While there is a fairly close connection between these two clauses, it is not as close a connection as exists between the last two clauses of the passage, where the referents stay the same and the actions are closely related. Absent from relations between the escape-clause and the -a/-ya clause are notions of contrast, counterexpectation, or special focus, as well as instances of repeated form, series marking, setting modification, new referents, or subject switch.22 By contrast, no example with -ma occurs without at least one of these pragmatic categories. This example, along with two others (#4021, #4031), provide evidence for a general additive function for -a/-ya.

§3.5 Conclusion

In the preceding chapter we have seen the phonological and syntactic environments in which -ma occurs in Neo-Hittite. The particle has appears rather frequently, in about one out of five clauses. It occurs after consonants and vowels, as well
as after Akkadograms and Sumerograms. -ma occurs most often after the first word in its clause, but can appear later in certain cases. Although its position is often delayed when it is attached to Akkadograms and Sumerograms, this delay is likely to be only graphic in most cases. -ma occurs in both independent and dependent clauses, but tends to occur in Vordersätze.

We also extensively reviewed pragmatic contexts in which NH -ma occurs. The first pragmatic notion examined was focus. -ma was seen to occur frequently in clauses of contrast, and these often involve repeated form. Sometimes these factors are combined in series, and -ma can mark them. -ma also occurs in cases of counterexpectation, where the contrast exists between the text and the audience’s expectations. -ma is frequently found in clauses with new referents, especially new subjects and new relativized nouns. -ma can be linked to special cases of focus, where emphasis is conveyed with variant word order or orthotonic personal pronouns.

-ma was seen to occur also in clauses that change the setting of the text, and very frequently in a special subset of orienting clauses, at the beginning of paragraphs. -ma also occurs with subject switch about two-thirds of the time. Although this may be the average frequency for subject switch in texts in general, a few cases where no other pragmatic factor is present show that a connection between -ma and subject switch should not be discounted.

Examining the other NH enclitic conjunction -al-ya revealed that it, too, occurs in the environments in which -ma occurs, but usually less frequently. -al-ya was seen to occur more frequently than -ma in clauses closely related to the preceding clause. These differences can be seen as confirming a link between -ma and the pragmatic environments examined; the strongest links appear to be between -ma and contrast and between -ma and orientation.

Although the pragmatic contexts were most often examined individually, their occurrence with -ma is by no means as atomistic as the method implies. Only 28 of the 408
clauses with -ma (6.9%) exhibited just one of the contexts examined: 8 with contrast, 6 with orientation change, 2 with new referents, 1 with a member of a series, and 11 with subject switch (see Appendix). Thus 93.1% of the clauses with -ma show at least two of the contexts. A good example is (95).

(95) BT Vs. II 72-73; #1378

ūk maḥḥān mšTutḫaliyaš LUGAL.GAL mšLAMMA-an pahḥašši
katta=ma DUMU-YA DUMU.DUMU¹-YA NUMUN mšLAMMA QATAMMA
{down-ма son- my grandson- my progeny Kurunta in that way }
pahḥaššu
{he shall protect! }

'As I, Tutḫaliya, Great King, protect Kurunta, in future (έма) shall my son (and) my grandson protect the progeny of Kurunta in like manner'

In this passage with -ma we see several pragmatic conditions present at one time. A couple of these derive from the characteristics of the maḥḥan-QATAMMA 'as x ... so y' construction: 1) There is contrast between Tuthaliya and his descendents and between Kurunta and his progeny. 2) The second clause is the second of a pair, a pragmatic context for which I have not demonstrated a link for -ma, but which must be related to series marking, if indeed it is not its source. The other contexts are the introduction of a subject, the subject switch that necessarily accompanies it, and orientation establishment in the adverb katta 'in future'. We also see some repeated form in mšLAMMA pahš- 'protect Kurunta', although the form is closer in other passages. Sections of text in which borders are determined also provide examples with several contexts obtaining simultaneously. Compare (52), or column I of the Bronze Tablet, where in any given example one can find contrast, orientation establishment, new referents, subject switch, series-marking, as well as the special emphasis expressed by the formula(e).
Notes to Chapter 3

Sections of NH texts accepted for use in this study were the following:

Annals of Mursili (667 lines), here abbreviated ‘AM’ with taxonomy as under CTH 61:
- Ten-Year Annals: CTH 61.I.A I 3-32, II 1-78, III 17-95, IV 26-48;
- Detailed Annals: CTH 61.II.5.B (+ KBo 19.46) I 39-44, II 45-75, III 14-64, 68-70, IV 5-60;
- CTH 61.II.7.A I 1-42, II 1-40, III 14-43, IV 5-22, and CTH 61.II.7.C (+ KBo 16.14) II 15'-34'. (Bo 69/404, listed under II.7.C in oCTH, is unavailable as far as I know);
- CTH 61.II.10 I 1-9, II 1-17, III 18-63 (after combined edition at KBo 16.17), IV 6-28.

Apology of Hattusili (CTH 81) (322 lines), abbreviated ‘AH’: All but I 1-4 and III 31-37’ (after Otten 1981).

Treaty with Kupanta-KAL (CTH 68) (245 lines), abbreviated ‘SvKK’: §2—§11 D 41, §13 C 4—§21, §26 A 9—§27 A 21, 26-37 (after Friedrich 1926:106-150; out of regard for this enduring edition, I retain for this text the reading KAL over the updated LAMMA (Rüster and Neu 1989:187 no. 196)). SvKK/oCTH.68 A = CTH 68.C (include KBo 19.64a per Otten, KBo 19.65, KBo 22.38 per oCTH), SvKK/oCTH B = CTH A (include KBo 19.65, KBo 22.38 per oCTH), SvKK/oCTH C = CTH B, SvKK/oCTH D = CTH E (include KBo 19.66 per oCTH), SvKK/oCTH E = CTH D, SvKK/oCTH F = CTH G, SvKK/oCTH G = CTH H, SvKK/oCTH H = CTH F (include HFAC 1=NBC 11801 per oCTH); SvKK J = CTH/oCTH I).

Bronze Tablet (347 lines), abbreviated ‘BT’: All but Vs. I 1-5 (after Otten 1988).

Instruction to the LU.MES.SAG (CTH 255.1) (123 lines), abbreviated ‘ILMS’: I 4-40, II 12-36, III 3-23, IV 3-42 (after von Schuler 1957:22-34 Text I.2).

Letter of Puduhepa (CTH 176) (45 lines), abbreviated ‘LPK’: Vs. 11-21, 47-65, Rs. 1-15.

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Melchert (1984b:81-82) observes some orthographic changes within Neo-Hittite that could help in dating manuscripts. I have given attention to the manuscripts he designates as later NH copies, but could not perceive any difference in the use of -\textipa{ma} in earlier versus later copies. For this study, those manuscripts were CTH 68.B (KBo 5.13), 68.C (KBo 4.3+, 19.64a?), and 68.H (KUB 6.48).

The other four examples of complex hosts of -\textipa{ma} with inflected Hittite nouns are these:

(a) AM II.7.A Vs. I 4-5; \#1068

\begin{verbatim}
ER\text{IN}.\text{ME}\text{Š} U\text{RU} \text{Tagg\text{a}}\text{š}a\text{š}=\text{ma} \par\text{e\text{s}anza} \text{KUR} U\text{RU} \text{Șadduppa}
\{troops Tagg\text{a}ša.Nc -\text{ma} forward set.PPL.Nc land Șadduppa\}
[KUR U]\text{R} \text{Karahna} \text{KUR} U\text{RU} \text{Mari\text{š}ta}=\text{ya} \text{e\text{s}an h\text{a}rta}
\{land Karahna land Mari\text{š}ta and set had\}
\end{verbatim}

‘but the troops of Tagg\text{a}šta, positioned forward, had occupied the land of Șadduppa, [the land of] Karahna, and the land of Mari\text{š}ta’

(b) AM II.7.C Vs. II 23’; \#1088

\begin{verbatim}
L\text{U}KUR U\text{RU} \text{Ga\text{š}ga}=\text{masi} \text{kan} \text{makk\text{i}š\text{sanza} e[-e\text{-s-ta]}
\{enemy Ga\text{š}ga.Nc -\text{ma} him.DL PV become-much.PPL.Nc was\}
\end{verbatim}

‘but the Ga\text{š}ga enemy h[ad] become too numerous for him’

(c) AM II.10 Vs. I 4; \#1113

\begin{verbatim}
[\text{N}]\text{A-hekur} \text{Pittal\text{a}h\text{š}a}=\text{ma}=\text{za= kan IŠTU ER\text{IN}.\text{ME}\text{Š} NAME.RA /[IŠ]BAT}
\{stone:sanctuary.A Pittal\text{a}h\text{š}a.G -\text{ma} RFL PV with troops civilians seized\}
\end{verbatim}

‘but (the enemy) [to]ok the Pittal\text{a}h\text{š}a sanctuary along with troops and civilians’

(d) BT Rs. III 36; \#1397

\begin{verbatim}
IŠTU \text{É} \text{tuppa}=\text{ma}=\text{sši} \text{KARA\text{š} le šan\text{hanzi}}
\{from house containers.G -\text{ma} him.DL army not! they seek\}
\end{verbatim}

‘but from the administration they shall not demand an army for him’

Götze accepts as nominatives the inflected Hittite placenames in (a) and in (b) (though in analogous passages, e.g., at KBo 5.8 Vs. II 17, since the assembled text KBo 16.8 + 14
was unavailable to him; Götze 1933:326-327). If URUTaggastāš in (a) and URUGašgaš in (b) are nominatives, their inflection -aš would function to mark the case for the whole phrase, this in contrast to the Sumerian syntax in Hittite texts which has the form NOUN-GENITIVE(-GENITIVE) (Friedrich 1960:171 §337b). The phrasal host of -ma in example (9) could also belong to this category. If this is correct, then it raises the question of just how the Hittites were actually pronouncing such combinations. Examples like (e) make it clear that inflection for the entire phrase cannot be rejected outright.

(e) AM II.5.B Vs. II 56-57; #1049

apûn= ma=wa= tta LÚKÚR URUḪayašan / dU BELI-YA karû paiš

{that.Ac -ma QU you.DL enemy Ḫayaša.Ac Storm-god lord my already gave}

"the Storm-god, my lord, gave you that Ḫayaša enemy already"

Although URUḪayaša would by known principles function as a genitive, here it clearly carries accusative inflection for the entire direct-object noun phrase.

The forms in (a) and (b) could also be analyzed as genitives, however. Götze implicitly takes the inflected Hittite placenames in (c) and example (9) as genitives (pp.181, 151, respectively). Weitenberg has observed that (NA)ḫekur ('sanctuary') behaves like a Sumerogram (1984:154, noted in Puhvel 1980ff. 3:289), and its occurrence in (c) is consistent with this idea. The noun tuppaš 'containers' in (d) is a genitive; tuppa- would have the ablative ending -az if it were carrying the inflection for the entire noun phrase (Tischler 1977ff. III:441-444). Of course, the questionable case forms are not necessarily either all genitive or all nominative.

In any event, since we are not sure how these complex phrases were pronounced, I have included the 5 inflected hosts of -ma with the uninflected, non-phonetic writings whose form they otherwise share.

3 The following were not considered constituents in determining syntactic positions: Akkadian prepositions; the Sumerian predeterminers URU 'city', ḪUR.SAG 'mountain',
ÍD 'river', LÚ(.MEŠ) 'man(/men), [profession]', m '[male personal name]', and d '[divine name]', etc. KUR 'country, land' was regarded as a constituent, following Friedrich (1960:23 §6a-b) and Güterbock (1945). Square brackets in examples (12) and (83) indicate syntactic constituency, not tablet breaks.

Included as Noun Phrases for -ma's hosts are combinations of Akkadian, Sumerian, and uninflected Hittite forms, as well as nouns with enclitic Akkadian possessive pronouns. These types make 61 of the 63 examples; the two remaining are #1113 = note 2, example (c) and #1153 = example (21).

The clauses from the Apology of Hattusili are those that occur without the clause-connector nu, thus with forms in initial position, and they number 146. Nine broken clauses were excluded.

-ma might have been construable in different contexts as 'but then' or 'and then' and the like, or as more rhetorically colorful equivalents like 'while' (e.g., in example (47)), but I do not know of any principled way to determine this, i.e., attributing such English-based construals to -ma while remaining true to the data. Indicating the degree of perceived adversativity by giving translations with 'and' or 'but' (and if strongly adversative, 'however' and the like) is about as far as it is safe to go.

The second members marked with -ma in bipartite structures were not collected comprehensively, so the total may be more than 43.

It does not matter for the purposes of understanding the force of counterexpectation whether the referent of apāš 'that one' be the messenger, the person who sent him, or the extraditee.

New non-initial non-subjects were not collected systematically, so the number of clauses with new referents is actually higher than 105. Two of these clauses (#1012, #1046) have two referents each, so the number of new referents in the 105 clauses is 107. Cf. Appendix.
These 5 examples of the border-setting formula with new subject are #1098–#1099, #1102 (all given in example (52)), #1155 (= example (41)), and #1227.

The 16 examples of the border-setting formula in the Bronze Tablet are ##1322, 1324, 1326, 1327, 1329, 1331, 1333, 1335, 1338, 1341, 1342, 1344, 1346, 1347, 1350, 1351.

Of course it is possible in these border-setting formulae that *irhaš/ZAG-aš* ‘border’ is the subject and that the placename is the predicate nominal. Such an analysis would be consistent with Delbrück’s ‘rule’ for nominal sentences in Sanskrit, in which the predicate nominal more frequently occurs at the beginning of the clause because it is new and thus emphasized (Delbrück 1888:17). Although the placename in the Hittite examples does not occur clause-initially, it is certainly new and stressed. At present both views of the Hittite data are plausible. The difficulties associated with deciding which nouns are subjects and which are predicate nominals in Sanskrit led Gren-Eklund (1978) to reject the verbal model for nominal sentences.

The two clauses with phraseological verbs are #1154 (in example (93)), occurring paragraph-initially (cf. §3.3.2.1), and #1356 (= example (4e)), occurring in a clause of orientation with *mahhan* ‘when’ (cf. §3.3.2).

The demonstrative pronominal stem *apa-* was considered ‘personal’ for the third person (Friedrich 1960:62 §98).

#1068 can be seen in note 2, example (a), where relevant information is backgrounded by means of a pluperfect construction.

Although no preserved paragraph beginnings in ILMS show -*ma*, 6 paragraphs begin with *našma* ‘or (if)’, and 4 begin with *namma* ‘furthermore’. The former contains -*ma* historically, and the latter may do (Tischler 1977ff. II:266-268, 279-282). Both forms tend to occur after something else.

This paragraph of AH (§7 in Otten’s 1981 ed.) contains many subject switches occurring with -*ma*. In the 20 clauses from 1.33 to 1.47, there are 14 changes in subject, and 10 of
these are marked with -ma. Example (93) contains more text from this paragraph that precedes the passage in (79).

17 As Ruggero Stefanini observes, -al-ya is 'especially present' in the Letter of Puduhepa (1964:52-54). Unfortunately, many attestations were excluded from this study because they are not clause-connecting, or because they occur in broken contexts or are unclear.

18 One of these 41 attestations does not occur with geminate consonant. At AH IV 17 (#4040) we find kišat=ya=za ‘and (so) it happened’, instead of *kišatt=a=za. Another non-geminate attestation in apparently non-clause-connective context occurs at LPK Vs. 54’ (#5017): n=at ma=na iyat=ya ‘and even if you did it’, instead of *iyatt=a.

19 Nine of the 14 paragraph-initial -ya’s are found in the Bronze Tablet, so the particle’s occurrence in this environment is otherwise rare (cf. §3.3.2.1). It may be noted that both -ma and -ya have much higher-than-average rates of occurrence in the Bronze Tablet: 29.5% of clauses for -ma (average 19.8%), and 10.0% of clauses for -ya (average 5.3%).

20 Examples of close connection with -ma were presented in (35) = #1082, (37) = #1264, (38) = #1069, (39) = #1368-#1369, (48) = #1297, (49) = #1139, (53) = #1314, and (93) = #1157, as well as below in (95) = #1378.

21 The 6 examples with -ya are found in the Bronze Tablet. All occur in the second of a pair of clauses. In the first clause Tuthaliya asserts that his father Hattusili did something for the benefit of Kurunta, and in the second Tuthaliya says that he also performed the same action benefiting Kurunta. The examples are #4085, 4088, 4090, 4102, 4106, 4107.

22 I am aware that some of these conditions may have obtained when Mursili actually heard the report that he quotes, but it seems unlikely that he is necessarily quoting the report verbatim, given the presentation of the information in the previous paragraph, or that he is considering the status of referents and relations in his consciousness at the time of the report, or moreover that such statuses, for instance the newness of the referents, would trigger the occurrence of -al-ya as opposed to any other conjunction.
Chapter 4

-\textit{ma} in Middle Hittite

§4.0 Introduction

My study of -\textit{ma}'s function continues with the examination of its occurrence in the Middle Hittite Maşat letters.

In §4.0.1 I reiterate the reasons for using the letters, and present the basic statistics on -\textit{ma}'s occurrence. I find that it is more likely to occur in texts that are relatively longer than shorter.

§§4.1-4.2 contain the data on the phonological and syntactic distribution of -\textit{ma}. Regarding the former, the particle has already been extended to post-consonantal environments. As to the latter, a smaller number of attestations exhibits less variety.

The pragmatic notions focus, orientation, and topic and their occurrence with -\textit{ma} are examined in §4.3. Middle Hittite (MH) -\textit{ma} can be most strongly associated with contrast and subject switch. In addition to expected uses, -\textit{ma} in contrastive and emphatic contexts is found to occur with three Hittite formulae. -\textit{ma} is also seen to link and signal conflict between clauses in the same and different conceptual domains (Sweetser 1990).

In §4.4 I review the evidence for the continued productivity of -\textit{a}, discussed in §2.4. While most occurrences support the idea that -\textit{a} is fossilized by Middle Hittite, limited evidence suggests that it is instead merely moribund.

I briefly examine the distribution and function of -\textit{a/-ya} in §4.5. The number of attestations of MH (clause-connective) -\textit{a/-ya} is rather small, and this is evident in its less robust occurrence in almost all distributional and functional categories, particularly the pragmatic contexts associated with -\textit{ma}. It continues to be strongly associated with contexts of close connection between clauses, however.
§4.0.1 Texts and Data

In this study the primary goals for including texts for analysis were 1) secure dating of the composition and manuscript of a text, and 2) consistency across textual genres. The corpus commonly accepted as Middle Hittite might allow consistency of genre to be achieved for the most part, but the dating of non-historical texts to the period is not entirely certain (Melchert 1984b:80, Yoshida 1990:9 fn.7). As historical texts, the treaties with the Gasga (CTH 137-139) seem to be securely Middle Hittite but are either too fragmentary or have too many questionable attestations to have been included in the corpus. I therefore have chosen to use only the letters from Maşat.¹

Middle Hittite is not crucial for determining which changes occurred between Old Hittite and Neo-Hittite, as Melchert notes (with reference to his study, 1984b:80-81), although it could provide evidence for tracking such changes. Upon quick review, the use of -ma in some MH texts seems to agree with that in OH texts, while other texts indicate transition or affinity with NH texts.²

Nevertheless, the letters constitute a well preserved corpus securely datable to a time shortly before Suppiluliuma I (Alp 1991a:109-112), in whose reign the Neo-Hittite linguistic period is commonly considered to have begun. Their primary value for the present study, however, is that they probably contain colloquial Hittite, or as close to it as we shall ever get.³ This assumption is supported by the fact that the letters deal primarily with domestic administrative matters, which should imply a style that is, minimally, less formal than that of diplomatic correspondence.

The letters present two complications with regard to consistency. First, there is no well-preserved correspondence of a similar stylistic level in the OH and NH texts; and second, the letters themselves are less involved texts than, say, NH historical texts, simply because they are not as long. In this respect, they resemble the language of the Laws, with shorter chunks of texts (paragraphs) and less rhetorical development.

See the appendix for the letters included for analysis.

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The number of occurrences of -ma found in the Maṣat letters is given in the following table.

(1) Occurrences of -ma

<table>
<thead>
<tr>
<th>Text</th>
<th>Secure</th>
<th>Unsure or in Broken Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maṣat Letters</td>
<td>70</td>
<td>30</td>
</tr>
</tbody>
</table>

(See the appendix for a list of the citations of -ma in these texts.) The following table shows the frequency of occurrence of -ma in the letters considered suitable for inclusion:

(2) Frequency of -ma; Clause Counts

<table>
<thead>
<tr>
<th>Text</th>
<th>Clauses with -ma</th>
<th>No. of Clauses</th>
<th>Frequency</th>
<th>No. of Letters</th>
<th>Clauses per Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maṣat Letters</td>
<td>71a</td>
<td>665</td>
<td>10.7%</td>
<td>72</td>
<td>9.2</td>
</tr>
<tr>
<td>Letters with -ma</td>
<td>67</td>
<td>394</td>
<td>17.0%</td>
<td>29</td>
<td>13.6</td>
</tr>
<tr>
<td>Letters without -ma</td>
<td>0</td>
<td>145</td>
<td>0.0%</td>
<td>23</td>
<td>6.3</td>
</tr>
<tr>
<td>Zweitbriefe</td>
<td>4</td>
<td>126</td>
<td>0.2%</td>
<td>20</td>
<td>6.3</td>
</tr>
</tbody>
</table>

a) Includes one -ma in broken context: #7012.

Fifty-two letters and 20 Zweitbriefe were found to be acceptable under the criteria laid out in §1.5. While 71 clauses contain -ma, 1 of these (#7012) must be excluded from analysis due to damage, so the tally of clauses beginning with -ma and included in the analysis is 70. In individual letters -ma’s occurrence ranges from 0.0% (or 5.3% (HKM 58) for letters with -ma) to 29.4% (HKM 68).

While the frequency of -ma in the letters is 10.7% overall, it is 17.0% in the letters with -ma as considered separately from the letters without -ma and the Zweitbriefe. The profiles of the last two are rather similar, the rarity of -ma apparently having to do with the length of the letter.
In fact, occurrence of -ma correlates well with length of letter, even among letters by one author. Assuming just one Hittite king authored all letters from ḫUTU-ŠI ‘My Majesty’ in the corpus, then he is the only author to have written more than two letters (excluding Zweitbriefe). The king dictated 29 of the 52 letters, and 18 of these 29 contain -ma. The average length of a letter among the 18 is 10.4 clauses, while the average length among the king’s 11 letters without -ma is 4.5 clauses. Clearly, -ma is more likely to occur in longer texts.

§4.1 Phonological Distribution

In Middle Hittite, -ma occurs after consonants, vowels, and Sumerographic and Akkadographic forms. There is thus no phonological restriction on the enclitic’s occurrence. The following table summarizes MH -ma’s phonological distribution in the letters analyzed:

(3) Phonological Distribution of -ma

<table>
<thead>
<tr>
<th>after C</th>
<th>after V</th>
<th>after non-phonetic writing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>10</td>
<td>35ᵃ</td>
<td>70</td>
</tr>
<tr>
<td>35.7%</td>
<td>14.3%</td>
<td>50.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

a) Includes 6 examples with Akkadogram or Sumerogram plus Hittite stem form.

§4.2 Syntactic Distribution

As in Old Hittite and Neo-Hittite, Middle Hittite -ma usually occurs after the first word in its clause, but may occur in other positions, as summarized in (4).
Syntactic Distribution of -ma

i) after the first word: 54  77.1%

ii) after the second word, involving one constituent:
ex.: [LÚ.MEŠ URUQašqa] = ma 6  8.6%

iii) after the third word, involving one constituent:
ex.: [LÚ.KUR KUR URUDurmitta] = ma -  0.0%

iv) after the second word, involving two constituents:
ex.: [mān] [ŪL] = ma 9  12.9%

v) after the third word, involving two constituents:
ex.: [nu] [Gišmura tuel] = ma 1  1.4%

Delaying -ma to the second or third word of the clause occurs in Middle Hittite in the same contexts as in the other periods. These are a) with clause-initial mān ‘if [MH-NH]’; b) with the clause-introductory particle nu ‘and’; and c) with Akkadographic or Sumerographic writing (cf. §2.2, §3.2).

§4.2.1 -ma with mān

The conditional conjunction mān ‘if’ cooccurs with -ma 7 times in the letters, accounting for 7 of the 9 examples of syntactic distribution type iv) in (4). Six of these involve the phrase mān ŪL = ma ‘but if not’, as in (5).

(5) HKM 52 öy. 17-18; #6051
mān ŪL = ma n=at uwami / INA É.GAL-LIM memaḫḫi
(if not -ma cc-it I will go in palace I will tell)

‘But if not, I’ll go tell it in the palace’

(See §4.3.1.1 for more discussion of this phrase.) The seventh example contains mān = aš nāwi = ma ‘but if he (has) not yet’ (#6060).

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§4.2.2 -ma with nu

-ma occurs 3 times with n(u) 'and'. Two of these involve n=ašta ...=ma, as in (6), where -ma is delayed to the third word of the clause.

(6) HKM 72 öy. 9-10; #6068

§ n=ašta Gitšmurta tuel= ma / karašsandu
{CC-PV wood:murta.A you.G -ma they cut!}

'§ (Or) let them cut your(sma) murta-wood'

Here the presence of n(u) and the unusual placement of -ma seem to make -ma an emphatic particle (see example (16b)). The other example with n=ašta is (7):

(7) HKM 47 ay. 50; #6047

... n=ašta ḥūtāš= ma=kan piran SIG5-az zilawan SIG5-az
{CC-PV huta.N-ma PV before SIG5-az zilawan SIG5-az}

'... then a huta(-bird) (was) in front SIG5-az zilawan SIG5-az'

Interesting here is the addition of -kan after -ma. Desirous of including -kan, but finding its usual syntactic slot filled by -ašta, the author placed it in what seems to be the backup position for sentence enclitics. Both -ma and -kan are written above the line, indicating that they were added after initial composition of the text. Both examples with n=ašta show more syntactic flexibility than we are accustomed to, and this may be attributed to the presumably unrevised and colloquial nature of correspondence.5 The third example with nu is nu=wa URUKapapāšuwan=ma walḫūwani "we will strike Kapapāšuwa" (#6020). This example and (7) are the two remaining instances of syntactic distribution type iv) in (4), while (6) is the sole example of type v).6

§4.2.3 -ma with Akkadograms and Sumerograms

-ma occurs with Akkadograms and Sumerograms in compounds that constitute all 6 examples of syntactic distribution category ii) in (4). Similar examples were discussed in

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§3.2.3. *-ma* also occurs with 29 Akkadograms and Sumerograms that function as single words and do not cause delay of *-ma*. Three of the former type and 3 of the latter involved undeclined Hittite stem-forms.

§4.2.4 Further Host Syntax

The grammatical categories of the hosts of the 70 *-ma's* are summarized in (8).

(8) **Grammatical Categories of *-ma's* Hosts**

<table>
<thead>
<tr>
<th>Category</th>
<th>Noun</th>
<th>Noun Phrase</th>
<th>Pronoun</th>
<th>Adjective</th>
<th>Adverb</th>
<th>Negative</th>
<th>Preverb</th>
<th>Verb</th>
<th>Conjunction</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>26</td>
<td>8</td>
<td>7(^a)</td>
<td>2(^b)</td>
<td>14(^c)</td>
<td>8</td>
<td>-</td>
<td>1</td>
<td>4(^d)</td>
<td>70</td>
</tr>
<tr>
<td>Percentage</td>
<td>37.1%</td>
<td>11.4%</td>
<td>10.0%</td>
<td>2.9%</td>
<td>20.0%</td>
<td>11.4%</td>
<td>0.0%</td>
<td>1.4%</td>
<td>5.7%</td>
<td>99.9%</td>
</tr>
</tbody>
</table>

a) 2 personal (genitive) and 1 demonstrative used for 3.sg. personal; 4 demonstrative. b) 1 demonstrative, 1 number. c) 3 spatial, 2 temporal, 9 other. d) 1 *mahhan*, 3 *kuitman*.

The grammatical relations of the substantival categories is given in (9).

(9) **Grammatical Relations of Substantival Hosts**

<table>
<thead>
<tr>
<th>Category</th>
<th>Noun</th>
<th>NP</th>
<th>Pronoun</th>
<th>Adjective</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>9(^a)</td>
<td>3(^a)</td>
<td>4</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Accusative</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Genitive</td>
<td>9</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Dative/Locative</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Ablative</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Allative</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>8</td>
<td>7</td>
<td>2</td>
<td>43</td>
</tr>
</tbody>
</table>

a) incl. 1 possibly vocative form (N—#6052 in HKM 52; NP—#6057 in HKM 56).
§4.2.5 Syntax with respect to Neighboring Clauses

Example (10) summarizes the occurrence of MH -ma in simple and complex structures (environments after Houwink ten Cate 1973:128; cf. §2.2):

(10)

**Interclausal Syntax of -ma**

<table>
<thead>
<tr>
<th>1a</th>
<th>in an independent clause</th>
<th>26</th>
<th>37.1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC-ma</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1b</th>
<th>in a protasis following another protasis</th>
<th>1</th>
<th>1.4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC DC-ma...MC</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>in an apodosis</th>
<th>9</th>
<th>12.9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC MC-ma</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th>in a protasis</th>
<th>34</th>
<th>48.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-ma MC</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2/3</th>
<th>in the protasis of a complex apodosis</th>
<th>-</th>
<th>0.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC (DC-ma MC)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total | 70 | 100.0% |

In the Maṣat letters analyzed, the number of examples involving complex protases (environments 1b and 2/3) was noticeably small, there being only 1, or 1.4% of the total, as compared to 9.5% of the total in Neo-Hittite. This is attributable to the shorter length of texts and portions of texts (i.e., 'paragraphs') in the letters as compared to NH historical documents. The brief nature of the letters does not favor complex structures, here, complicated sets of conditions.

The scope of -ma is the same as discussed in §3.2.5. It includes its own clause and a following clause if the structure is dependent (=ma)–main (environment 3). Its referential scope is typically the immediately preceding clause(s), but can extend further back, e.g., in contrastive contexts. See §4.3.1.1 for discussion of the formula for introducing discourse-topics, in which the connection between the dependent and main clauses is looser than usual.
§4.3 Pragmatics

As was done for the previous periods of Hittite, I will examine the correlation of
-ma with the pragmatic notions of focus, background, and subject (representing topic) also
in Middle Hittite.

§4.3.1 Focus

Considered as fairly secure instantiations of focus worth investigating are contrast,
including counterexpectation and series-marking; new referents; and special emphasis.

§4.3.1.1 Contrast

Middle Hittite -ma occurs in contrastive contexts, that is, contexts where one idea is
opposed to another. A clear example is the two-clause specification in (11). I-iš 'one' is
opposed to the second I-iš 'one, the other', and, forming the primary focus of contrast, the
first crossing point, Išteruwa, is opposed to the second, Zišpa. -ma, of course, occurs in
the second, contrasted clause.

(11) HKM 46 òy. 3-7; #6039

§ kāša=kan LÜKÜR pangarit / II AŠRA zaiš
   nu=kan I-iš / lattiš /NA URU Išteruwa / zaiš
   I-iš=ma=kan lattiš / /NA URU Zišpa zaiš
{ 1.N -ma PV tribal group.N at Zišpa crossed }

'S, the enemy crossed / in force at two locations.
One tribal group crossed / at Išteruwa,
And one tribal group / crossed at Zišpa'

Forty-one clauses with -ma were contrastive (58.6% of 70), 23 (32.9%) exhibiting strong
contrast, and 18 (25.7%) exhibiting weak contrast, as in §3.3.1.1.1 and §3.3.1.1.2,
respectively.⁷

Sixteen of the 18 examples of weak contrast with -ma involve a formula used to set
the discourse topic for the next portion of the discourse, as in (12).⁸
Here the discourse topic about Himuili's brother is opposed to the discourse topic about chariotry, but the opposition is not very strong—as far as we can tell, there is no reason to assume that the two were so closely related in some situation that separate reference to each would connote strong contrast. Each topic was apparently written about separately in one or more previous communications from Kaššu to the king.

Repeated form tends to highlight oppositions, and 21 of the 70 clauses with -ma show some degree of repeated form (30.0%). Twenty of the 21 occur in contrastive contexts. Among the examples with weak contrast, repeated form is limited to the formula that changes the discourse topic. The examples with strong contrast exhibit more variety in repeated form.

The formula that changes the discourse topic has one of two forms, either that given above in (12), ŠA NP(=ma)(=mu) kuit uttar hatrāeš ‘(and) the matter of NP that you wrote (me):...’ (10 out of the 16 occurrences with -ma), or a variant with deictic adverb (6 out of the 16 occurrences with -ma): kisšan(=ma)=mu kuit hatrāeš ‘(and) that which you wrote me in the following way:...’ (cf. Hagenbuchner (1989:87-89)). The author may optionally then quote from the communication he had from the addressee (not done in (12)). The formula occurs most frequently at the beginning of paragraphs (15 out of the 16 occurrences with -ma) and typically changes the discourse topic to something not yet
discussed in the current letter. It often establishes the first discourse topic of a letter (but not with -ma). While the formula consists of a relative protasis, the relative noun or pronoun is grammatically resumed in only 5 of 14 occurrences with -ma (3 of the first variant, 2 of the second; 2 of 16 examples broken). When resumptions do occur, they may refer to the genitive noun phrase or to an idea from the quote. Relative clauses in Hittite typically exhibit tight anaphoric connections, and this looser grammatical connection supports the idea of a specialized function for this formula, i.e., to set the discourse topic for the following discourse, and 2) provides conditions of ambiguity favorable for the passage of kuit from a relative form to a conjunction, as discussed in Holland (ms.).

Another formula associated with contrast is mān ūl ez ma ‘but if not’ (cf. CHD L-N:94, 156, 417). The function of this phrase is to set up conditions opposite from those of a preceding proposition (or propositions). The phrase is therefore strongly contrastive. Compare (13).

(13) HKM 16 őy. 5-ay. 15; #6017 (dUTU-ŠI to Kaššu and Zilapi[ya])

§ mahšan šamaš / kāš tuppianza / anda wemizzi
nu MAḪAR dUTU-ŠI / liliwaḫḫuanzi / ūnništen
§ mān ūl ez ma
{ if not -ma }
nušmaš šan / ūwanzi / apiya pidi / tašuwaḫḫanzi

‘§ When / this tablet / reaches you,
come / quickly / before My Majesty.
§ But if (you do) not,
they will come / blind / you / there’

The addressees are expected to heed the king’s command. The clause, mān ūl ez ma, creates a hypothetical situation in which they fail to do so, and under those circumstances it will go badly for them. Although negative conditional protases with -ma are found in the OH and NH corpora, they include explicit predicates. In the Maṣat letters, however, mān ūl ez ma clauses show that the predicate of a preceding proposition can be gapped in a
negative conditional protasis,\(^{10}\) and the use of the phrase provides evidence for the colloquial nature of the letters.

§4.3.1.1.1 Series

A use of \(-\text{ma}\) that is strongly associated with contrast marks the opposition of ideas constituting one overarching situation, either of three or more ideas, as in series marking, or, as with its less complicated source, opposition of two ideas (cf. §3.3.1.1.3). In Middle Hittite, 15 examples with \(-\text{ma}\) (21.4\% of 70) are marked as series members in 6 different series. The more common, but perhaps less striking, pair-marking is seen in 13 examples (18.6\%). All but one example each of pair (#6030) and series (#6003) marking occur in contrastive clauses. Most examples of both types are instances of the construction that changes discourse topics discussed in §4.3.1.1: 9 of 15 series members, 8 of 13 two-part members.\(^{11}\)

An interesting example of multiple-member marking can be seen in (14), where a two-member opposition makes up part of a larger series:

(14) HKM 6 öy. 3-14; #6002, #6003, #6004 (\(\text{d}\)UTU-\(\ddot{S}\)ı to Kaššu)

\(\ddot{\text{§ kiššan=mu kuit ħatræ̱s / kāsə=wa LÜKÚR úit}}\)
\(\text{nu=wa=za=kan URUḤaparan iniššan / tamašta} \)
\(\text{URUKašipuran= ma=wa= kan / kez / ta'mašta} \)
\{ Kašipura.A \(-\text{ma} QU PV this.AB oppressed \}
\(\text{apāš= ma=wa=kan / ištarna arṭa úit} \)
\{ that.N-\text{ma} QU PV between away came \}
\(\text{namma=ma=wa<cr>=aš kuwapi pait / nu=wa'=aš UL IDI} \)
\(\text{§ nu apāš LÜKÚR / alwaŋažhanza imma / ěsta n=an UL / šaṭka[[§]]?} \)

°§ That which you wrote me in the following way: / "Lo, the enemy came. He oppressed Ḥapara / as (previously) stated, and he oppressed Kašipura / from this side, and that one / went away, but when he went on, / I did not recognize him (lit. know them)."
\(\ddot{\text{§ Was that enemy / indeed bewitched, / that you did not / know him?}} \)°
The enemy actions, oppressing first Ḥapara and then Kašipura, and then departing from the area, form a series, the second and third members of which are signaled with -ma. The two clauses reporting the attacks on the cities also form a two-member opposition within the series. These clauses contain repeated vocabulary and show stronger opposition to each other than either does to the last clause about enemy movements.

§4.3.1.1.2 Counterexpectation

The last two clauses of the first paragraph in (14), namma = ma...ÜL IDI, form a sentence expressing counterexpectation. Kaššu reported to the king that the enemy had been coming, presumably toward him, such that he would have been able to challenge them, but that as the enemy moved on, he did not recognize them, and they apparently evaded his notice. Example (15) concerns another situation in which events occur that go against expectations.

(15) HKM 56 öy. 7-10; #6057 (Ḫimmuili to Ḫuilli)

§ ammel [k]uit LÜTEMU / apez ūit  
ŠEŠ. DÜG.GA- YA=ma=mu / aššul kuwat ÜL / ḫatraēš §  
{brother dear my -ma me greeting.A why not you wrote }

‘§ When my messenger / came (back) from there,  
why(=ma), my dear brother, / did you not write me / greetings? §’

We can infer from this passage that Ḫimmuili expected salutations from Ḫuilli, and when these were not forthcoming, he was compelled to question Ḫuilli about it. Of the 70 clauses with -ma, 14 (20.0%) express counterexpectation.¹²

Five of the 6 examples of clausal mān ÜL = ma ‘but if not’ are counterexpectational, as in (13). All 5 follow an author’s commands which he expects the addressee to obey.

The negative conditional protasis poses a scenario in which the latter does not carry out the order, and the apodosis describes the punishment he would then suffer—these sentences function as threats. The sixth instance of mān ÜL = ma (#6070) is not contrary to
expectation and presents an alternative to a given scenario with more than one possibility. Therefore the counterexpectationality associated with the phrase *mān OL*-ma is due to the context in which it occurs rather than any quality of the phrase itself.

Example (15a) shows another case of counterexpectation wherein -ma links clauses in the epistolary domain:13

(15a) HKM 8 a.k. 12-ay. 19; #6006 (dUTU-Šl to Kaššu)

§ nāšta LūKŪR QATAMMA / kuit KUR-e anda / lammar lammar iattari
mān=an ėndāši / kuwapiki mān=an / walaḫši
§ ANA PAN/ LūKŪR=-ma= z / m[e]kki pāḫḫašnuanza čēš §
| before enemy -ma RFL very cautious you be! }

‘§ Since the enemy is marching through the land / hour by hour in that way, either you will handle him somehow, or you will strike him. § But be very careful / of the enemy! §’

-ма links the imperative with the preceding clauses, which themselves are functionally, if not formally, imperative. The counterexpectation (Sweetser’s *conversational conflict*) arises because the first two clauses direct the addressee to engage the enemy, but the last clause, with -ма, implies the danger inherent in such activity. -ма occurs with other questions and imperatives (see (15) above and (16a) and (16b) below, as well as note 16), but in these it seems to link and indicate adversativity between the epistolary domain and the epistemic domain, the domain of reasoning that accommodates most, if not all, cases of counterexpectation I have identified heretofore.

Although -ма occurs with imperatives and questions elsewhere in the corpus, in the NH treaties and instruction, for example, the cases of domain-linking here are more salient, probably because of the near-immediacy of the epistolary context: these questions and commands were directed at someone in particular, in a specific situation. The addressee would have responded immediately if it were face-to-face conversation, and this is rather different from the dictating of general commands and prohibitions that characterizes treaties.
and instructions. The addressees of those documents would not have been expected to respond to the king setting down terms of behavior.

§4.3.1.2 New Referents

Referents considered to be inactive in the consciousness of the addressee were examined as obvious instantiations of focus. There are no fewer than 35 new referents in 33 clauses with -ma (47.1% of 70). Twenty-two referents served as -ma’s host clause-initially. Eight of these were genitive NPs occurring in the discourse-topic-changing construction. Five consciousness-inactive hosts were new subjects; another 7 new subjects occurred later in the clause. An additional 6 new referents also occurred after initial position.14

An example of -ma’s cooccurrence with a new referent can be seen in (16), in which the author is describing the observation of birds in various positions and directions:

(16) HKM 47 öy. 32-a.k. 36; #6043–#6044 (Šarla- diplomats to 4UTU-$\bar{\text{S}}$)

§[na]m’m’a ħuranniš tar-u tapaššiš GUN /[zi]lawan SIG₅-az nu āršintaraš
[z]ilawan kuš uit kuitman=ma=an ušgauen
[š]a$\text{s}ān=ma tar-u-an aûmen / n=as pariyawan pait ... 
{šaša.A -ma tarwiyalliyan we saw}

‘§[Th]en a ħuranni(-bird) (was) tarwiyalli tapaššiš GUN zilawan SIG₅-az. And an āršintara(-bird)
came zilawan kuštayati. And while we were watching it,
we saw a [š]aša(-bird)(=ma) tarwiyalliyan, / and it went pariyawan ... ’

In this passage the direct object šaša, a type of bird, is mentioned for the first time. -ma really seems to be marking this referent’s introduction, for it is the only category associated with the particle that is present: the šaša does not seem to contrast with the most recently observed bird, the āršintara. Also, the subject of the clause is the same as that of the preceding clause (1.pl.), whereas resumptive clauses with -ma most often have subject switch (7/8 in Middle Hittite, 37/44 in Neo-Hittite).15
§4.3.1.3 Emphasis (Special Focus)

MH -ma occurs in contexts of special focus, that is, where the proposition or an element therein is emphasized, as described in §3.3.1.3. Twelve clauses with -ma (17.1%) are detectably emphatic. Four of these are forceful questions, 3 are imperatives, and 3 contain orthotonic personal pronouns; 3 are generally emphatic.16 Two of these emphasized clauses can be seen in (16a).

(16a) HKM 68 öy. 4-7; #6062-#6063 (UGULA NIMGIR.ERÍN.MEŠ to Pallanna and Zartummanni)

§ ammuk ÜL kuitki kuit / dammiškan ḥarmi
ÜL=ma=kan / dàn kuedani kuitki ḥarmi
[in that way -ma ]
QATAMMA=ma= mu kwat dammiškanzi §
[in that way -ma me why they are attacking ]

‘§ (Seeing) that I have not / harmed anything, nor have / I taken anything from anyone, why(=ma) are they attacking me in that way? §’

The two clauses with ÜL (= natta) ‘not’ exemplify a Hittite rhetorical practice that is seen twice in the Apology of Hattusili (see chapter 3, example (49), and #1137), wherein the second of two negated assertions contains a fronted negative with -ma.17 The effect of this strategy is to aid in emphasizing the content of the second clause, as seen above. Similarly in the last clause, the adverb QATAMMA (= apeniššan) ‘in that way’, which with more constituents would occur later in the clause, occurs clause-initially and highlights the emphatic nature of the question.

Three other examples exhibit variant syntax. One (#6023) features a new subject placed late in its clause, after the locative and the direct object. The other 2 exhibit non-standard clitic placement—see examples (7) and (16b). In addition to these, two broken examples have clause-initial verbs (#7002, #7007).
There are 3 examples in which -ma attaches to an orthotonic personal pronoun, but only 2 of these are in clause-initial position. Interestingly, there are 12 examples of orthotonic personal pronoun with -a; see note 22. See §4.4 below for discussion of -a.

In example (16b), which repeats example (6) with more context, -ma attaches to a genitive personal pronoun that atypically follows its head noun.

(16b) HKM 72 öy. 7-10; #6068 (Chief Scribe to Gaššu, quoting Tarḫu[np]iḫanu in part)

GIŠ.ḪI.A=ma=wa NU.GÁL nu=ššan k[ašaʔ] / ANA GIŠ ḫuški
§ n=ašta GIš.murta tuel= ma / karaššandu
{CC-PV wood: murta.A you.G -ma they cut! }

‘(T. reported to me: “The stone part of the bridge is finished being built,)
but there is no wood.” L[ookʔ], wait for the wood.
§ (Or) let them cut (some of?) your(=ma) murta-wood (and take it to finish the bridge)’

The occurrence of -ma with nu and the placement of -ma on the third word of the clause greatly diminish the connective force of the particle and seem to make it almost purely emphatic, probably with connotations of adversativity, of course. Compare §5.5.

§4.3.2 Orientation

In Middle Hittite, as in the other stages of Hittite, -ma occurs in contexts that adjust the setting in which the events of the discourse take place. Fourteen such clauses with -ma are found in the data (20.0% of 70). The majority, 10 clauses, make temporal adjustments to the discourse while spatial adjustments occur in only 2 clauses, the last 2 clauses being ambiguous between these or otherwise modifying. Six examples occur in dependent adverbial clauses, and 1 occurs in a circumstantial clause under the scope of kuit. Eight examples involve clausal complements: 6 initial adverbs, and 2 initial oblique nouns. The clause-initial adverb appezziyaz ‘afterwards’ in example (17) adjusts the setting of the action to the third stage of coldly efficient civilian relocation.
(17) HKM 10 oy. 9-12; #6009 ([UTU-ŠI to Gaššu, quoting the latter’s quote]

nu\=wars\=anza imma III ME É-TUM amumi
nam\=mas\=an kan LÚ.ME\=SIGS MAHAR [UTU-ŠI / parā neḥḫī
appezziyaz\=ma\=wa / URU-an amumeni
{ afterwards -ma QU city.A we will move }

"Indeed I will move 300 (of) it(s) household.
Then I will send the prominent men before His Majesty,
and afterwards we will move the (population of the entire) city."

The number of examples with -ma that establish the orientation may be augmented by including conditional protases (7: #6060 and those in note 10) and relative clauses (4: #6030, 6045, 6052, 6064), as described in §3.3.2. If these are included, then 25 clauses with -ma adjust the setting (35.7% of 70). The data containing the formula for changing discourse topics, discussed in §4.3.1.1, could also be included here. The background information would then be that the addressee had written to the author about the subject in a previous letter. These 17 would bring the total of orientation-establishing examples to 42 (60% of 70). It may be noted here that 13 clauses in the data analyzed begin with kinun(=?)a 'but now'; see note 22.

§4.3.2.1 Paragraph-Initial -ma

The incidence of clause connectors that occur at the beginning of paragraphs is summarized in (18):

(18) **Clause Connectors at the Beginning of Paragraphs**

<table>
<thead>
<tr>
<th>-ma</th>
<th>-wa</th>
<th>nu</th>
<th>other/none</th>
<th>broken</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>27*</td>
<td>6</td>
<td>44*</td>
<td>103</td>
<td>16</td>
<td>195*</td>
</tr>
</tbody>
</table>

*1 clause beginning with n=ašta...=ma (#6068) counted as 1 instead of 2 in Total

The 27 paragraph-initial -ma's constitute 38.6% of the 70 clauses with -ma, but only 13.8% of the total of paragraph-initial clause connectors. The latter frequency is only

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slightly higher than -ma's 10.7% occurrence in the letters in general. The prevalent strategy is to have no clause connector at the beginning of paragraphs (103/195 = 52.8%).

Many paragraphs begin with the formula that changes or sets the discourse topic (43/195 = 22.1%). In 15 paragraphs the formula cooccurs with -ma; in 2, with nu; in 1, with -ya; and in 25, usually the first occurrence in a letter, no clause connector occurs. Another 20 paragraphs begin with relative clauses (4 occur with -ma), which typically make a referent topical for the ensuing discourse.

Of the paragraph-initial clauses with -ma, 16 involve the formula (including the one relative structure that is very similar to the formula, #6066), but the 11 that remain do not seem to form any coherent and salient group. We see relative clauses, conditional protases, a clause-initial setting change, examples with subject switch, and others that may be separated from the preceding paragraph simply for emphasis. While the motivation for using some connectors is clear (e.g., -ma with non-text-initial occurrences of the formula), it would be interesting to try to determine the conditions for using or not using -ma or one of the other of the connectors at the beginnings of paragraphs in other contexts.

§4.3.3 Subject Switch

In this study -ma is considered to mark changes in topic only insofar as it marks changes in subject. In the Middle Hittite of the Ma§at letters, -ma occurs 41 times with subject switch (58.6% of 70). Although all examples also contain other conditions that favor the occurrence of -ma, the fairly high frequency and examples like (19) support the association of -ma with subject switch.
(19) HKM 19 öy. 9-15; #6024-#6025 (dUTU-Š/ to Kaššu, quoting Kaššu)

§ nu=wa=šmaš=kan ŠA URU Gašipûra / ḫalkiḪI.A-aš zigganzi
ERÌN.MEŠ.HI.A= ma=wa= kan ANŠE.KUR.RA.HI.A / anda NU.GÁL
{ troops QU PV chariotry in be not }
dUTU-ŠI=ma=wa / mKal‘un LÛBEL ANŠE.KUR.RA / watamaḫta
{ my sun -ma QU Kallu.A lord chariotry commanded }
ANŠE.KUR.RA.H[Ť]₄A₄=kan / parâ nai ...

‘§ “They are harvesting / the grain of Gašipura for you (pl.).
But troops (and) chariotry (are) not present.
And His Majesty / commanded Kallu, / lord of the chariotry (thus):
‘Send / chariotry (to them) ’’ ’’

Although the first clause with -ma seems counterexpectational, and even though the second clause with -ma contains a new direct object, both -ma’s correlate also with a change in the subject of their respective clauses, and the association between -ma and subject switch remains strong. This association is aided by the fact that -ma cliticizes to each subject, and by the fact that the first subject in the first clause, ERÌN.MEŠ.HI.A ‘troops’, is a new referent.

§4.4 -a in the Mašat Letters

The enclitic conjunction -a that was used productively in Old Hittite remains only marginally in the Middle Hittite of the Mašat letters, and there are tantalizing indications that it is still somewhat productive.

Most attestations occur attached to orthotonic personal pronouns, as in ziga ‘but you’, or to the temporal adverb kinun ‘now’, kinuna ‘but now’. There are 13 examples of the latter, all of which can be considered to change the temporal orientation of their clauses. Five occur paragraph-initially, and 10 have subject switch. We find 12 examples of pronoun plus -a: 5 nominative 1.sg. ammuga, 5 nominative 2.sg. ziga, 1 accusative/dative-locative 2.sg. tuga, and 1 nominative 3.sg. apāša. By their very presence, these 12 can be considered emphatic to some degree. Among these we see 2
strongly contrastive examples, 1 contrastive or counterexpectational example, 5 paragraph-
initial examples, and 8 examples with subject switch. All the pronouns and adverbs occur
in clause-initial position, with the exception of one pronoun that occurs in modified initial
position. Given the quite limited distribution of -a here, it is not unreasonable to assume
that the pronouns and the adverb have come to be regarded as alternates for forms without
-a and that these alternates are used in specific contexts, e.g., clause-initially, in cases of
emphasis, or of contrast.\(^2\)

Such forms are productive in Old Hittite but have become fossilized by the time of
Neo-Hittite. The MH examples certainly seem to be residual forms, but their status is not
entirely sure, because two forms in the Maṣat letters may indicate that -a is marginally
productive. Unfortunately, both forms are in either unclear or broken context. The first
example can be seen in (20).

(20) HKM 38 oy. 3-7; (dUTU-Š? to ?)

§ man=za x[ ] EGIR-an / karû paḫašnut*
antuḫšaš(=?)a= kan uttar / kiššarî anda / karû daiš §
{person -a? PV matter.A hand.DL in already set }

'§ (? ) would have protected [ ? ] earlier,
but7 the person (had) already set the matter in the hand (i.e., took care of it) §'
*p[a]-ah-\(^{-5}\)

This is the first paragraph of the letter after the greeting, and the discourse topic is evidently
already known to the author and the addressee. It is difficult to know whether the subject
of the clauses is the addressee or some third party, for antuḫšaš ‘person, man’ could here
be a genitive dependent on uttar ‘matter’ rather than the nominative suggested. We also do
not know what was in the break. It was probably the direct object, and the traces are
consistent with the sign TU, allowing tuk ‘you [acc./dat.-loc.]’, as well as ERÎN, allowing
Fu[sstruppen] hinterher schon ges[ch]ützt, (hätte die Gottheit dir) die Sache der Menschen

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schon in die Hand gelegt’ (1991a: 189), thus rendering the clauses as a counterfactual conditional sentence. In such sentences, however, the modal particle man is usually present in both clauses (CHD L-N: 139-143).

Without knowing better the situation underlying the letter, it is hard to know just how to interpret the -a. It could be -a occurring in a contrastive or counterexpectational clause. It could also be -a/-ya written without gemination, either with emphatic word-scope or with clause-scope. There are two examples in the Maṣat letters where the second of two conjuncts is written so. But these joined forms are both constituent phrases within the clause, not clauses themselves.

The second potential -a occurs in the fragment HKM 92 at ay. 6': ]kiyaš(=?)a=šši. The beginning of the line is broken, but this is the first line of a paragraph, and this is very probably also the first word of the paragraph, therefore of a clause. There is no other context to help decide this case. The -a here could be real, as it could in antuhšaš(=?)a=kan. (It may be recalled that -a occurred most frequently after <s> in the MH texts not included in this study (see note 2).) MH -a may be moribund, but not yet dead.

The form hinganaš(=?)a=ma=kan ‘and from the plague’ (at HKM 50 oy. 4) brings to mind the rare occurrences of =ma seen in Old Hittite (§2.2). The ablative ending written <-aza> would not arouse any suspicion if it occurred word-finally, but its occurrence before clitics is unusual. The fortuitous presence of kit(-)pantalaza=pat ‘from this very time on’ (HKM 96 ay. 11’) helps determine how to interpret the questionable attestation. The emphatic particle -pat would not occur after -a, whether this be a particle with scope over word (Houwink ten Cate 1973) or over clause, because -pat attaches directly to the form on which it operates (Hoffner 1973a: 10424). In kit(-)pantalaza=pat, then, we have the ablative ending /-ats/ written <-aza>, with faux final vowel. This erases any suspicion that the final <-a> in hinganaša might be the enclitic -a.
In closing, I note that I have not observed -a attaching to -z and that the common Hittite scribal practice of writing the ablative ending -aza would obscure any such attestation.

§4.5 A Brief Look at Clause-Connective \(-a/-ya\) in the Maṣat Letters

In this section I briefly examine the function of MH \(-a/-ya\). The conjunction deserves a full treatment in its own right, and I do not claim to have fully studied its uses. As in §3.4, here I examine -a/-ya primarily with regard to the categories of use associated with -ma and present only a very brief characterization of -a/-ya. The conjunction occurs in almost all the environments examined, but the small number of attestations limits the range of its occurrence in both type and robustness.

§4.5.1 Frequency, Phonological Distribution, and Syntactic Distribution

The number of occurrences of -a/-ya found in the Maṣat letters is given in the following table.

(21) Occurrences of -a/-ya

<table>
<thead>
<tr>
<th></th>
<th>Secure</th>
<th>Unsure or in Broken Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maṣat Letters</td>
<td>23</td>
<td>13</td>
</tr>
</tbody>
</table>

With 23 attestations, -a/-ya occurs about one-third as many times as -ma, with 70 attestations. The following table shows the frequency of occurrence of -a/-ya in the sections of the Maṣat letters considered suitable for inclusion:

(22) Frequency of -a/-ya

<table>
<thead>
<tr>
<th></th>
<th>Clauses with -a/-ya</th>
<th>Number of Clauses</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maṣat Letters</td>
<td>25</td>
<td>665</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

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The frequency of -a/-ya at 3.8% is correspondingly about one-third that of -ma, at 10.7%.
The 25 clauses with -a/-ya contain two attestations in broken context (#9007 and #9008).
Subtracting these 2 clauses from the 25 yields a total of 23 clauses accepted for analysis.
(See Appendix.)

The following table summarizes -a/-ya's phonological distribution in the Maṣat letters analyzed:

(23)  

<table>
<thead>
<tr>
<th>after C</th>
<th>after V</th>
<th>after non-phonetic writing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2</td>
<td>13*</td>
<td>23</td>
</tr>
<tr>
<td>34.8%</td>
<td>8.7%</td>
<td>56.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td>(35.7%)</td>
<td>14.3%</td>
<td>50.0%</td>
<td></td>
</tr>
</tbody>
</table>

*Includes 2 examples of Sumerogram plus Hittite stem form.

As compared to -ma, -a/-ya occurs less frequently after vowels and more frequently after non-phonetic writings.

As with -ma, the predominant syntactic position for -a/-ya is after the first word in a clause, but -a/-ya exhibits much less variety in its occurrence than we have seen before. Its syntactic distribution is summarized in (24).
Syntactic Distribution of -a/-ya

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>%</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) after the first word:</td>
<td>20</td>
<td>87.0%</td>
<td>77.1%</td>
</tr>
<tr>
<td>ii) after the second word, involving one constituent:</td>
<td>3</td>
<td>13.0%</td>
<td>8.6%</td>
</tr>
<tr>
<td>ex.: [İR maŠaparta] 3 ya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) after the third word, involving one constituent:</td>
<td>0</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>ex.: [ANA LUGAL KUR URU U R U d U-to.s&amp;i] ya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv) after the second word, involving two constituents:</td>
<td>0</td>
<td>0.0%</td>
<td>12.9%</td>
</tr>
<tr>
<td>ex.: [nu] [ABU-YA] ya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v) after the third word, involving two constituents:</td>
<td>0</td>
<td>0.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

Occurrence with Sumerographic and Hittite stem-form writing accounts for the 3 examples in which -ma appears later than usual in the clause.

Please see note 25 for statistics on the syntax of -ma’s host.

As regards interclausal syntax, -a/-ya occurs as follows (after Houwink ten Cate 1973:128; cf. §2.2 above):

Interclausal Environments for -a/-ya

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>%</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a in an independent clause</td>
<td>12</td>
<td>52.2%</td>
<td>37.1%</td>
</tr>
<tr>
<td>IC-ya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b in a protasis following another protasis</td>
<td>1</td>
<td>4.3%</td>
<td>1.4%</td>
</tr>
<tr>
<td>DC DC-ya...MC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 in an apodosis</td>
<td>1</td>
<td>4.3%</td>
<td>12.9%</td>
</tr>
<tr>
<td>DC MC-ya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 in a protasis</td>
<td>9</td>
<td>39.1%</td>
<td>48.6%</td>
</tr>
<tr>
<td>DC-ya MC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/3 in the protasis of a complex apodosis</td>
<td>0</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>DC (DC-ya MC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>99.9%</td>
<td></td>
</tr>
</tbody>
</table>

The distribution of -a/-ya is similar to what we have seen to that for other periods of Hittite.
§4.5.2 Functional Contexts

The contexts which favor the occurrence of -ma were used to evaluate the occurrence of -al-ya, and the results can be seen in (26). The attestations underlying the tallies are given in note 26.

(26)

<table>
<thead>
<tr>
<th></th>
<th>-a/-ya</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(Contrast:</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>strong</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>weak</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>overall</td>
<td>4</td>
<td>41</td>
</tr>
<tr>
<td>Repeated form</td>
<td>4</td>
<td>17.4%</td>
</tr>
<tr>
<td>Series marking</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>bipartite</td>
<td>1</td>
<td>4.3%</td>
</tr>
<tr>
<td>Counterexpectation</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Clauses with</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New referents</td>
<td>16</td>
<td>33</td>
</tr>
<tr>
<td>subjects</td>
<td>6/16</td>
<td>12/33</td>
</tr>
<tr>
<td>Special focus</td>
<td>3</td>
<td>13.0%</td>
</tr>
<tr>
<td>variant word order</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>orthotonic pronouns</td>
<td>3</td>
<td>13.0%</td>
</tr>
<tr>
<td>Orientation</td>
<td>3</td>
<td>13.0%</td>
</tr>
<tr>
<td>conditional protases</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>combined</td>
<td>3</td>
<td>13.0%</td>
</tr>
<tr>
<td>Paragraph-initial</td>
<td>6</td>
<td>26.1%</td>
</tr>
<tr>
<td>% of Total (195)</td>
<td>3.1%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Subject switch</td>
<td>16</td>
<td>69.6%</td>
</tr>
</tbody>
</table>

In most categories the rate of occurrence of -ma (relative to the number of -ma-clauses) is higher than the rate of occurrence of -a/-ya (relative to the number of -a/-ya-clauses), and we can therefore conclude that most categories are more closely associated with -ma than

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with -al-ya. -ma is relatively less frequent than -al-ya in the categories of subject switch and new referents, but when regarded absolutely, -ma still occurs in these contexts at least twice as often as does -al-ya. -ma attaches to orthotonic personal pronouns rather infrequently (3x); such forms are outnumbered by those with pronoun plus -a, 12 of which occur in the data.

-al-ya is more strongly associated with additive contexts, e.g., those of close connection, in which the same subject or the same action is maintained over two clauses or sentences. -ma occurs at a lower rate in such contexts, but the frequency of contrast in its attestations is much higher than it is for examples with -al-ya.

(27)  

<table>
<thead>
<tr>
<th></th>
<th>-al-ya</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close connection:</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>showing contrast</td>
<td>2/12</td>
<td>16/20</td>
</tr>
</tbody>
</table>

A typical example of close connection with -al-ya can be seen in (28), in which -al-ya links the two clauses that deal with Gaššu’s repulsion of the attack by the enemy.

(28) HKM 10 ay. 33-41; #6013-#6014, #8004 (dUTU-ŠI to Gaššu)

§ kissans=ma=mu kuit ḫatrāēš
maḥṭan=wa=kan¹ ammu / INA KUR URUŠšupitta āṛḥun
EGIR-an=ma=wa LŪKĪR URUZikkattā / walaḥta
nu=wa XL GUD.HI.A I ME UDU.HI.A / penneš
nu=war=an=kan arḥa / peššiyanun
ŠA LŪKĪR=ya=wa=kan / appantēt kunantit / XVI[.]L₂Ú.MEŠ peššiyanun
\{ of enemy and QU PV captured.1 killed.1 16 men I threw \}
ₙ=at AŠME §

‘§ And that which you wrote to me in this way:
“When I / arrived in the land of Ššupitta,
later(=ma) (or behind me) the enemy struck / Zikkatta,
and he drove (away) 40 (heads of) cattle (and) 100 / sheep.
And I repelled / him
and (dispensed with) 16 / of the enemy, / (together) with (those) captured and killed.”
I have heard it §’
The two clauses connected by -al-ya concern closely related issues, but are not contrastive. For two non-contrastive examples of close connection with -ma, see (17) and the second clause with -ma in (14). Contrastive examples include the first and third clauses with -ma in (14).

§4.6 Conclusion

The Mašat letters make for a very interesting object of study simply by virtue of their subject matter and the style in which they are written. They offer us an opportunity to see how the Hittites administered their empire and how they communicated with one another.

The functions of -ma in the letters seem not to differ greatly from its functions in other periods and in other genres. We find it used to mark contrast and counterexpectation, the opposition of members in pairs and series, the introduction of new referents, special emphasis, orientation, and change of subject. In the letters -ma most frequently occurs in contexts with contrast, subject switch, and new referents, although somewhat less often in contexts involving change in orientation.

Thus whatever the degree of colloquiality in the letters, it does not appear to affect appreciably the function of -ma, but the particle is often used in utterances that are emphatic and therefore clearly colloquial, as in imperatives, forceful questions, and strong denials, as well as in the contrastive phrase múna OL=ma. In fact, -ma's occurrence with imperatives and questions brought to light another use of the particle: to link and indicate difference between clauses within the epistolary domain, as well as to connect and signal adversativity between clauses in the epistemic and epistolary domains. A higher incidence of clauses with both nu and -ma may also be due to the more colloquial nature of the letters.

Some effects can be attributed to genre. In the Mašat letters -ma has a lower frequency, as compared to Neo-Hittite. Its occurrence seems to correlate with length of letter, occurring more frequently in longer letters. But the letters are not as long in general
as other text types. Another obvious effect of epistolary style is the frequent use of -ma in
the formula that changes the discourse topic.

The syntactic distribution of -ma in the Mašat letters is like that of the Neo-Hittite
texts, even if, with fewer examples, it is less diverse. The phonological distribution of -ma
is also like that of Neo-Hittite, especially in that the restriction observed in Old Hittite,
namely occurrence almost exclusively after vowels, no longer holds.

OH -ma's partner in suppletion, -a, lives on in the Middle Hittite of the Mašat letters
in clause-initial forms: personal pronouns and the adverb kinuna. It may also persist as a
productive particle, though quite marginally.

The small number of occurrences of the clause conjunction -a/-ya in the letters may
compromise our understanding of it. It occurs in the contexts associated with -ma, but,
with the exception of contexts involving subject switch and new referents, it does not occur
with the frequency that -ma does. Instead, it occurs more often in contexts involving
(usually non-contrastive) close connection between clauses.
Notes to Chapter 4

1 The letter to augurs, KUB 31.101, is most probably Middle Hittite (Meacham ms.), but I exclude it due to its uncertain date and to the fact that, as regards -ma, it offers nothing not found in the Maṣat letters. See note 10.

2 Upon quick review the other MH texts provisionally eligible for inclusion provide evidence sufficient to inspire a closer look at the transition in use of -ma/-a to -ma. The Gašga treaties (CTH 137, 139.A) the Prayer of Arnuwanda and Ašmunikal on the subject of Nerik (CTH 375), and particularly the Ritual naming Tuthaliya and Nikalmati (CTH 443) maintain the phonological distribution of OH -ma/-a, with about 1 exception per text. The Prayer of Kantuzzili (CTH 373), typically considered to be 'archaizing' (Old Hittite in Middle Hittite copy (Yoshida 1990:11)), actually has -ma occurring after more consonants than do the texts above. The Instruction for the Royal Bodyguard (CTH 262) is much more like a Neo-Hittite text, -ma having free phonological distribution. In this text there appears to be only 1 example of -a, occurring after <s>. In fact, -a in all the texts occurs primarily after <s>, and, excepting instances of kinuna, only occasionally after <n>, and even less frequently after other consonants.

3 Chafe (1994:271-272, 277) describes the (personal) letter as the form of writing least divergent from conversation because a letter has a specified addressee and because the author expects a response (also likely in the form of a letter). The latter characteristic seems to be crucial.

4 Of these 30, 21 are found in letters not included in the analysis, thus only 9 unsure or uninterpretable -ma's occur in the letters included in the analysis (12.9%).

5 This is not the only example of atypically placed -kan. See the Apology of Hattusili col. I 7, where -kan is placed well within the clause (Otten 1981:4).

6 In broken context we find also the attestation našma = wa ziga = ma "or (even) you" (#7018), intriguing because of the syntax of delay and because našma 'or' contains -ma historically and functions to mark the second (or later) of two alternatives.
There are 41 clauses with -ma in contrastive contexts. The 23 with strong contrast are ##6002, 6004, 6015, 6016, 6017, 6018, 6023, 6027, 6034, 6039, 6040, 6048, 6051, 6053, 6054, 6055, 6056, 6058, 6060, 6062, 6067, 6068, 6070. The 18 with weak contrast are ##6001, 6005, 6007, 6010, 6011, 6012, 6013, 6019, 6021, 6026, 6029, 6031, 6032, 6033, 6035, 6036, 6037, 6066.

The 16 examples of the discourse-topic-changing formula are ##6001, 6005, 6007, 6010, 6011, 6012, 6013, 6019, 6021, 6026, 6029, 6031, 6032, 6033, 6035, 6036. #6066 is very similar to the formula and is also considered to change the discourse topic.

The 21 clauses with -ma with repeated form are ##6001, 6002, 6005, 6010, 6012, 6013, 6019, 6026, 6029, 6031, 6032, 6033, 6035, 6036, 6047 (in non-contrastive context), 6054, 6055, 6056, 6060.

This is frequently the case for letters (CHD L-N:156). In fact, the only -ma in KUB 31.101 occurs in män ÛL-smá (1. 24'). The 6 examples in the Mašat letters are ##6015, 6016, 6017, 6034, 6051, 6070; #7029 is a broken attestation of the phrase.

The 15 examples of series marking with -ma are ##6002*, 6003*, 6010, 6011, 6012, 6013, 6019, 6032, 6033, 6035, 6036, 6053*, 6054*, 6055*, 6056*. (An asterisk indicates that the example is not an instance of the construction that changes discourse topics.) Two of these mark only the last member of series with three members (#6019, #6056). The 13 examples of two-member marking with -ma are ##6001, 6002*, 6005, 6007, 6021, 6026, 6027*, 6029, 6030, 6031, 6037*, 6039*, 6062*. (Asterisks are similarly meaningful.)

The 14 examples of -ma with counterexpectation are ##6004, 6006, 6015, 6016, 6017, 6024, 6034, 6051, 6057, 6059, 6063, 6065, 6067, 6069.

I use epistolary here as an equivalent to Sweetser's conversational domain (1990:11). The language of the letters is the closest we will ever see to spontaneous Hittite speech, and this label is merely intended to be an adaptation of her model to fit the situation at hand.
There are 35 examples of new referents in 33 clauses with -ma. The 22 examples of -ma with new host are ##6001, 6002, 6007, 6010, 6018*, 6020, 6021, 6023, 6024*, 6029, 6031, 6032, 6033, 6035, 6042, 6044, 6047*, 6056, 6061*, 6064, 6066, 6067*.

(Asterisks indicate that the host is a new subject.) The 7 examples with non-clause-initial new subject are ##6009, 6014, 6023 (also with new host), 6030, 6038, 6063, 6068. The 6 examples with other non-clause-initial new referent are ##6010 (also with new host), 6025, 6052, 6053, 6054, 6055.

A reading of counterexpectation is also possible for this passage, depending on how surprising it was to view the šaša. The inability to determine this illustrates the limitation of functional analysis of texts in dead languages. An example similar to (16) occurs 15 lines later in the same text: *kuitman šaša I-in / [us]gauren nšaša hūtāš šaša kan piran* SIG5-az zilawan SIG5-az 'and while we were watching the one, a ĕuta(-bird)-šaša was in front SIG5-az zilawan SIG5-az)' (#6046-#6047). This example is more clearly emphatic, with both nu and -ma, than example (16); hūtāš is a new referent here. There is also subject switch.

In example (16) tar-ša is an abbreviation for the augury term tarwišali-, which Tischler seems to understand as an oracular status for a bird (1977ff. III:248-250). Scholars have represented the abbreviation differently, see Tischler (p.249) and compare CHD, where one can find taru.-an (P:151, 154).

The 4 questions with -ma are ##6050, 6057 = example (15), 6063 = example (16a), 6065. The 3 imperatives with -ma are ##6006, 6022, 6068 = example (6)/(16b). The 3 clauses with orthotonic personal pronoun and -ma are ##6003 = example (14), 6038, 6068 = example (6)/(16b). The 3 generally emphatic clauses with -ma and variant word order are ##6023, 6047 = example (7) and 6062 = example (16a).

The article on natta in CHD (L-N:409-419) observes that clause-initial occurrences may express emphasis (p.418), but the examples I cite are of a special, though productive, type that combines emphatic, truly fronted negatives with the pair-marking of -ma. These three
examples also contain indefinite expressions in both clauses, and, in the second clause, fronting separates the negative from the indefinite. CHD cites one other example of the type under uses e. (p.416) and j 4” (p.418) (in which each pair involves two clauses). The clause-initial negatives in other emphatic pairs with -ma, given under uses c 1” (p.412), c 3” (p.413, repeated under c 6” a” (p.415)), and i (p.417), would also occur clause-initially under non-emphatic circumstances, due to the gapping of constituents.

The example with non-clause-initial orthotonic pronoun plus -ma is #6068 = example (6)/(16b). The referent of a fourth pronoun, apedani ‘from that one’ (#6065), is probably not human.

One example (#6004) is a dependent adverbial clause with clause-initial adverb, thus an apparent total of 15. The 14 examples of setting modification with -ma are as follows; the examples that are not temporal modifications are so noted. #6004 (other; ambiguous), 6009, 6014, 6023 (spatial), 6027 (spatial), 6028, 6038, 6041, 6042, 6043, 6046, 6049, 6058, 6062 (other).

The 27 examples of -ma that occur paragraph-initially are #6001*, 6005*, 6006, 6007*, 6008, 6010*, 6011*, 6012*, 6013*, 6015, 6017, 6019*, 6021*, 6026*, 6029*, 6030, 6032*, 6033*, 6035*, 6036*, 6042, 6052, 6060, 6064, 6066*, 6068, 6069. An asterisk indicates cooccurrence with the discourse-topic-changing formula, including the similar form found in #6066.

The 41 examples of subject switch with -ma are #6007, 6009, 6011, 6014, 6018, 6019, 6020, 6022, 6023, 6024, 6025, 6026, 6028, 6029, 6030, 6032, 6033, 6038, 6039, 6041, 6042, 6043, 6045, 6046, 6047, 6048, 6050, 6052, 6053, 6054, 6055, 6057, 6059, 6060, 6061, 6063, 6064, 6066, 6067, 6068, 6069.

The 12 examples of personal pronoun plus -a are located at HKM 10 öy. 26, a.k. 30; HKM 35 öy. 1; HKM 46 ay. 18; HKM 52 öy. 10; HKM 55 ay. 36; HKM 58 ay. 30; HKM 63 ay. 25; HKM 66 ay. 29, 34; HKM 71 öy. 11; HKM 73 ay. 28 (occurs in modified initial position). The 13 examples of kinuna are located at HKM 5 öy. 7; HKM
18 ay. 26; HKM 19 a.k. 17; HKM 30 ay. 16, 18; HKM 52 öy. 15, ay. 36; HKM 54 ay. 25; HKM 56 öy. 13; HKM 57 a.k. 18; HKM 66 ay. 36, 39; HKM 68 öy. 8.

23 The two examples where -a/-ya is written without gemination are the following. HKM 30 ü.k. 23-25: [k?]ašša GEME kuit / [kui]t dān dayan s-a / x? harzi ‘and whatever this female slave has taken and stolen (...)’.

HKM 57 öy. 13-17: n-san ši-ša kan / mḤimuliš / mTarḥūmuwaš-a / II LÚ.IMEŠ URUḪaššarpanda / arha daiēr ‘And Ḥimuili and Tarḥumuwa, two men of Ḫaššarpanda, separated him from her (or her from him)’.

24 Among Hoffner’s attestations is a very interesting exception, ‘a-ap-pa-ja-pāt “afterwards too(?)”’ with -al-ya, at IBot I 36 iii 25 (1973a:106), but this -a/-ya appears to have word-scope (cf. Guterbock and van den Hout 1991:25).

25 The grammatical categories of the hosts of the 23 -a/-ya’s are summarized in (a).

(a) Grammatical Categories of -a/-ya’s Hosts

<table>
<thead>
<tr>
<th>Category</th>
<th>#</th>
<th>%</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>13</td>
<td>56.5%</td>
<td>37.1%</td>
</tr>
<tr>
<td>Noun Phrase</td>
<td>4</td>
<td>17.4%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Pronoun</td>
<td>3i</td>
<td>13.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Adjective</td>
<td>-</td>
<td>0.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Adverb</td>
<td>3i</td>
<td>13.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Negative</td>
<td>-</td>
<td>0.0%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Preverb</td>
<td>-</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Verb</td>
<td>-</td>
<td>0.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Conjunction</td>
<td>-</td>
<td>0.0%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>99.9%</td>
<td></td>
</tr>
</tbody>
</table>

i) Pronouns: 3 personal. ii) Adverbs: 1 spatial, 2 other.

The distribution of -a/-ya and -ma with respect to their hosts differs in that that of a/-ya is more restricted. A notable difference is the higher percentage of -a/-ya’s hosted by noun phrases, which is consistent with the more frequent cooccurrence of -a/-ya and non-
phonetic writing seen in (23). Other differences may be attributed to the smaller number of occurrences of -a/-ya. Here a smaller count correlates with less variation.

The grammatical relations of the substantival categories is given in (b).

(b) **Grammatical Relations of Substantival Hosts**

<table>
<thead>
<tr>
<th></th>
<th>Noun</th>
<th>NP</th>
<th>Pronoun</th>
<th>Adjective</th>
<th>Total</th>
<th>%</th>
<th>-ma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>7</td>
<td>30.4%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Accusative</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>9</td>
<td>39.1%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Genitive</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>13.0%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Dative/Locative</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>4.3%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Ablative</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Allative</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>20</td>
<td>~87.0%</td>
<td>61.4%</td>
</tr>
</tbody>
</table>

-a/-ya occurs much more frequently with accusative forms than does -ma, but no explanation for this is evident at present.

Concerning -a/-ya:

The 2 examples with strong contrast are #8016 and #8023. The 2 examples with weak contrast are #8001 and #8011.

The 4 examples with repeated form are #8001, 8002, 8011, 8017.

The 1 example of bipartite marking is #8005.

The 16 examples with new referents are #8001*, 8005, 8006*, 8007, 8008*, 8011, 8012, 8013, 8014, 8015, 8016*, 8018*, 8019, 8020, 8022, 8023*. Asterisks indicate new subject.

The 3 examples with orthotonic personal pronouns are #8001, #8009, #8010.

The 3 examples with orientation change are #8002, #8022, #8023.

The 6 examples occurring paragraph-initially are #8002, 8011, 8012, 8017, 8020, 8021.

The 16 examples with subject switch are #8001, 8002, 8006, 8008, 8009, 8010, 8012, 8015, 8016, 8017, 8018, 8019, 8020, 8021, 8022, 8023.
The 12 examples of close connection with -a/ya are 8001*, 8003, 8004, 8005, 8006, 8007, 8010, 8013, 8014, 8015, 8018, 8023*. Asterisks here and following indicate contrastive examples. The 20 examples of close connection with -ma are 6002*, 6003, 6004*, 6009, 6015*, 6016*, 6017*, 6034*, 6037*, 6039*, 6040*, 6044, 6049, 6051*, 6054*, 6055*, 6056*, 6060*, 6062*, 6070*.
Chapter 5
Diachronic Interpretation

§5.0 Introduction

Given the findings of the synchronic studies of -ma in Old Hittite, Middle Hittite, and Neo-Hittite in the preceding chapters, it is possible to determine what changes occurred in the use of -ma and what may have motivated those changes identified.

In §5.1.1 I present evidence for a great increase in -ma's frequency from Old Hittite to Neo-Hittite that indicates increased grammaticalization of the enclitic. In §5.1.2 I observe that by the Middle Hittite period -ma had moved into the phonological domain of its OH allomorph, -a, and I suggest a path for this change. In §5.1.3 I present changes in -ma's syntactic distribution. In terms of intraclausal syntax, -ma's placement became more regular over time, whereas the particle's occurrence increased in non-sentence-initial interclausal environments.

Section §5.2 concerns changes in the pragmatic distribution of -ma. The connector occurred much more frequently in nearly all categories, but particularly in contexts with series, with orthotonic personal pronouns, with counterexpectation, and in paragraph-initial environments. Smaller but nevertheless robust increases were seen in nearly all the remaining categories. It is possible to suggest paths of development for several of these changes.

In §5.3 I present a partial confirmation of my method by measuring whether in one text -ma occurs in a significant portion of the categories examined. There are clear correlations between occurrence of -ma and its use with the categories of contrast, counterexpectation, orthotonic personal pronoun, and paragraph-beginnings, and a somewhat lower correlation with establishment of orientation.

Section §5.4 contains my response to the treatment of -ma found in CHD. I disagree with their analysis that -ma is a marker of correlation. Although our approaches
differ, they are largely complementary, and the CHD article offers a practical summary of both common and rare uses of -ma.

In Section §5.5 I present -ma's that have unusual placement. These examples are very interesting, but because they are so uncommon, it is difficult to assess their significance.

In Section §5.6 I demonstrate that -ma has functions that are at least partially similar to those of Hieroglyphic Luwian -pa and Thessalian má and show that the particle exhibits similarities in function to Greek dé, as analyzed by Bakker (1993). While the Thessalian form tantalizes as a possible cognate, etymologies for the enclitic, and for Hittite forms potentially containing the enclitic, remain speculative.

In Section §5.7 I summarize the findings of the present chapter.

§5.1 Changes in Frequency and in Phonological and Syntactic Distribution

§5.1.1 Overall Frequency

The incidence of -ma increases greatly over the period of attested Hittite. See (1).

(1) Overall Frequency of Enclitic Conjunctions¹

<table>
<thead>
<tr>
<th></th>
<th>OH</th>
<th>MH</th>
<th>NH</th>
</tr>
</thead>
<tbody>
<tr>
<td># of</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>exx.</td>
<td>total</td>
<td>exx.</td>
<td>total</td>
</tr>
<tr>
<td>-ma</td>
<td>32</td>
<td>4.2%</td>
<td>71</td>
</tr>
<tr>
<td>-a</td>
<td>36</td>
<td>4.7%</td>
<td>(26)</td>
</tr>
<tr>
<td>-mal-a</td>
<td>68</td>
<td>8.8%</td>
<td></td>
</tr>
<tr>
<td>-al-ya</td>
<td>57</td>
<td>7.4%</td>
<td>25</td>
</tr>
<tr>
<td># of clauses</td>
<td>771</td>
<td>665</td>
<td>2077</td>
</tr>
</tbody>
</table>

The number of NH clauses included in the corpus is greater than the number of OH and MH clauses included by about a factor of 3 (2.7 and 3.1, respectively). Taking this difference into account, we see that -ma occurs 4.7 times more often in the NH sample than

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in the OH sample (19.8% vs. 4.2%). NH -ma occurs 2.25 times more frequently than do the OH suppletive allomorphs -mal-/a taken together (19.8% vs. 8.8%). The frequency of MH -ma in the Mašat letters, occurring in 10.7% of clauses included, may be taken as indicating a transitional stage in the particle’s increase, but recall that -ma occurred more frequently in longer letters—17.0% (cf. §4.0.1), a rate that is only slightly lower than that in Neo-Hittite. The increased frequency of -ma is consistent with an interpretation of increasing grammaticalization of this particle.

The incidence of -a decreased drastically from Old to Neo-Hittite, from 4.7% to 0.7% of clauses included. Although the frequency of -a in Middle Hittite is only slightly lower than that in Old Hittite, all but one (potentially productive) example of the 26 MH examples occur in forms of orthotonic personal pronouns or in kinuna ‘now’, whereas only 5 OH -a’s are attached to pronominal forms, and 11 to kinuna (out of 36 attestations of -a). MH -a may still be marginally productive, but by Neo-Hittite, the particle is preserved only in the (by then unproductive) pronominal forms and in kinuna.

The frequency of -al-ya decreased by about one-quarter (28.4%) from Old to Neo-Hittite (from 7.4% to 5.3%, respectively). While in Old Hittite -mal-/a and -al-ya occurred in approximately the same proportion of clauses (8.8% and 7.4%, respectively), by Neo-Hittite the use of -ma has increased greatly, while the use of -al-ya as clause conjunction has declined somewhat.

§5.1.2 Phonological Distribution

In chapter 2, we saw that the distribution of OH -ma was almost entirely restricted to postvocalic environments and was just beginning to include postconsonantal environments. By the Middle Hittite period the phonological restriction on -ma’s occurrence had ceased; -ma had come to occur freely after consonants. See (2).
Phonological (and Graphic) Distribution of -ma

<table>
<thead>
<tr>
<th>Distribution</th>
<th>OH</th>
<th>MH</th>
<th>NH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of</td>
<td>% of</td>
<td>% total</td>
</tr>
<tr>
<td>-V=ma</td>
<td>31</td>
<td>96.9</td>
<td>4.0</td>
</tr>
<tr>
<td>LOG=ma</td>
<td>1</td>
<td>3.1</td>
<td>0.1</td>
</tr>
<tr>
<td>-C=ma</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

By Middle Hittite, -ma occurred more frequently after Sumerograms and Akkadograms. I attribute this (at least minimally) to both an increase in the occurrence of -ma and to an increase in writing with such forms over time.³ (The above numbers for such writing in Middle Hittite are somewhat skewed by the large proportion that are formulae that change the discourse topic: 10 / 35 = 28.6%; cf. §4.3.1.1.) While from Old to Neo-Hittite the proportion of -ma’s occurring postvocically decreased significantly (96.9% vs. 18.0%, respectively), the frequency of postvocalic -ma over the total number of clauses remained approximately the same (4.0% vs. 3.6%, respectively).

For whatever reason, -ma and -a functioned suppletively in Old Hittite, -ma occurring only after vowels and -a only after consonants. By Middle Hittite, -ma occurred without restriction and had nearly subdued its partner -a, and the question naturally arises as to how this happened. The Zukraši text, which was so valuable in determining chronology for Hittite texts (Otten 1953), is also valuable in determining (at least part of) the answer to this question. The text contains the form URU[Hattu]az=ma=as ‘and he ... from Ḫattu’ (chapter 2, example (11)), thus with -ma after an ablative in -az. Hittite -az descends from the Common Anatolian ablative *(o)ti by regular sound change (Melchert 1994a:131, 1994b:182-183): CA *(o)ti > *(a)ti > (Pre)Hitt. *(a)zi [-atsi] > Hitt. -az [-ats] or -z(a) [-ts], the last written with the sign ZA but with phonetically unreal final vowel. I assume that -ma was being attached to clause-initial ablatives by the time affrication of *r had occurred, but before loss of the final *i, giving forms ending in *-azzi = ma. While the final vowel was being lost, we could expect to have encountered
forms ranging from *-azzi=ma to -az=ma (and points in between). Since there was no phonological encouragement of the sequence -i-m-, which existed for -i-ya- and was preserved in forms like kez...kezzi=ya ‘on this side...and on that side’, the result of the sequence by regular sound change would have been -az=ma. Once -ma began to occur after one consonant, one that ended in an [s] (or [s]-like) sound, the stage was set for it to spread to other post-consonantal environments, starting with final 〈s〉 (=-[s]). A situation conducive to such spread may be seen in the enclitic pronoun -šmaš ‘you [pl.acc.&dat./loc.]; them [dat./loc.]’, where the phonetic sequence [-sma-] and its strong associations with enclisis had long since been established in speakers’ minds. It may be noted, however, that MH -a occurs most frequently after 〈š〉 (see chapter 4, note 2, and §4.4).

During the transitional period when final *i was being lost after *z, one might expect language learners to have appended the conjunction -a to clause-initial ablatives in contexts of contrast, orientation, etc., giving *-az=a. Such ablatives may still be lurking unidentified in OH texts, where it may be difficult to distinguish a clause-initial ablative with -a from an ablative written with unreal final 〈a〉 (so Neu 1974:62 n.85). However, factors functioning as disincentives to using -a with ablatives (but favoring the use of -ma) are 1) the probable association of -a with non-geminate, voiced consonants and of -al-ya with geminate, voiceless consonants, while the 〈z〉 in -az is voiceless; 2) the robustness of phonetic material found with -az=ma as compared to *-az=a; and 3) the probable association of -ma (over -a) with the ablative in speakers’ minds (e.g., in clause-initial expressions of orientation). Together these factors would have guaranteed -ma’s association with the ablative.

§5.1.3 Syntactic Distribution

Changes in -ma’s syntactic distribution are suggestive of other changes as yet undemonstrated: 1) that the syntax of the Hittite clause became more rigid over time, and
2) that writing with Sumerograms and Akkadograms increased over the period of attestation. The changes also support the view that -ma fully assumed the function of -a.

In Old Hittite, -mal-a occurred almost entirely in categories i) and iv) (65/68 examples), although -ma at this stage could attach to constituents consisting of more than one word (3/68).

(3) Clausal syntactic distribution

<table>
<thead>
<tr>
<th></th>
<th>Old Hittite</th>
<th>Middle Hittite</th>
<th>Neo-Hittite</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ma</td>
<td>50.0%</td>
<td>91.7%</td>
<td>72.1%</td>
</tr>
<tr>
<td>-a</td>
<td>91.7%</td>
<td>91.7%</td>
<td>91.7%</td>
</tr>
<tr>
<td>-mal-a</td>
<td>72.1%</td>
<td>77.1%</td>
<td>84.2%</td>
</tr>
<tr>
<td>-ma</td>
<td>77.1%</td>
<td>84.2%</td>
<td></td>
</tr>
</tbody>
</table>

In Neo-Hittite, -ma occurred in all 5 categories, with even greater priority given to category i), placement after the first word in the clause. The Middle Hittite situation is clearly one of transition between these stages.

The distribution of -ma shifts away from occurrence after the second constituent (categories iv)-v)) toward occurrence after the first constituent (categories i)-iii)): 75.0% in OH categories i)-iii) as compared to 94.9% in NH i)-iii); 25.0% in OH categories iv)-v) as compared to 5.1% in NH iv)-v). The old rule whereby -ma was delayed beyond an initial conjunction or relative pronoun to the second constituent of a clause was clearly on its way out.

As the numbers indicate, such changes are not abrupt. In the OH data -ma was delayed to the second word of the clause with the conjunctions mān ‘when’, takku ‘if’, and nu ‘and’, and with the indeterminate relative pronoun kuiš. In the MH letters, the restriction had loosened. -ma continued to be delayed to the word following mān ‘if’ and nu, but it was attached to kuitman ‘until’ and to mahhan ‘when, as’. (There was no relative occurring with -ma in the MH letters.) By Neo-Hittite, the restriction had
weakened even more. *-ma* continued to be attached to the conjunctions *mahḫan* and *kuitman*, but was also attached to indeterminate relative pronouns (6/6). *-ma* continued to be delayed to the word after *nu* (1/1) and after a slight majority of the examples with *mān* (17/29 = 58.6%), but 12 examples of *-ma* are attached to *mān*. Among these, 2 examples with *mān* and 1 with *kuiš* have *-ma* both attached to the clause-initial conjunction or relative and delayed to the second word (§3.2.1). These attestations, where the authors observed both traditional and regularizing rules of placement, nicely demonstrate transition between the old and new ways. The shift toward regular placement of *-ma* accounts for the decrease in the percentage of examples of category iv) and the corresponding increase in examples of categories i)-iii). It also shows that Hittite speakers were tending toward increasingly rigid clausal syntax, here concerning clitic placement.

The second change in the distribution of *-ma* within the clause is its increased occurrence in categories ii) and iii), i.e., after constituents consisting of more than one word. Such hosts involve about 3% of *-mal-a-*clauses in Old Hittite, but about 11% of *-ma-*clauses in Neo-Hittite (0.3% and 1.9% of all clauses, respectively). One of the 2 OH examples of category ii) contains Sumerographic and Akkadographic writing, while 43 of 44 NH examples of categories ii) and iii) contain such writing. I gave evidence in §3.2.3 for Hittite readings of Sumerographic and Akkadographic noun phrases, which likely occurred with these examples (although I am not convinced that all such forms were always given Hittite readings). The increase in examples of categories ii) and iii) is therefore probably only a graphic matter. This increase, taken together with the increase in *-ma*'s occurrence after Sumerograms and Akkadograms (see §5.1.2), supports the view that Sumerographic and Akkadographic writing increased in frequency over the period of attested Hittite.

Examples of category v) are quite rare, though consistently represented. The OH and MH corpora each contain only 1 example, and only 3 are found in the NH corpus (0.13%, 0.15%, and 0.14%, respectively, of all clauses).
The changes in distribution of -ma with regard to its host's grammatical category also suggest increasing uniformity of clausal syntax (cf. Holland 1980). In Neo-Hittite, -ma occurred more frequently after noun phrases and conjunctions than it did in Old Hittite. From the earlier to the later period it occurred much less frequently after verbs.

(4) Host grammatical categories

<table>
<thead>
<tr>
<th></th>
<th>Old Hittite</th>
<th>Middle Hittite</th>
<th>Neo-Hittite</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ma</td>
<td>40.6%</td>
<td>36.1%</td>
<td>48.6%</td>
</tr>
<tr>
<td>-a</td>
<td>9.4%</td>
<td>16.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td>-mal-a</td>
<td>15.6%</td>
<td>44.4%</td>
<td>20.0%</td>
</tr>
<tr>
<td>NP</td>
<td>40.6%</td>
<td>36.1%</td>
<td>48.4%</td>
</tr>
<tr>
<td>Pro</td>
<td>9.4%</td>
<td>16.7%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Adj</td>
<td>15.6%</td>
<td>44.4%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Adv</td>
<td>6.3%</td>
<td>2.8%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Neg</td>
<td>3.1%</td>
<td>1.5%</td>
<td>2.9%</td>
</tr>
<tr>
<td>PreV</td>
<td>25.0%</td>
<td>11.8%</td>
<td>1.4%</td>
</tr>
<tr>
<td>V</td>
<td></td>
<td>11.8%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Conj</td>
<td></td>
<td></td>
<td>5.7%</td>
</tr>
</tbody>
</table>

The differences concerning verbs and conjunctions are particularly striking. If the distribution seen among -ma's hosts holds for all of Hittite, then from Old to Neo-Hittite we see an increase in the proportion of clause-initial conjunctions and NPs and pronouns (most of which are nominative), while the frequency of clause-initial verbs decreases dramatically. We also see a decrease through Middle and Neo-Hittite in clause-initial adverbs, which often served as hosts to OH -mal-a. Such changes in distribution would be consistent with increasingly rigid structure of the Hittite clause over time. However, rather than saying anything about the development of -ma per se, these changes in its distribution imply more about shifts in the greater structure of Hittite.

One may also observe that OH -ma attaches to a wider variety of grammatical categories than does OH -a, due at least in part to the distributional differences associated with suppletion (cf. §2.4.2.3). This wider distribution places -ma in a position favorable for displacing its suppletive partner.
In terms of the grammatical case of substantival hosts of -ma, the most notable change from Old to Neo-Hittite is the increase in occurrence of -ma after nominative and accusative forms (and the decrease in the proportion of dative/locative hosts).

(5) Grammatical case of substantival hosts

<table>
<thead>
<tr>
<th></th>
<th>Old Hittite</th>
<th>Middle Hittite</th>
<th>Neo-Hittite</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ma</td>
<td>12.5%</td>
<td>41.7%</td>
<td>24.3% (22.9%)</td>
</tr>
<tr>
<td>-a</td>
<td>41.7%</td>
<td>29.4%</td>
<td>14.6% (10.5%)</td>
</tr>
<tr>
<td>-ma/-a</td>
<td>29.4%</td>
<td>10.3%</td>
<td>6.3% (4.9%)</td>
</tr>
<tr>
<td>Nom</td>
<td>12.5%</td>
<td>41.7%</td>
<td>24.3% (22.9%)</td>
</tr>
<tr>
<td>Acc</td>
<td>6.3%</td>
<td>13.9%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Gen</td>
<td>3.1%</td>
<td>-</td>
<td>21.4% (15.7%)</td>
</tr>
<tr>
<td>D/L</td>
<td>18.8%</td>
<td>-</td>
<td>7.1% (5.7%)</td>
</tr>
<tr>
<td>Abl</td>
<td>3.1% (0.0)</td>
<td>-</td>
<td>6.3% (5.1%)</td>
</tr>
<tr>
<td>All</td>
<td>6.3%</td>
<td>2.9%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Tallies with Sumero-/Akkadographic phrases removed stand in parentheses.

This increase is consistent with -ma’s move into the phonological (and, thereby, functional) territory of its OH (suppletive) allomorph, -a.

Concerning interclausal syntax from Old to Neo-Hittite, we see a significant increase in -ma’s distribution in two of the syntactic environments identified by Houwink ten Cate (1973). These are environments 1b and 2, and, along with environment 3, their frequency apparently expanded at the expense of that of environment 1a, which nevertheless remained in Neo-Hittite the predominant type.

(6) Interclausal syntactic environments

<table>
<thead>
<tr>
<th></th>
<th>Old Hittite</th>
<th>Middle Hittite</th>
<th>Neo-Hittite</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ma</td>
<td>56.3%</td>
<td>37.1%</td>
<td>50.0%</td>
</tr>
<tr>
<td>-a</td>
<td>80.6%</td>
<td>1.4%</td>
<td>7.8%</td>
</tr>
<tr>
<td>-ma/-a</td>
<td>69.1%</td>
<td>12.9%</td>
<td>9.1%</td>
</tr>
<tr>
<td>1a-IC-ma</td>
<td>56.3%</td>
<td>37.1%</td>
<td>50.0%</td>
</tr>
<tr>
<td>1b-DC DC-ma...MC</td>
<td>- 2.8 1.5</td>
<td>1.4 7.8</td>
<td></td>
</tr>
<tr>
<td>2-DC MC-ma</td>
<td>- 2.8 1.5</td>
<td>12.9 9.1</td>
<td></td>
</tr>
<tr>
<td>3-DC-ma MC</td>
<td>40.6 13.9 26.5</td>
<td>48.6 31.4</td>
<td></td>
</tr>
<tr>
<td>2/3-DC(DC-ma MC)</td>
<td>3.1 - 1.5</td>
<td>- 1.7</td>
<td></td>
</tr>
</tbody>
</table>

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The increase of -\textit{ma} in environment 1b has as much to do with differences between Old and Neo-Hittite structure as with changes of -\textit{ma} (which was becoming increasingly grammaticalized). Here the difference is between Old and Neo-Hittite texts. The NH texts analyzed (particularly the treaties and the instruction) contain a higher number of protases consisting of more than one clause than do the texts from the earlier periods. -\textit{ma} was appropriate for marking pair- or series-membership, subject switch, and counterexpectation, among other relations that obtain between the clauses constituting such complex protases.

We also see an increase in the frequency of -\textit{ma} occurring at the beginning of apodoses (environment 2). These apodoses most often contain subject switch, as observed by Houwink ten Cate (1973): 32/37 (86.5%; 37/44 = 84.1% including examples in environment 2/3). This compares with a general frequency of 68.4% for subject switch in the -\textit{ma}-clauses of the NH sample. It seems that, even by Middle Hittite, -\textit{ma} was being increasingly employed to link main clauses to their preceding dependent clauses when the subjects of the clauses were different. If the purpose for using -\textit{ma} is correctly identified here, this increase in -\textit{ma}'s occurrence would be consistent with an interpretation of increasing grammaticalization of the particle.

The NH figures for -\textit{ma}'s occurrence in interclausal syntactic environments and for the grammatical case of -\textit{ma}'s substantival hosts are more similar to the figures for OH -\textit{mal-a} in these categories than those for OH -\textit{ma} alone. These statistics support the view that NH -\textit{ma} continues the function of OH -\textit{mal-a} (while MH -\textit{ma}'s statistics are skewed by its occurrence in epistolary formulae).

§5.2 Changes in Pragmatic Distribution

Changes in -\textit{ma}'s pragmatic distribution also indicate that over time use of the particle proliferated. All uses found in Old Hittite are found in Neo-Hittite, including a few
that are rare or only incipient in the earlier period, and all of these uses from the corpus investigated here have greatly increased in frequency by Neo-Hittite.  

The increases in frequency for some categories are quite large: NH -ma marks individual series members 37 times as often as OH -mal-a; it occurs paragraph-initially about 7 times as often, and it attaches to orthotonic personal pronouns about 4 times as much. The number of attestations of -ma with counterexpectation also increased greatly. For other categories, increases are substantial: NH -ma occurs in conditional protases nearly 3 times as often as OH -mal-a, and it occurs about 2 times as often in contexts with contrast, special emphasis, new subject, or subject switch. For the categories of orientation, repeated form, and new referents (for which data has not been completely collected), NH -ma occurs at a frequency that is about 1.5 times that of OH -mal-a. The only categories decreasing in frequency are two for which NH data are incompletely collected: variant syntax and pair-marking.

It is possible to suggest concomitant causes for the increase in the use of -ma, apart from general increase in frequency, depending on the category. Some categories are not well established in Old Hittite, but become so by Middle Hittite or Neo-Hittite, and these categories see the biggest increases in their use. The category with the greatest increase, series-marking, appears to be incipient in Old Hittite, where only 1 example (#60) of -a marks the last member of a series of 3 (see the appendix for examples). There are intimations of series-marking in the section of the Royal Couple ritual with fronted verbs (#23-#26 + #55-#56), where out of 14 clauses describing a sequence of events and states, 6 clauses are marked with -mal-a. One of these (#25) marks the second member of a pair, a use that appears to be well established in Old Hittite. Such conditions would be conducive to development of series-marking. In similar environments the (oppositional) relation holding between members in a pair of clauses marked with -ma(-a) would next be extended to a third member, eventually establishing such use as a construction for signaling multiple parts of a greater whole. The way would then be clear for extending such marking...
to structures with even more members. Series-marking with -ma is found in 1 series in Old Hittite, in 6 series in Middle Hittite with -ma, and in 17 series in Neo-Hittite. With the adjustment for the greater number of clauses (a factor of 2.7), the use of -ma in such structures in Neo-Hittite is 6.3 times as high as in Old Hittite.

Another category that is present in limited numbers in Old Hittite is paragraph-initial -mal-a. The particles occur at the beginning of 3.3% of paragraphs. By Neo-Hittite, -ma occurs at the beginning of 43.9% of paragraphs, 13.3 times as frequently. In Old Hittite, paragraph-initial -mal-a attaches to expressions of orientation (anda=ma ‘and in addition’, šer=šemet=a ‘and over them’, man lukkatta=ma ‘and when it dawns’) and to 1 switched subject (ki=ma ‘but this’). Evidently these examples began a new episode (or part of an episode) that was linked closely enough to the preceding context to warrant the use of -ma. Thus -ma could already be used in Old Hittite to connect material across paragraph boundaries. Almost all of the MH paragraph-initial -ma’s (25/27) and all of the NH examples continue to occur with the categories of orientation, subject switch, or both.

Since -ma proliferated in general from Old Hittite to Neo-Hittite, it is only to be expected that paragraph-initial -ma’s would also proliferate. Depending on the text, the author chose to begin new episodes in new paragraphs with similar linguistic forms, which we see in the formula changing discourse topics in the MH letters and in the many NH paragraphs that begin with expressions of orientation, e.g., mahhan=ma ‘and when’.

These can be thought of as series of paragraphs (cf. CHD L-N:96-97, 99), but whether the authors conceived of them as such is open to question. It may be that the author was merely signaling that the next discourse topic was beginning. The length of the text influences my interpretation of these structures. I find that the discourse-topic-changing formulae in the shorter paragraphs of the MH letters are easier to understand as series members than are the orientation-expressions in the longer paragraphs of the NH Annals of Mursili. In any event not all paragraph-initial forms with -ma in Middle Hittite or Neo-Hittite, and none of those in Old Hittite, are series members in the special sense used here.
and in CHD. Among the MH and NH forms there is still a residue that do not have series-like paragraph-initial forms but are expressions of orientation or are cases of subject switch (11/27 in Middle Hittite, 9/68 in Neo-Hittite). The point is that the use of -ma in this position was already present in Old Hittite, and that the series-marking use of -ma, which increased greatly after Old Hittite, may have aided forces of general proliferation in expanding the use of -ma in paragraph-initial position.

Orthotonic personal pronouns plus -ma also occur much more frequently in Neo-Hittite than do such pronouns with -mal-a in Old Hittite. The reason for this is twofold. First, -ma underwent the same proliferation with orthotonic personal pronouns that occurred with other categories. Second, clause-initial orthotonic personal pronouns occur at a higher rate in general in the NH texts than in the OH texts. Orthotonic personal pronouns occur in initial position or modified initial position in 6.0% of the clauses in the Apology of Hattusili. While I have not counted the number of such pronouns in modified or unmodified initial position in the OH texts, they certainly do not number 46 (~6.0% of 771 clauses). Orthotonic personal pronoun plus (-mal)-a was nevertheless already in use in Old Hittite.

Clauses with -ma conveying clearly detectable counterexpectation are rare in the OH texts, with only 1 possible example (#7) in the corpus and 1 sure example outside the corpus (chapter 2, example (115)), but they are much more common in NH texts, where there are 30 times as many attestations. This may be due in part to the subjectivity of the reader and in part to the more easily understandable nature and abundant material of the NH texts as compared to the OH texts. While the data indicate that this use of -ma increased over time, it seems to me that counterexpectation is of such a nature that one example implies many more. Since -ma occurred in a context with counterexpectation, this use was probably already well-established in Old Hittite. Although counterexpectation is not one of the most frequently occurring categories, it is nonetheless notable because it is such a robust pragmatic relation, because -ma was clearly used to signal it in the oldest period of
the language, and because it shows one of the greatest increases in textual frequency from the early to the late period of the language.

For most categories, namely contrast, subject switch, emphasis, new subject, orientation, conditional protases, repeated form, and new referents (even though incompletely collected), there are less spectacular, but substantial, increases in the frequency of their occurrence with -ma (as noted above). This is to be expected, given the increase in -ma’s frequency itself, since the types of pragmatic contexts in which the particle occurs held fairly steady over the period of attested Hittite.

The increased occurrence of -ma in Middle and Neo-Hittite indicates increasing grammaticalization of the particle. -ma already had a more or less well-defined range of grammatical functions in Old Hittite; by the Neo-Hittite period this range of uses had been expanded somewhat. While the use of -ma was not obligatory in any context, it was certainly favored in some (see §5.3). We see a similar increase in the occurrence of nu ‘and’. The frequency of this connector in the OH sample was 12.7% (98/771 clauses). By Neo-Hittite it occurred in 54.8% of clauses (1138/2077), 4.3 times as many (compared to 4.7x for -ma, 2.25x for -mal-a). The increasing grammaticalization of such particles may have played a part in the increasing rigidification in the Hittite clause over time.

Two categories for which data was not comprehensively collected in the NH sample, pair-marking and variant syntax, permit only conjecture rather than conclusion about changes in their frequency. Pair-marking with -ma, a clear example of which can be seen in chapter 3, example (38), seems to me to be a basic use of the particle, relating its own clause to the clause preceding it. I would expect its frequency to have at least remained stable. And by extrapolating from data from the Apology of Hattusili, we can predict the increased frequency of -ma with variant syntax. In this text there are 10 such clauses, or 2.7% of 368 clauses, as compared to a rate of 1.0% of all OH clauses.

While the frequency of -ma with most categories increased over time, the 5 categories with which -ma occurred most often remained rather stable. These categories
are subject switch (OH 6.0%–MH 6.2%–NH 13.4%), contrast (OH 4.2%–MH 6.2%–NH 9.5%), orientation (OH 4.7%–MH 2.1%–NH 7.4%),10 new referents (OH 3.4%–MH 5.0%–NH ≥5.1%), and repeated form (OH 3.2%–MH 3.2%–NH 5.0%; this category correlates highly with contrast). This is interesting, because it shows that -ma was used in a nucleus of contexts already in Old Hittite, and that these core contexts even then involved subject/topic, focus, and background. It also indicates that the greatest changes in the use of -ma from Old to Neo-Hittite came from its increased frequency, with a corresponding penetration into niche uses.

The remainder of this section contains the statistics for -ma's occurrence in each pragmatic category from Old Hittite to Neo-Hittite, with pertinent information included as appropriate.

(7) Distribution of -ma in Pragmatic Categories

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<thead>
<tr>
<th></th>
<th>-ma clauses</th>
<th>-ma clauses</th>
</tr>
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<tbody>
<tr>
<td>Contrast</td>
<td>32</td>
<td>771</td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>665</td>
</tr>
<tr>
<td></td>
<td>408</td>
<td>2077</td>
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</table>

<table>
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<tr>
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<tbody>
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<td>-a</td>
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<td></td>
<td>32</td>
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<tr>
<td>-ma</td>
<td>clauses</td>
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<td>11</td>
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<td>34.4</td>
</tr>
<tr>
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<td>1.4</td>
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<td>41</td>
</tr>
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<td>198</td>
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<td>-a</td>
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<td></td>
<td>58.3</td>
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<td></td>
<td>2.7</td>
</tr>
<tr>
<td>-mal-a</td>
<td>32</td>
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<td></td>
<td>47.1</td>
</tr>
<tr>
<td></td>
<td>4.2</td>
</tr>
</tbody>
</table>

*incl's IŠTU É ABI-ŠU=ma ka[rpianzi] (#9) as an example of weak contrast.

Repeated form

<table>
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a) 8 from Laws; b) 10 from Laws (8 karû-kinuna)

Counterexp.

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*1 possible example, #7; 1 example outside corpus, chapter 2, example (115).
Series-marking # % ofptc % tot # % ofptc % tot # % ofptc % tot

- ma -

- a 1 2.8 0.1 15 21.4 2.3 76 18.6 3.7

- mal-a 1 1.5 0.1 6 series 17 series

Including 3 examples of LOGOGRAM-Ca (as cases of -a) from conditional protases in the Laws would add a few members to series-marking (-6) in \([\leq 3]\) series.

Pair-marking # % ofptc % tot # % ofptc % tot # % ofptc % tot

- ma 7 21.9 0.9 13 18.6 2.0 ≥43 ≥10.5 ≥2.1

- a 18* 50.0 2.3

- mal-a 25* 36.8 3.2

* incl.’s 11 karū-kinuna pairs.

The data are compromised for pair-marking, presumably a basic function of -ma, in which -ma marks the second of two clauses that together form some greater event or situation, and this yields an unclear status for this function. The OH attestations of -a are potentially skewed by a high number of formulaic karū-kinuna pairs (11/18), and the data for NH have not been collected comprehensively.

New referents # % ofptc % tot # % ofptc % tot # % ofptc % tot

- ma 13 40.6 1.7 33 47.1 5.0 ≥105 ≥25.7 ≥5.1

- a 13 36.1 1.7

- mal-a 26 38.2 3.4

It is also unclear how -ma’s occurrence with new referents changed since new referents in NH clauses with -ma were not collected comprehensively. From the statistics for OH and MH (and if the data for NH new subjects is any indication), it looks as though the incidence for this category would be higher (than it is) in NH, but note that the absolute frequency is nevertheless highest for NH.

New subject # % ofptc % tot # % ofptc % tot # % ofptc % tot

- ma 5 15.6 0.6 12 17.1 1.8 65 15.9 3.1

- a 9 25.0 1.2

- mal-a 14 20.6 1.8
Again, incomplete collection of the NH data compromises the conclusion about the change in a context, but see above. It is possible to say that the absolute frequency of this combination minimally held steady over time.

Including 3 examples of LOGOGRAM-Ca (as cases of -a) from conditional protases in the Laws would bring the total for OH -mal-a to 10 – 14.7% – 1.3%.

The high frequency relative to -ma-clauses in MH is skewed because of the frequent occurrence of -ma with the formula that changes the discourse topic.
§5.3 Confirmation of Method

The method I have thus far employed in this study has relied primarily on positive 'internal' results, that is, those correlations that appear to exist between -ma and various pragmatic contexts, as measured by -ma's frequency in those contexts relative to all occurrences of -ma. To determine whether these results have 'external' validity, as evidenced by -ma's frequency in the context relative to all occurrences of the context, I examined one text in close detail, paying particular attention to those categories with which -ma seemed to correlate.

I selected the Apology of Hattusili because the text is nearly complete and quite well understood, and because it reflects the NH average of both size and frequency of -ma. It contains 17.7% of NH clauses in the corpus, with 368, as compared to a projected average of 16.7% as 1 of 6 NH texts. The frequency of -ma both in the Apology and in the NH corpus in general is 19.8%. So this text seems very well-suited to represent an average text.

I analyzed each clause of the text with regard to the pragmatic categories presented in chapter 3, whether or not -ma was present, and thus could tell the total number of clauses showing each pragmatic category. The following table shows the frequency of -ma's occurrence in each category relative to the total number of clauses exhibiting the category.
Comparing the frequencies in the table to -ma's general frequency in the Apology, 19.8%, shows clearly that -ma is very strongly associated with contexts exhibiting contrast, counterexpectation, orthotonic personal pronoun, and paragraph-initial forms, occurring 2-3 times more frequently in one of these contexts than in clauses in general. -ma is also strongly associated with orientation, but it is less strongly associated with pair- and series-marking and with subject switch, at least according to the statistics.

Conditional protases are not common in the Apology, and -ma occurs in none of them. As a substitute, I gathered statistics for conditional protases in the Bronze Tablet, another complete and very well understood NH text. According to the index, there are 26 examples of man ‘if’ in the Bronze Tablet; this would not include clauses without man but under the scope of a preceding man. -ma occurs in 9 of these 26 clauses, giving a frequency of 34.6%, as compared to the particle's general frequency of 29.5% in the text, and showing a ‘less strong’ association of -ma with conditional protases.

Although the statistics show that -ma does not occur much more frequently in clauses exhibiting pair- and series-marking, subject switch, or conditional protasis than it does in clauses in general, I would still argue that there is a strong association between -ma and these categories, because when the two cooccur, the result is quite salient. Series members marked with -ma form a more robust and cohesive series than do members not so marked, and subject switch seems more salient with -ma than without. The hypothetical
situation expressed in conditional protasis is highlighted better when -ma is present, and this is even aided by the construction-like status of -ma’s delayed attachment. With these categories, ‘expressive’ pragmatic salience is not reflected by the statistics.

-ma was not used in all instances of any pragmatic category, for its use was still a choice made by the author, but judging by its occurrence in about one out of two instances of several categories, it seems to have been moving in the direction of required marking in some contexts.

§5.4 -ma in the Chicago Hittite Dictionary

In its article on -ma (CHD L-N:91-99), up to now the most extensive treatment of the conjunction, CHD describes its function in this way: -ma ‘relates words or clauses to each other through pairing or opposition’ (p.91). The article organizes -ma’s uses in a clear and practical way based on its syntactic distribution, presenting the ‘marking of correlation’ between individual words and phrases, through clauses, and on to paragraphs. The entry shows that -ma cannot function as a typical coordinating or subordinating conjunction since it connects independent clauses, dependent clauses, dependent–main clauses, and paragraphs (p.99).

As I understand it, I agree with CHD’s description of -ma’s function as one of relating clauses but would add that -ma also signals difference or change. Regarding its occurrence in clauses with different statuses of dependency, I would note that nu also occurs in these environments, with a rather similar function in terms of linking. So perhaps for Hittite it is worthwhile to think about clause linkage as involving primarily connection rather than grammatical dependency.

Under usage a. of its article, CHD gives examples with -ma ‘marking the correlation of single words within adjacent clauses’ (p.92). Usage a. also deals with series of two members and of more than two members, which I have labeled pairs and series, respectively. Rather than claim that -ma relates opposed words in the examples in a., I
would suggest that -ma relates clauses that are contrastive. The focus of contrast would exist without -ma, and repetition in form between the two clauses would highlight the contrast. What is important, in my opinion, is that -ma is often chosen to relate such clauses. Similarly, examples with -ma ‘marking correlation of clauses without focus on a particular pair of words’ are presented under usage b. (pp.93-94). Most examples under b. 1'-4' do contain opposed forms, however, and are also contrastive.

Usages b. 5'-7' primarily concern relating dependent clauses with other dependent clauses or with main clauses, often with a change in grammatical subject (pp.94-95). In my opinion it is the change in subject, sometimes in combination with other pragmatic factors such as contrast, counterexpectation, orientation, or series-marking, that favors the use of -ma in these environments (cf. note under usage b. 6', p.95).

Under usage b. 8' the examples with nammasma ‘over and above, in addition’ seem contrastive to me and classifiable as series. Moreover, the adverb modifies the orientation, although it perhaps changes the orientation of the text of the discourse rather than that of the events of the discourse (cf. chapter 3, example (69)).

Usage c. concerns -ma’s that mark ‘an explanation or elaboration (which interrupts the normal flow of the context)’, and it is indicated as a NH use (p.96). Ruggero Stefanini (p.c.) has independently suggested to me a similar use for -ma wherein the particle signals an interruption of the flow of the narration proper in order to introduce parenthetically background information, either 1) temporal, causal, or otherwise circumstantial information having relevance for the past, relative to the time of the narration, or 2) consequential information having relevance for the future, relative to the time of the narration. This use is more precisely specified than CHD’s, but the two seem to be consonant with one another. I have noted only a few instances of this use in the texts analyzed for the present study. These are Neo-Hittite, which is consistent with CHD’s characterization. They include the assertions in the Apology of Hattusili wherein Hattusili claims that the favor of Istar was on him (as in chapter 3, example (78)), as well as a passage from the Annals of Mursili, where
-ma appears to mark the end of such background information and the return to the main plot of the narrative.

(9) AM II.7.A Vs. II 1-7; #1080

n=as úit n=as=mu GIR.MEŠ-aš kattan ḫaliyat[lat]  
n=as=za ĪR-ānni daḫḫun n=as šullānun  
nammaš=kana ERĪN.MEŠ iššuḫḫun nu=mu ERĪN.MEŠ  
piškiu[dār] n=at=mu laḥhi kattan  
paišgauwan tīr ḪUTU-šš=ma / INA <KUR> URU>Hatti arḥa úwanun  
{ my sun -ma to land Hattuša away I came }  
nu INA URU>Ankuwa gimmantariyanun §

'And (a representative of the people I was moving against) came, and knelt down at my feet. / And I took them into servitude and I treated them angrily. Furthermore I obligated them (to provide) troops, and they began giving me troops. And they began going with me on campaign. And My Majesty / returned to <the land of> Hatti and wintered in Ankuwa §'

The narrative proceeds from Mursili’s dealings with the unidentified people he is subjugating to their actions of compliance, and the verb forms correspondingly change from past tense to past tense plus supine. This would be unremarkable were it not for the next clause concerning Mursili’s return to Hatti, for in this clause with -ma and with past-tense verb, he resets the time of events back to a point after the subjugation but presumably before the people began providing him troops, i.e., a point along the primary plotline. Hence the clauses concerning provision of troops and their campaigning with Mursili become background information of the consequential type.

I do not claim to have identified all passages with such transitions, but they seem to be relatively few. They nevertheless embody a distinct use of -ma. Note that again -ma links clauses in a context of change. The characterizations of this use given above recall those proposed by Starke and Luraghi for OH -ma (cf. §2.6). While I do not agree that such a use is evident in the Old Hittite we have, it is evident in NH data.
CHD’s usage d. concerns -ma’s that mark ‘anaphora (to resume and more completely describe or define a word just mentioned; on the resuming word at the head of its clause)’ (p.96), thus anaphora as a Classical literary figure rather than a contemporary linguistic concept. This could be considered a specific type of example that I have grouped with others under the category of repeated form. Coincidentally, perhaps, in 5 of the 6 examples listed under usage d., the repeated word is a noun in an oblique case, which I would further classify as modifying the orientation.

The usage given in e. concerns those -ma’s ‘marking continuation’, and is described thus in e. 1: ‘often -ma has no detectable sense of opposition, but serves to relate a large segment of new material to what has preceded. In most instances -ma in this usage is attached to the first word of a new paragraph or section’ (p.96). The second part of usage e. lists specific adverbs (and one conjunction) occurring with -ma in the continuation function, often paragraph-initially, sometimes just clause-initially: anda=ma ‘in addition’, appa=ma and appanda=ma ‘and after(wards)’, parâ=ma ‘and furthermore’, and mahhan=ma ‘and when’ (pp.96-97; glosses mine). This usage corresponds in large part to my paragraph-initial category, as well as to my more general orientation category: note that the adverbs given above are textual or temporal setting expressions, which are commonly placed at the head of discourse chunks (Chafe 1994:168, 202).

I disagree with CHD’s claim that ‘[t]he paragraph-introducing, continuative use (e) is an extension of the series-marking use seen in a 1 a’’ (p.99). On this view, Hittite speakers presumably conceived of multiple paragraphs as a string of opposed structures, and apparently formed paragraph beginnings similarly to highlight the opposition. As I pointed out in §5.2, however, the origin of this ‘paragraph-introducing, continuative use’ was -ma’s typical connective function, not series-marking. The part series-marking would have played was to expand a function of -ma that was already in use, namely, beginning paragraphs with expressions of orientation or instances of subject switch.
The syntax of -\textit{ma} is presented under CHD’s section \textit{f}. The usual placement of -\textit{ma} at the head of Wackernagel’s Law clitics is noted, as are exceptions in the order among these clitics, references being given to Houwink ten Cate (1973) and involving there sequences of -\textit{a\v{s}ma} (see §2.2, §5.5), as well as to a form with -\textit{ma} appended to the 2.sg. enclitic pronoun -\textit{ta}, \textit{li-\v{s}i-\v{s}i-ya-la-at-ta-ma} ‘but for you oracular? (words)’ (KBo 3.21 ii 6-7, cited from CHD L-N:72). The latter example recalls \textit{mahhan\v{z}wa\v{s}ma} at HKM 10 ay. 34, which may, however, be an error involving the wrong sign: the sequence is transcribed by Alp as \textit{mahhan\v{z}wa\v{s}kan} without comment (Alp 1991a:134), although the autograph clearly shows MA (Alp 1991b:11). I suppose it would be odd with all the Hittite data at our disposal if we were never to find scribal errors of this type, but these are not the only examples with -\textit{ma}’s occurring later than usual in the enclitic string, and two others involve -\textit{ma}’s attaching to enclitic pronouns (see §5.5).

The syntactic quirk of delaying -\textit{ma} to the second word in the clause is also presented, along with many examples with \textit{takku} ‘if’, \textit{m\~an} ‘when; if’, (indeterminate) relative \textit{kui-}, and \textit{n\~asma} ‘or’. The article notes the existence of clauses in which -\textit{ma} occurs twice, but I would quibble with their assertion that this occurs often (p.99). CHD gives 4 examples; I have found 3 examples in my sample and 1 potential example in the Instruction for the Royal Bodyguard (Güterbock and van den Hout 1991). Undoubtedly there are more examples, but they are infrequent.

The article also notes that ‘[i]n the construction employed with double questions, ... the -\textit{ma} is often delayed beyond the second word in its clause, being appended to that element in the second question which is central to the opposition to the first alternative’ (p.99). The two examples they cite in which this is the case contain Sumerograms, and consistent with what I showed in §3.2.3, Hittite readings really do underlie (at least most of) these forms (cf. Friedrich 1960:22 §3). Thus in \textit{n\v{z}at ANA DINGIR-LIM I\v{S}TU K\~U.GI\v{s}ma pianzi} ‘or shall they give it to the deity with g\~old?’ (as opposed to silver) (KUB 22.70 obv. 51-53; cited from CHD L-N:92), -\textit{ma} may well have occurred on the
second word in the clause when it was read in Hittite. Such an interpretation is much less
likely with *nu BAL arahza-ma kuiški DŬ-zi* ‘or will someone rebel outside (i.e., foreign
insurrection)?’ (KUB 5.4 i 35; again cited from CHD L-N:92). The Sumerogram BAL
‘rebellion’ is present, but so is the Hittite adverb *arahza* ‘outside’. They do not seem to
form a compound, but they are opposed to *BAL andurza* ‘rebellion inside’, so *-ma*
genuinely seems to occur on the third word of the clause. This example shows that
although *-ma* most often occurs after the first accented word of the clause, it sometimes
occurs after the first semantic unit, and this very often with Sumerograms. See §5.5 for
more on unusual occurrences of *-ma*.

The compilers of CHD undoubtedly had more than the 411 examples of *-ma*
analyzed here from which to develop their article on the conjunction. They are able,
therefore, to note some occurrences of *-ma* that I did not find in my corpus. One type of
occurrence is the use of *-ma* in double questions mentioned just above. Another sort of
occurrence is the elision of *-ma*’s vowel, as in *tāi=m=ūš=za* ‘but she takes them to
herself’, *ienzi=m=ūš* ‘but they make them’ (p. 92), and *lukatta=m=ūš* ‘but at dawn ...
them’ (noted in Neu 1983:5 n.16) (glosses approximate here).

We have different opinions about some uses of *-ma*. We agree that the conjunction
relates the information in its clause to information that has come before, but in my opinion,
it also signals difference. We agree that some uses of *-ma* involve opposition and that
others do not, but I do not distinguish contrastive clauses where one member in each is
opposed from those where more than one member in each are opposed. Our views on the
rise of paragraph-initial *-ma* differ.

My method differs from CHD’s, as well, in that mine focuses more on functional
categories, whereas CHD’s follows syntactic structures as a template for discussing the use
of the conjunction. But in general, our views are complementary. CHD has presented an
excellent summary of uses and occurrences of *-ma* in several syntactic environments, and I
have proposed specific pragmatic motivations, several of which CHD has noted, for the
conjunction’s occurrence in those syntactic environments. It is important to note that, aside from minor or infrequent occurrences of -ma, I have observed in my sample everything CHD has observed in its far wider-reaching sample. This fact confirms my method of analyzing thoroughly a limited number of sizeable texts from discrete linguistic periods.

§5.5 Unusual Placement of -ma

The syntactic placement of -ma is very regular, nearly always occurring as described in §1.4.1. Irregular placement does occur, however, as the examples below demonstrate.12

There are those examples in which -ma occurs in an irregular position in the enclitic string. One subset of this type concerns sequences of -a=ma in Old Hittite, the examples of which were discussed briefly in §2.2:

(10) Laws I §24 (A Vs. I 55'); #4

SAL-š= a =ma kušan ITU.I.KAM VI GÍN K[Ü.BABBAR] pāi
\{ woman.G -a -ma wage.A month.1.DET 6 shekel silver he shall pay \}

‘but he shall pay a woman’s wage (for) one month (of) 6 s[ilver] shekels’

(11) KBo 17.18 Vs. II 10 and KBo 17.43 Vs. I 9’ (cited at Neu 1980:100, 104)

LUNAR-šiyaš= a= ma arāi
\{ musician.N -a -ma rises \}

‘and the musician rises’

(12) KUB 30.10 Vs. 2013 (Prayer of Kantuzzili)

hingan= a= ma= pa anda ĝušswanni=ya ĝamikān
\{ death.Nn -a -ma PV in life.DL also bound.Nn \}

‘and death is bound up also with life’

Since I understand -ma and -a as suppletive allomorphs (contra Houwink ten Cate 1973), in these examples I see reinforcement of -a by -ma, with the more vital member of the pair strengthening the weaker, moribund member. I view the resulting -a=ma as
synchronously analyzable, but this cannot be proven. In support of the suggestion of reinforcement, one may note that a hypothetical sequence without -ma, *hi-in-ga-na-pa, would be interpretable as hingansapa ‘death’ (plus enclitic preverb). The indication of clause connection would have thus been lost or, maximally, would have seemed ambiguous. Reinforcement by -ma would have prevented any confusion.

Other cases where a morpheme is used to reinforce itself are known, e.g., the Surselvan (Rhaeto-Romance) reflexive sesez, where the original reflexive se has been reinforced with an emphatic version of itself (Kemmer 1992). One may also note the example of Vulgar Latin cum mécum ‘with me’ (Penny 1991) (as reflected in Spanish con migo ‘with me’) which is not syntactically parallel to -a=ma, but was presumably synchronically analyzable at some point.

Two other examples, in which -ma occurs later than usual in the enclitic string, are discussed briefly in §5.4, namely:

(13) KBo 3.21 ii 6-7 (cited at CHD L-N:72)

§ lissiyalah ta ma nepišaš daganzipāša
{oracular? pNn you.DL -ma heaven.G earth.G and
uddār kattan arṭa pētummanzi
words.Nn with away to take }

‘§ But the oracular? words of heaven and earth are for you to take along’

(14) HKM 10 ay. 34-35

mahḥanwa=ma ammuk /INA KUR URU Ishūpitta āṛhun
{when QU -ma I in land Ishūpitta arrived}

‘ “but when I arrived in the land of Ishūpitta” ’

In both cases, -ma would of course ordinarily occur as the first enclitic.

Other unusually placed -ma’s occur later than expected, in these examples, on the third constituent of the clause, instead of on the second.
(15) KBo 5.9 i 19-20 (cited at CHD L-N:93)

[n]u tuk maḫḫan=ma $\text{UTU-ŠI IŠTU AWAT ABL-[K]}$A $\text{EGIR-an / šaḫḫun}$

{CC you.Ob when -ma my sun from word father-your after sought }

‘but when I looked after you according to the word of your father’

(16) KBo 6.34 + KUB 48.76 iii 42-43 (cited at CHD L-N:93)

[n]=ašta $\text{IŠTU IM.ŠU.NÍG.RIN.NA GIM-an=ma' welku/ ša[r]ā }\text{OL úizzeri}$

{CC-PV from oven as -ma grass up not comes }

‘but as grass sprouts not from an oven’

(17) KUB 5.34 i 35 (cited at CHD L-N:92)

§ nu BAL arahza=ma kuiški DU-zi

{CC rebellion outside-ma someone.N will make }

‘§ or will someone make rebellion outside?’

(18) KUB 30.39 Vs. 6 (with restoration from KBo 10.20 I 7-8, which is cited at Friedrich and Kammenhuber 1975ff. 1:237)

§ mān LUGAL-uš arahza=ma kuwapiki tamēdani URU-ri gimmanda[(riyazzı)]

{if king.N outside-ma some.DL other.DL city.DL winters }

‘§ but if the king winters beyond in some other city’

When -ma occurs late in a clause with another conjunction, as in (17)-(18), it seems to me much more emphatic than prototypical -ma (cf. Götze 1928:267). But its occurrence with maḫḫan/GIM-an ‘when; as’ in (15)-(16) raises the suspicion that the influence of a fixed phrase (maḫḫan=ma) is at work, and this suspicion is not dampened by the fact that -ma in (17)-(18) is appended to the same adverb, arahza ‘outside, beyond’. Another probable attestation in which (a partially broken) -ma attaches to the third word of the clause (kē ‘these [neut.acc.]’) occurs in the Madduwatta text (see Götze 1928:20, l.79). -ma does show some affinity for neuter demonstrative pronouns in Old Hittite, so this example may also involve a phrase. In any case, it would be interpreted as emphatic.

Still other infrequently occurring -ma’s are placed earlier in the clause than usual.
(19) KBo 5.3 i 19-20 (cited at Houwink ten Cate 1973:133 n.77)

nu= tta= ma màn / SAG.DU dUTU-ŠI QATAMMA UL nakkîš

{CC you.DL -ma if person my sun in that way not important.Nc }

‘but if the person of My Majesty is not (equally) as dear to you’

(20) KBo 5.3 iv 18’ (=34’ of ed. (Friedrich 1930:132), cited at Houwink ten Cate 1973:133 n.77)

§ n[u=š]maš= ma kuit imma kuit ḫatrāmi

{CC you.pDL-ma what ‘ever’ what I write }

‘§ But whatever I write to [y]ou (pl.)’

In each example -ma occurs at the end of an enclitic string attached to nu (but still not to nu itself!). I can accept the highly unusual placement of -ma in these examples, but both cases are contestable.16

While the syntax of -ma in the examples above is not that usually seen, -ma nonetheless functions in all of them in one or more of the ways identified as typical uses, e.g., contrast, subject switch, orientation, etc. Such may not be claimed for this example.

(21) IBoT 136 oy. 1 19-20 (translation after Güterbock and van den Hout (1991:5))

män andurza=ma I-za INA Ė= ma kuiški URUDU zamkeš UL karpanza

{if inside -ma 1.AB in building-ma some.Nc bronze:doorbolt.Nc not lifted.Nc}

‘but if on the inside on one side in a building(šma) some doorbolt is not lifted’

Here the second -ma may be emphatic or contrastive, but this is not clear from the text, which is somewhat broken, as well as graphically disorganized (cf. Güterbock and van den Hout 1991:5, 46). In the autograph of the tablet, the horizontals of the second -ma are drawn out from its vertical, and a break occurs close enough after the vertical that one wonders whether another distended horizontal occurred therein, such that the reading was originally GAL, giving Ė.GAL ‘palace’. Another promising explanation is that the phrase I-za INA Ė=ma, with the initial ablative of ‘one’, I-za (= I-edaz(a)), is appositional to andurza=ma (Gary Holland, p.c.).
Although -ma appears in syntactically unusual positions, as presented above, it nonetheless conforms quite regularly to the rules for its occurrence, with only 2 of the above examples occurring in the 3513 clauses of my corpus. The rate of regular occurrence is 99.6% (508 / 510 -ma-clauses). The unusually placed -ma's may indicate more variation in the spoken language than that which is preserved in tablets, or they may just be cases of scribal or even speaker error. Whatever the case may be, in such variation we see the seeds of language change. Whether they sprout and take root is a matter of chance.

§5.6 Comparative and Etymological Issues

The function of -ma has frequently been likened to that of other clitic connectors, specifically, Greek de and Thessalian má (cf. §1.2), and the function of Hieroglyphic Luwian -pa, also a clause connector, has been compared to that of -ma (Carruba 1969, Meriggi 1980). It is true that upon cursory examination the functions of the three non-Hittite forms show similarities to those of -ma.

Hieroglyphic Luwian (HL), a sibling language of Hittite attested mainly in monumental inscriptions in an indigenous script dating from ca. 1250 to 700 BCE, exhibits the typical IE Anatolian trait of clitics placed in Wackenagel’s Law position. One of these, -pa ‘and, but’, attaches to the first stressed word in a clause and occurs first in a sequence of clitics. It is considered to have a mildly adversative value (e.g., Meriggi 1962:96, glossing with Greek de).17 A review of HL -pa in the Karatepe bilingual shows that the enclitic occurs in pragmatic environments like those in which Hitt. -ma occurs. In (22) we see a series with repeated form and opposed verbs, and the second and third series members are marked by -pa:
(22) Karatepe bilingual §§LVI-LVIII (320-330) Hu. (Hawkins 2000 1:1:56)

(clauses wishing prosperity for the city’s inhabitants)
\[\text{Ima-} \ wa^{|}_1 \ - \ za \ ha-\text{sá-}tu-'\]
{much QUOT us may they beget}
\[\text{ma-} \ pa-w^{|}_1 \ MAGNUS+r^{|}_1-nú-w^{|}_1-tu-'\]
{much -pa QUOT may they make big}
\[\text{ma-} \ pa-w^{|}_1 \ (CRUX)pa+r^{|}_1-na-w^{|}_1-tu-u \ (LITUUS)á-za-ti-w^{|}_1-tà-ia \ mu-ka-sa-sá- \ há-'\]
{much -pa QUOT may they serve Azatiwatas.DL Muksas.G and}
\[\text{DOMUS-nú-} \ (DEUS)TONITRUS-hu-ta-[ti] \ DEUS-na-ti-há\]
{house.DL Tarhunzas.AB gods.AB and}

'Much may they beget for us, and (-pa) much may they raise, and (-pa) much may they serve Azatiwatas and Muksas' house with (the help of) Tarhunzas and the gods!'\(^{18}\)

In example (23) we see several of the pragmatic contexts that in Hittite would favor the occurrence of -ma.

(23) Karatepe bilingual §§XXVI-XXVIII (134-144) Hu. (Hawkins 2000 1:1:52)

(clauses describing Azatiwatas’ accomplishments)
\[\text{lNEG}_2 \ -w^{|}_i \ REL-ia (*274)ha-ta-la-i-ta \ lFRONS-li-zi \ REX-ti-zi\]
{not QUOT which.pA smote former.pN kings.N}
\[\text{lá-mu} \ II \ REL-zi \ IPRAE-na \ lá-sá-ta\]
{me who.pN before were}
\[\text{lá-mu-pa-w^{|}_i+r^{|}_i} \ (LITUUS)á-za-ti-w^{|}_i+r^{|}_i-sá \ (*274)ha-ta-li-i-ha\]
{I pa QUOT them Azatiwatas.N smote}

'(And I smote fortresses to the west) which former kings had not smitten, who were before me, but (-pa) I, Azatiwatas, smote them'

Here -pa occurs with an orthotonic personal pronoun in an emphatic assertion that switches subject and contrasts with the previous subjects and their actions. Other Hieroglyphic Luwian environments with -pa that are like Hittite environments with -ma are pair-marking, the less common subject switch in apodosis, and the quite rare intraclausal contrast. The most common uses of -pa (in this text) are series-marking and occurrence with the clause-initial adverb REL(-i), which Hawkins translates 'so' (cf. Hawkins 2000 1:1:60, 62, 66); some of these mark the beginning of new episodes. A comprehensive
study of HL texts would undoubtedly uncover other similarities and dissimilarities between HL -pa and Hitt. -ma, but minimally we can observe that both particles function as adverative connectors in their respective languages.

Hittite -ma has been likened to Greek dé from the beginning of Hittite studies (Hrozný 1915:34 via equation of dé with Thessalian má). This is due to characteristics clearly common to both, their status as clitics and their function as connectors expressing a relation ranging from continuative to adverative (cf. Denniston 1966:162ff.).

A linguistic approach is taken by Bakker (1993), who describes functions of Greek dé from a functional perspective based in part explicitly and in part implicitly on the work of Chafe. Extending the work of Ruijgh, which in turn follows (at some distance) on the work of Kühner-Gerth, Bakker primarily sees the enclitic as a boundary marker, ‘dividing a discourse into larger or smaller segments’ (p.276), a view accepted by Morpurgo Davies (1997). In describing the various types of boundary that dé marks in narrative, Bakker gives examples of the particle in different environments, and these are in many cases the same as those in which -ma is found, e.g., switch reference (corresponding to my subject switch); preposed temporal subclauses, participial phrases, and adverbial combinations of preposition and dé (all corresponding to my orientation); segmentation and identification (corresponding in part to my repeated form, in part to contrast, and in part to series-marking); and oppositional mén-dé pairs (corresponding to my pair-marking). Bakker’s progressive/continuative boundary in oral (epic) discourse could correspond approximately to my series-marking. There are also examples of contexts where I have observed -ma in principle, if not in detail: perspectival shift; frame-creating preposed purpose clauses; and such transitions as occur with mén-dé.

The Thessalian enclitic má is considered to have the same function as Greek dé (e.g., Buck 1955:106, 150; Bechtel 1921 1:194), and in fact is often glossed with dé (e.g., Buck p.364). Since má is similar in form, function (clause-connection that is often adverative), and syntax (clause-second—although not always postpositive), it has often
been adduced as a potential Greek cognate of Hitt. -ma (cf. §1.2). Although a thorough comparison of Thess. má and Hitt. -ma remains to be undertaken, a review of the selection of Thessalian inscriptions in Buck (pp.220-227) shows that the particle does occur in some pragmatic environments like those in which -ma occurs. Here in example (24) we see a switch in (accusative) subject (of infinitive) from tamías ‘treasurers’ to psáphisma ‘decree’, which begins a distinct but evidently necessary part of closings in decrees—the same or nearly the same formula occurs three times in Buck’s Thessalian inscriptions.

(24) IG IX.ii.517 ll.45-46; about 214 BCE (Buck 1955:222)

(... and the decrees ... to be set down into two stone steles ...)

kai tân onánan tân en tâne ginuménan tós l tamías dómen át tân koinán pothódoun •
tó má psáphisma tóne kúrron émmen káp pantós khrónoi •
{the má decree to be valid for all time}

‘and the treasurers to give the expenditures arising from this from the common income. And this decree to be valid for all time.’

Although in example (25) the subject technically switches from 3.sg. to 3.pl., the more salient relation is the opposition of the direct objects granted to the allied individuals—land in addition to citizenship.

(25) IG IX.ii.234 ll.1-4; 3rd century BCE (Buck 1955:226)

...a pólis Tharsalíoun toís kai hoús ex arkhás sumpoliteuoménois ... édouke tân politeían
kattáper Tharsalíoys toís l e[x arkhás pol]l[iteuoménois,]
edóúkaem má em Makounfais tás ekhoménas toú Louérkhoul (g)â[s móran ...] ...
{they gave má in Poppy Fields of the holdings of Louerkhos land mora ...}

‘...The city of the Tharsalians granted citizenship to those who already from the beginning have been allied ... just as to the Tharsalians who have been [cit]izens fr[om the beginning], and they granted a (600-[ple]thra) [mora] of the land held (by) Louerkhos in the Poppy Fields (for each youth to have as patrimony for all time)’
Another example from Buck shows function similar to -ma's, specifically a structure with mén–má pair marking: tām mēn īan...tām mā āllan 'and the one...and the other', where má marks the second member of the pair (p.221; presented in Garrett 1990:249).

However similar the functions of HL -pa, Greek dé, and Thess. má may be to that of Hitt. -ma, it is only Thess. má that can be relevant in terms of language history. The similarity of the last two forms has inspired proposals of their cognate status since Hrozný (1915:34; cf. Tischler 1977ff. II:85-86), but the etymology of -ma is far from certain. Scholars have tended to derive -ma from pronominal stems, *me/-mo-, *sem/-sē/-smo- with s-mobile, or to align it with the possible Thessalian cognate; Greek mēn 'on the one hand' has also been suggested as a cognate. Comparisons have also been made between -ma and seemingly appropriate forms in non-IE languages, e.g., Etruscan and Akkadian. Tischler (ibid.) offers a concise summary of proposals. To these may be added Melchert (1985:202), who posits a PIE form *-mō and considers a source in *me/o- possible but uncertain,22 and Garrett (1990:248-249), who sees a source in a PIE *moh₂ but does not assign semantics to the form.23 With the current state of our knowledge, it would appear that all that can be done on this score has been done.

Although unsure of their ultimate derivation, we may have more confidence that forms in other IE Anatolian languages are cognates of Hittite -ma: Palaic -ma, a clause-connector with possible adversative meaning; Lydian -m, another connector that is not precisely understood; and Lycian me, whose affiliation with the others is somewhat questionable since it functions as a general clause-connector like Hittite nu (Carruba 1969, 1970, Gusmani 1964, Meriggi 1980). Although the Palaic and Lydian forms are still obscure, but their enclitic syntax accords each membership in the group.

Since the etymology of -ma is in question, it is difficult to know whether to relate -ma to other Hittite words: mān 'when; if', and (-)man, expressing the optative, potential, or irrealis (Tischler II:115-117); māḥḥan ‘as, when’ may be derived from mān (+ ħanda
‘(to the) fore’) (Tischler II:86-89, Puhvel 1984ff. 3:94). There has been limited success in positing -ma (or its pre-form) as the non-initial element in other Hittite words.

The particle may occur in imma ‘indeed’, namma ‘then; again; further(more)’, našma ‘or’, āšma and kāšma ‘lo, behold’. The derivations of all but našma are uncertain.24 našma is commonly accepted as syncopated naššu = ma, which is attested several times, and it has often been noted that in the disjunctive correlative construction naššu typically marks the first member, while našma marks the second and following members, which is perfectly consistent with the function and syntax of -ma. (See CHD L-N s. vv. for variations.) Similarly, including -ma in the formation of namma accords well with the latter’s prototypical occurrence after something else. Puhvel purposely leaves the etymology of imma undetermined, but suggests two possibilities for āšma and kāšma (and kāša ‘lo’): relation to the pronominal stems a- ‘this, that’ and ka- ‘this’, or derivation, at least in part, from Hattic material.

While one of these may be the case for kāšma, a third possibility exists wherein the word was formed analogically in (pre-)Middle Hittite times during the general expansion of -ma into post-consonantal environments. In this scenario, kāša, whatever its provenance, was reanalyzed as kāš-a and so was susceptible to reformation with the then newly fashionable post-consonantal -ma. As far as I know, kāšma is not attested in Old Hittite, while kāša occurs 5 times in the corpus I used. In the MH Mašat letters the occurrences of kāša outnumber those of kāšma ~70 to 13 (15 to 2 in the letters I used), while in my NH corpus, kāša occurs twice to kāšma’s 10 times—by Neo-Hittite kāša persists, but kāšma has become more frequent. At any rate, the derivation of most of these Hittite forms remains uncertain.

§5.7 Summary

In this chapter, I have analyzed the findings of the three synchronic descriptions of -ma and identified the changes that resulted from them. The frequency of -ma in Neo-
Hittite was seen to have increased almost five times over that of OH -ma, and more than twice over the frequency of -ma/-a. The suppletion characterizing the pair gave way to dominance by -ma by the time of Middle Hittite, ultimately leaving -a only in fossilized forms. I suggested that -ma's ascendance began after apocope of the final vowel of the ablative ending *-azzi caused -ma to occur after a consonant.

-ma's intraclausal syntactic distribution became more regular over time, as the particle was no longer required to be delayed to the second word of the clause after clause-initial măn 'if'. An increase in the delay of -ma to the second or third word of the clause very often involved Sumerograms and/or Akkadograms, so the delay was most likely to be merely graphic. Analysis of -ma's hosts and of the cases of its substantival hosts produced results consistent with the idea that the Hittite clause became more rigidly structured over time. In contrast to its more regular syntax within the clause, -ma's occurrence in interclausal syntax became more diverse, as it came to be used more in chains of dependent clauses and in apodoses.

In pragmatic contexts -ma's frequency increased significantly, but especially in occurrence with non-initial members of series, with orthotonic personal pronouns, and at paragraph-beginnings. Increases in -ma's occurrence with clauses expressing counterexpectation are also noteworthy. None of these is a new use for -ma, and I proposed scenarios according to which they could have become more common. The increase of -ma both in its frequency and in the number of environments in which it occurs indicates that the particle became more grammaticalized from Old Hittite to Neo-Hittite. Despite this proliferation, the contexts in which -ma occurred most often remained very stable over time: subject switch, contrast, orientation (but see note 10), referent introduction, and repeated form, with its high correlation with contrast.

I presented a confirmation of my method by showing that in a single text -ma is strongly associated with contrast, counterexpectation, orthotonic personal pronouns, and paragraph-beginnings. The association with orientation-establishment was also strong.
The statistics did not support the notion that -ma is strongly associated with some
categories: pair- and series-marking, conditional protases, and subject switch. However,
the first two are indisputably salient contexts for the use of -ma, so here it may be a case of
true 'expressiveness' that spurs the association of the particle with the context. I believe
the same to be true for -ma and subject switch, but this position is not well supported by
statistical evidence and may be controversial.

With regard to the remaining sections of the chapter, I responded to CHD’s article
on -ma, indicating the similarities and differences in our views of the particle, but
concluding that our approaches are complementary. My primary disagreement with their
position that -ma is a marker of correlation is that it places too much importance on
examples with elements in opposition. In another section, I presented several examples of
unusually placed -ma's. These are extremely interesting in that they indicate the existence
of an 'emphatic' -ma with freer syntax that is, unfortunately, only infrequently attested.

Finally, I showed that -ma has some functions like those of Hieroglyphic Luwian
-pa (series-marking, subject switch, contrast) and of Thessalian má (contrast).
Comparisons with the latter have inspired etymologies that are possible but not probative.
Derivations of words that may have -ma as their second element also remain in doubt.
Notes to Chapter 5

1 As with the tables showing -ma's frequency in chapters 3 and 4, example (1) includes attestations that were identifiable but unsuitable for analysis. Subsequent tables in this chapter include only attestations deemed suitable for analysis, so tallies may differ.

2 The tally of 57 -al-ya-clauses differs by 12 from the 45 given in chapter 2, example (46). Included here are [1] the second member of a comparative 'as...so' pair from the Laws; [2] an instance of apparent word-scope -al-ya from the Laws; [3-4] a correlative pair from the Laws; [5-6] a correlative pair from KBo 22.1; [7-11] two correlative pairs and the second member of a correlative pair from StBoT 8; and [12] an attestation in broken context from StBoT 8 (cf. chapter 2, example (56)).

3 Writing with phonetic vs. logographic forms has been much discussed in the literature on dating Hittite texts, with results usually showing that older texts contain relatively more phonetic forms and that later copies contain relatively more logographic equivalents (Carruba 1969, Otten and Souček 1969, Houwink ten Cate 1970, Neu and Rüster 1973, Heinhold-Krahmer et al. 1979).

4 *-azzi=a, with -a, would not have occurred due to the phonological distribution of -al-ma; even if the form had been possible, it would presumably have been indistinguishable from *-azzisya, with -af-ya.

5 Holland (1980) found clause-initial verbs in only 3% of clauses in later texts. As far as I know, a statistical study of Hittite clause structure has yet to appear.

6 The frequencies compared here are the occurrences of OH -mal-a and NH -ma relative to the total number of clauses for the respective period, rather than the frequency of -ma(/-a) relative to just the number of clauses with -ma(/-a). It may be noted that if the frequencies of OH -ma alone were compared those of NH -ma, the increases would be even greater.

7 The authors' addressing the audience in the Treaty with Kupanta-<KAL and in the Instruction to the LÜ.MEŠSAG favors second-person forms, and the self-explanation in the Apology of Hattusili and in the Bronze Tablet is conducive to the use of first-person forms.
In Old Hittite, '-ma would have been restricted to occurring after vowel-final orthotonic personal pronouns, i.e., *apē* ‘those [nom.]’ (*apē s ma* is attested at least 4 times) and *apedani* ‘that (one) [dat./loc.]’.

Since the frequency of NH -ma is 2.25 times that of OH -mal-a, then if the distribution of -ma among the pragmatic categories held steady, the frequency of the categories in which it occurred should have increased correspondingly (2.25x). But considering their frequencies with regard to -ma’s distribution, only the categories of series-marking, paragraph-initial, orthotonic personal pronoun, counterexpectation and conditional protases increased; contrast and subject switch held their ground at about 2.25x the OH frequency; emphasis and new subject decreased by about 10% relative to -ma-clauses, ‘merely’ doubling in frequency relative to all clauses; and orientation and repeated form, decreasing by about 30% relative to -ma-clauses, increased by ‘only’ 50% or more relative to all clauses. New referents could be added to this last group; statistics for variant syntax and pair-marking are still inconclusive.

Paragraph-initial -ma, mostly occurring in the discourse-topic-changing formula, displaced orientation as one of the most common uses in the MH letters.

Data collection for new referents was unfortunately not undertaken, and reassessment of clauses with repeated form, emphasis and variant syntax is required before results for these categories can be considered valid. Pair- and series-marking were tallied together in this analysis.

This collection was gathered from texts I have worked through, as well as from citations in secondary literature, but it is not comprehensive. That it is so small attests to the very regular placement of -ma.

I do not interpret the -ma’s in this passage from the Kantuzzili prayer as marking each clause in a bipartite structure (cf. CHD L-N:93 a.2’). Instead, I consider each to exhibit its typical anaphoric orientation, relating its clause to the preceding discourse (rather than to
each other). This text is typically considered as Old Hittite set down in Middle Hittite times, (Oettinger 1979:568, Yoshida 1990:11, CHD P:366 (OH or MH in MH script)).

This example was not accepted as data for Middle Hittite, but probably could have been. The statistics would have been affected minimally. Since the clause comes at the beginning of a quote, about all we can tell about its pragmatic context is that it constitutes an expression of orientation.

Review of the autograph renders this attestation somewhat questionable, in that the sequence of signs appears to be GIM AN KU₁ Ü EL LU, with LU written over an erasure. Perhaps it was corrected to KU₁ on the tablet to give ū-el-ku, but it is difficult to tell. The uncorrected KU₁ could merely be a shortened MA, but could it have also been an anticipatory scribal error, the KU₁ written before Ú-EL-, then left as MA?

Upon review of the autograph of KBo 5.3, both attestations of -ma appended to the end of an enclitic string headed by nu are disputable. At KBo 5.3 iv 18', all that is visible of the putative NU is the head end of the horizontal, but even so, the Winkelhaken that NU's have in this text should be visible. If this sign is not NU, then example (20) becomes less interesting (but could remain interesting depending on the restoration).

At KBo 5.3 i 19, the interesting -ma cooccurs with an erasure, and the next word happens to begin with MA (ma-a-an), so it is possible that scribe wrote the MA of ma-a-an close to the enclitic string, but then remembered that he should right-justify the word, as he had done in the previous line. In that case, -ma would not occur here. Perhaps only collation of the tablet itself (or of a photo) can decide whether MA was (incompletely) erased or whether it was written over the erasure.

The formal and functional equivalent in Cuneiform Luwian has both an orthotonic and an enclitic variant, pa and -pa (Laroche 1959:76-77).

I follow Ruggero Stefanini's interpretation (p.c.), in which the city's inhabitants first beget children and then raise them, understanding a more literal sense of 'make big'.
Denniston's work is much cited but seemingly widely disliked; in his defense, his description is actually very practical from the point of view of a reader in that it offers semantic equivalents for dé in different environments.


Bakker's notion of boundary-marking for dé seems to correspond approximately to my description for -ma: 'linking with overt signal of difference'.

Melchert has since retracted his proposed etymology of Hitt. imma from PIE *íd-mō (1994b:160), but this may not affect the derivation of Hitt. -ma from PIE *-mō.

Garrett's reconstructions account for Hitt. -ma (from unaccented *mōh₂), Lycian clause-connective me (from accented *mōh₂), and Thessalian má (from ablaut variant *meh₂).

Chapter 6
Conclusion

In the preceding chapters I have presented evidence that showed that Hittite -\textipa{ma} occurs in conjunction with a number of pragmatic categories: contrast, counterexpectation, pair- and series-marking, introduction of new referents, and emphasis, as evidenced in variant word order and with orthotonic personal pronouns. In general, these categories may be considered focal. -\textipa{ma} also occurs with subject switch, which often can be considered a change involving topicality. Finally, -\textipa{ma} occurs with backgrounding, as in adverbial phrases and dependent clauses that adjust the orientation, including conditional protases. -\textipa{ma}'s use paragraph-initially may be included here.

In chapter 2, I showed that Old Hittite -\textipa{ma} occurred in clauses with focal elements like new and contrasted referents, with expressions of setting, including conditional protases, and with topic switch, although we may more profitably consider -\textipa{ma}'s cooccurrence with subject switch. These contexts frequently show repeated form, either of vocabulary or of syntax, or of both. The difference that -\textipa{ma} signals is rarely discrete, for most often more than one of these pragmatic contexts is present.

I also demonstrated on the basis of their similar function that -\textipa{ma} and -\textipa{a} were suppletive allomorphs, as suggested by Melchert. They indicate overtly that there is in their clause at least one difference from the preceding discourse. In contrast, -\textipa{al}/-\textipa{ya} tended to occur in contexts of close connection.

Further, I showed how -\textipa{mal}/-\textipa{a} served to mark contrasting conditional protases in the Laws in a systematic way. Finally, I responded to Starke's and Luraghi's views of -\textipa{ma}, offering evidence against them, while supporting my interpretation of its function.

In chapter 3, I presented evidence for Neo-Hittite -\textipa{ma}'s continued use in the contexts identified in Old Hittite, as well as for its increase in use in other contexts that in Old Hittite were less common. In addition to use with contrast, referent introduction,
orientation establishment, and subject switch, *-ma* was used in paragraph-initial contexts, in contrastive contexts showing counterexpectation and pair- and series-marking, and in emphatic contexts as indicated by variant syntax or orthotonic personal pronouns. Repeated vocabulary or syntax was often present in these contexts.

A comparison with *-al-ya* showed that it was still more often associated with contexts of close connection, whereas *-ma* seemed to be linked to contexts of contrast and orientation establishment.

I also observed that *-ma* had nearly completely replaced its OH allomorph, *-a*, which lived on only in morphologically frozen forms. I further demonstrated that Hittite words really do underlie forms written with Sumerograms and Akkadograms.

In chapter 4, I examined *-ma* in the Middle Hittite of the Maṣat letters and showed that the use of *-ma* in contexts that were common in Neo-Hittite had already been established by the time of Middle Hittite. Use in contexts establishing the orientation was less common, but *-ma* was often found in an epistolary formula that changed the discourse topic. *-ma* was also found to occur in and link clauses with emphatic expressions like imperatives, forceful questions, and strong denials. Linking the first two to the preceding discourse could be considered connecting the epistemic and the speech-act domains as analyzed by Sweetser, offering another type of pragmatic ambiguity for *-ma*. By the time of Middle Hittite, *-ma* had almost completely taken over the function of *-a*. This enclitic may still have been marginally productive in Middle Hittite but was primarily used in relic forms: with orthotonic personal pronouns and in the connective temporal adverb *kinuna*.

In chapter 5, I identified the changes that emerge from a comparison of the three synchronic descriptions of *-ma*. The connector substantially increased in frequency from Old Hittite to Neo-Hittite, by almost five times when taken alone, and by more than two times when taken together with its OH allomorph, *-a*. By Middle Hittite, *-ma* had assumed the functions of *-a* after the former’s distribution expanded into post-consonantal environments. This may have occurred when apocope of *-i* caused *-ma* to occur after the
affricate \(<z>\) in ablative forms. Syntactically, NH -\(ma\) was being placed more regularly in Wackernagel’s Law position as the requirement for delay to the second word of the clause was being lost in clauses with \(m\&n\). Interclausally, -\(ma\) occurred more frequently in sequential protases, as well as in apodoses, the latter usually with a change in subject.

-\(ma\) also showed substantial increases in frequency in all comprehensively analyzed pragmatic contexts. Those contexts with the largest increases involved series-marking, orthotonic personal pronouns, paragraph-beginnings, and counterexpectation. -\(ma\) occurred in all of these contexts in Old Hittite, but at a low rate, and I suggested possible paths of development that might explain how -\(ma\) came to be used more frequently in these contexts in Middle and Neo-Hittite. Despite -\(ma\)’s increased frequency in the categories just mentioned, the five most frequent categories in which it occurred from Old Hittite to Neo-Hittite were quite stable: subject switch, contrast, orientation (but see chapter 5, note 10), referent introduction, and repeated form, which correlated highly with contrast.

The proliferation in -\(ma\)’s occurrence in general and in the specific interclausal environments and pragmatic contexts noted above is consistent with the view that -\(ma\) became more grammaticalized over the period of attested Hittite.

To confirm the results of the method I used in my analysis, i.e., determining which categories occurred most frequently with -\(ma\), I checked the occurrence of -\(ma\) against all occurrences of several pragmatic categories in one text. -\(ma\) was found to occur in clauses with contrast, counterexpectation, orthotonic personal pronouns, and at paragraph-beginnings at rates two to three times higher than in clauses in general. -\(ma\) also showed a strong association with clauses establishing the orientation. Strong association of -\(ma\) with pair- and series-marking, conditional protases, and subject switch was not borne out by the data, but the salience of -\(ma\)’s use with the first two is beyond doubt. I would argue that -\(ma\)’s association with subject switch is also stronger than the data indicate.

I responded in detail to the article on -\(ma\) presented in CHD. I disagree with their interpretation of -\(ma\) as a marker of correlation and believe this view resulted from giving
priority to forms standing in opposition. Inasmuch as their lengthy and detailed article is ordered primarily by syntactic environment and contains uses of -ma that did not occur in my sample, our accounts of the particle are complementary.

I presented examples of -ma occurring in positions other than that licensed by Wackernagel's Law. These are intriguing attestations because they indicate that the spoken language allowed variation in the placement of -ma.

Finally in chapter 5, I showed that -ma and Hieroglyphic Luwian -pa share some functions (series-marking, subject switch, contrast) and reiterated the fact that -ma and its potential cognate in Thessalian, má, minimally share the function of signaling contrast. Etymologies have been proposed both for -ma and for most Hittite forms in which -ma is alleged to be the second member, but they are not certain.

In light of the evidence presented, I find that -ma's primary function was to link its clause (or sentence) to the preceding context while overtly signaling difference between them. Its meaning, inextricably tied to its function, was connective and adversative, thus confirming the particle's description by most scholars as an adversative conjunction. Of course, this characterization is an abstraction and is divorced from contexts where its meaning and use actually had value.

Now, each clause in a connected, coherent discourse will, of course, contain some information (in the sense used in §1.3.2) because the speaker (or author) taking part in such a discourse will typically avoid informational redundancy (in which case no information is asserted) (Givón 1984:240-241), so my characterization may seem rather pallid. However, it is reminiscent of Schwyzer's description of Greek de (1950 2:562), adduced by Melchert (1985) and cited above in §1.2: 'Es bezeichnet, daß (gegenüber dem Vorhergehenden) etwas Anderes, Neues kommt'. I think it is just such a meaning that would allow for the pragmatic ambiguity that we see with -ma, from strongly contrastive (as in chapter 3, example 38) to merely additive (as in chapter 4, example 17). Similarly, such a function allows for -ma's occurrence in contexts that ordinarily have very different
pragmatic statuses, expressions of focus (as in chapter 4, example 16a) and expressions of setting (as in chapter 2, example 42). (Cf. Holland 1984 on the relative-complementizer kuit and Sweetser 1990 on and, or, and but.)

Inasmuch as -ma's function is to link its clause and signal difference, it stands in relief from its clause-connecting cousins, the almost 'positively' additive -a/-ya 'and', and the more neutral linker nu 'and'. While I have examined some functions of the former, each deserves investigation on its own account.

Regarding the previous accounts of -ma, specifically those that labeled -ma a referent-introducing form, an emphatic particle, a backgrounding form, or a contrastive focus particle, it is possible to say that no one was completely right, but that no one was entirely wrong. On the one hand, it seems such labels were applied without considering all the data. On the other hand, though I do not find that -ma marks these categories in all cases, I could agree that -ma marks them optionally.

There is evidence for a secondary function of -ma, i.e., -ma as a marker of emphasis. Such evidence concerns those examples in which -ma occurs in a clause with nu, or in which -ma occurs later in the clause than in its usual initial or delayed position (§2.2, §3.2.2, §4.2.2, §5.5). In these cases the clause-connective function of -ma is hard to detect, and it is difficult to avoid the inference that -ma is raising its host to focal prominence in the clause (cf. Götze 1928:167, Houwink ten Cate 1973:133). If this -ma was indeed emphatic, then along with focality it probably connoted difference and was thus distinguished from other emphatic enclitics, the specifying -pat and the inclusive -al/-ya (with word-scope). A closer determination of the semantics of emphatic -ma will be limited by the small number of its occurrences, however, and it will probably be impossible to decide whether the two types were polysemous or pragmatically ambiguous for Hittite speakers.

The difficulty with regard to this emphatic -ma's meaning is symptomatic of the obvious problem with attempting pragmatic analyses of dead languages: limited knowledge.
of the language under analysis. We may never be able to resolve the difficulties encountered in a hapax or an obscure passage. We will probably never know whether a newly introduced referent would have been known to the audience or not (Prince’s *Unused* and *Brand-new*, respectively). We cannot be sure of degrees of focality, as in chapter 4, example (16), where a šaša-bird was spotted—was this interesting or extraordinary to the addressee of the letter? Which props used in rituals were identifiable to the audience, and which were not? For that matter, who was the audience for such a text? For most texts?

Despite these limitations, I hope to have demonstrated that by applying contemporary pragmatic concepts to a dead language like Hittite, it is possible to obtain interesting and informative results about the function of an element in such a language.


Friedrich, Johannes. 1930. See Friedrich 1926, 1930.


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Holland, Gary B. ms. The form and function of Hittite *kuit*. Dept. of Linguistics, University of California, Berkeley.


Melchert, H. Craig. 1985. *Hittite* *imma* *and Latin* *immō.* *KZ* 98:184-205.


Stefanini, Ruggero. 1992. On the tenth paragraph of the Bronze Tablet (ii.91-iii.3).
Archivio glottologico italiano 67:133-152.


Wackernagel, Jacob. 1892. Über ein Gesetz der indogermanischen Wortstellung.
Indogermanische Forschungen 1:333-436.


Appendix

Occurrences of -ma and -a in the Old Hittite Corpus

Please see the Notes on Translation and Glossing in the front matter.

Occurrences of -ma have example numbers from #1 to #34; for -a the example numbers range from #35 to #62. When a passage contains both -ma and -a, the passage is presented with the -ma group.

#1-#2: Laws I §10 (A Vs. I 16'-19')

§[(takk)]u LÜ.ULÜLU-an kuiški ḫūnikzi t=an ištarnikzi nu apûn
[(šak)]tāizzi11 pēdi=šši=ma LÜ.ULÜLU-an päi nu É-ri=šši
annîškizzi kuitmān=aš lazziatta mān=aš lazziatta=ma
nu=šše VI GĪN KŪ.BABBAR pā[(i)]] LŪ.A.ZU=ya kuššan apāš=pat päi §

'§ If someone injures a person and does him harm, he shall take care of that (person). And in his place he shall provide a person (who) shall work in his household until he (the injured person) recovers. And when he recovers, (the injurer) shall pay him 6 shekels of silver, and to the doctor that same one (the injurer) shall pay the fee. §'

1[[(ša1-ak)]]-°

#3: Laws I §23 (A Vs. I 51'-53')

§[(ta)]kku ĪR-aš ḫuwāi n=aš ANA KUR Luwiya paizzi kuiš=an āppa 'uwat][(ezzi)]
nu=šše 6 GĪN KŪ.BABBAR päi takku ĪR-aš ḫuwāi n=aš ANA KUR kūruri an[da]
paizzi kuiš=an āppa=ma uwatezzi n=an=za apāš=pat dāi §

'S If a male slave runs away and he goes to the land of Luwiya, whoever brings him back, (the owner) shall give him 6 silver shekels. If a male slave runs away and he goes into an enemy country, whoever (=ma) brings him back, that same one shall take him for himself. §'

• See note 24.
#4: Laws I §24 (A Vs. I 54'-'55')

§[(ta)]kkù I[R]-aš našma [(GEME)-aš huwái iššaššišši ša kuḫḫašši wemi(yazi)]
LÚ-naš kuššān ITU.I.KAM XII ĜIN KŬ.BABBAR pāi SALSEŠmeye ma kuššān
ITU.I.KAM VI ĜIN K[U.BABBAR] pāi §

'S If a male slave or a female slave runs away, at whose hearth his or her owner finds him or her, / he (the harborer) shall pay a man's wage (for) one month (of) 12 silver shekels, but he shall pay a woman's wage (for) one month (of) 6 (six) silver shekels.'

#5-#5.5: Laws I §40 (A Vs. II 18'-'22')

§takku LÚ[(GIŠ)TUKUL ḫar(akzi)] Ü LÚ ILKI tittianza nu LÚ ILKI tezzi
ki GIŠTUKUL[(L)-i|m] šaḫḫaššu=m A.SAḪLA ŠA LÚ GIŠTUKUL anda šittariezzi
GIŠTUKUL-li=ya ḫar[(zi s)]šaḫḫaššu=m a iššai takku GIŠTUKUL-li=ma mimmai
LÚ GIŠTUKUL-še=a! A.SAḪLA ḫarkantaš tarižni n=an=za LÚMES URU-LIM
anniskanz[(i)]
takku LUGAL-še=a NAM.RAḪLA-an pāi nu=šše A.SAḪLA-an pianiš t=ash GIŠTUKUL-li
kiš[(a)] §

'S If a GIŠTUKUL man [di]es (or disappears) and an ILKU man is designated, and the
ILKU man says, / "This is my GIŠTUKUL-[li] (obligation), but this (other) is my
šaḫḫan (obligation)," and he registers the field(s) of the GIŠTUKUL man, / he shall both
hold the GIŠTUKUL-li and perform the šaḫḫan. But if he refuses the GIŠTUKUL-li, / they shall declare the field(s) of the GIŠTUKUL man vacant, and the men of the city shall
work it for themselves. / But if the king gives a person, they shall give him the land, and
it shall become a GIŠTUKUL-li (arrangement). §'
• See notes 23 and 35.

#6, #36-#37: Laws I §41 (A Vs. II 23'-'26')

§ takku LÚ ILKI ḫarakzi Ü LÚ GIŠTUKUL tittianza LÚ GIŠTUKUL tezzi
ki GIŠTUKUL-li=met ki=ma šaḫḫaššu=m A.SAḪLA ŠA LÚ ILKI anda šittariezzi[(i)]
GIŠTUKUL-li ḫarzi šaḫḫaššu=m a iššai takku šaḫḫaššu=m a mimmaši,
A.SAḪLA ŠA LÚ ILKI ANA ĖGAL-LIM danzi šaḫḫaššu=m a ḫarak[(zi)] §

'S If an ILKU man dies (or disappears) and a GIŠTUKUL man is designated, and the
GIŠTUKUL man says, / "This is my GIŠTUKUL-li (obligation), but this (other) is my
šaḫḫan (obligation)," and he registers the field(s) of the ILKU man, / he shall hold the
GIŠTUKUL-li and perform the šaḫḫan. But if he refuses the šaḫḫan, / they shall take the
field(s) of the ILKU man for the palace. And the šaḫḫan shall cease. §'
• See note 23.

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#7: Laws I §44b (A Vs. II 34'-35')

§ takku LÚ.LU-LU-an kuiski parkunuzzi [(k)]uptarr=a uk[(tūriaš pēda)i] takkw=at=a parna=ma kuēlka pešiezi alu[(wanzatar DI.KUD LUGAL)] §

'S If someone (ritually) purifies a person, he shall convey also\(^1\) the remnants to the incineration dumps.

But if he throws them away onto someone's property (lit. house), (it is) sorcery, (and is) a case for the king. §'

\(^1\)Following Friedrich (1959:31, 116), I interpret -a/-ya in kuptarr=a 'remnants' as having word-scope; cf. §2.4.1 and example (70).

#9: Laws I §46 (A Vs. II 38'-42')

§ takku URU-ri A.ŠḪḪA.LA-an iwāru kuiski ħarzi takkušše A.ŠḪḪA.(['1a dapijan)za] piyanza luzzi karpiezi takkušše A.ŠḪḪA.š=a te[(paueš1 pi)yanteš]
luzzi natta karpiezi ISṬU É ABI-ŠU=ma ka[pianzi]
takku iwāruaš išhāš A.ŠĀ kulei ārki na[(š)ma]
LŪMES URU-LIM A.ŠḪḪA.LA.an pianzi ta luzzi karpiezi[i] §

'S If in a city someone holds land as an inheritance gift, if all the land is given to him, he shall render the luzzi service. But if the small(er portion of the) fields is given to him, he shall not render the luzzi service, but [they shall] render it from the house of his father. If the heir subdivides unused land or the men of the city give land (to him), he shall render the luzzi service. §'

\* See note 28.

#10: Laws I §47b (A Vs. II 45'-48')

§ takku LÚ.GIŠTU.UL-U-aš A.ŠḪḪA.LA.ŠU ħumandan kuiski wāši luzzi [(karp)]iezi takku A.ŠḪḪA-LA-n=š mekkī wāši luzzi natta karpiezi takku A.ŠḪḪA.LA kulei=ma ārki našma LŪMES URU-LIM pianzi ta luzzi karpiezi §

'S If someone buys all the land of a GIŠTU.UL-U man, he shall render the luzzi service. But if he buys (only) the large(r part of the) land, he shall not render the luzzi service. But if he subdivides unused land or the men of the city give (him land), he shall render the luzzi service. §'
§ takku GUD-un ANŠ-E.K[UR.RA ANŠE.GIR.NUN.N])A ANŠE-in kuiški wemieszzi
[(n=an LUG)]AL-w[(an¹ aška ūnnaí ta)]kku unamiya=ma wemieszzi
[(n=an LÛ.MEŠŠU.GI-aš ḫankanzi n=an=za)] tūrizzi mā₃,n=an₃

‘§ If someone finds a (stray) ox, horse, mule (or) donkey,
he shall drive it to the king’s gate. But if he finds (it) in the country,
they shall present it to the elders. (The finder) shall harness it for himself. When it [...]
LUG])AL-w[a-(an 2-ma₃-a-na-an₃]

#13, #44: Laws I §99 (A Rs. IV 56'-58’)

§[(takk)]u ÊR-aš É-er lukkezzi ištāš-šiš=[(a še)r=šši]š šarnikzi
[(ŠA I)]R KA×KAK-ŠU UZNÁ-ŠU kukku[(raškanzi n=an E)]GIR-pa ištī=ššī
[(pian)]zi takku natta=ma šarnik[(zi) n(u apūn=pat šuwi)]zzzi §

‘§ If a male slave sets fire to a house, and his owner makes compensation for [him],
they shall cut (off?) the slave’s nose and ears [and] give him back to his owner.

But if (the owner) does not make compensation, he shall forfeit that very (slave). §’

• Against the readings of Hoffner (1997:96), Hrozný’s autograph seems to me to show ÊR
in 1.57’, and there does seem to be a trace of a vertical in 1.56‘ (if it is not a representation
of a crack or an artifact), allowing ilR, but my resources were more limited than
Hoffner’s (p.XI). The restorations for 11.57'-58’ of this law, supplied from B (KBo 6.3
Rs. IV 56-58), seem a bit much for the space on A (KBo 6.2).

#15: Anitta A Vs. 1-4

mAnitta DUMU mPitḫaṇa LUGAL URUKushšaru QĪBĪ-MA
nepiṣṣu=šašša dIM-unnī aššuš ešta
n=asṭa dIM-unnī=ma mān aššuš ešta
URUNēšaš LUGAL-uš URUKushšaruš LUGAL-i × × ×[ ] §

‘Anitta, son of Pitḫana, King of Kuššara, speak:
He was dear to the Storm-god of Heaven.
But as he was dear to the Storm-god,
the king of Nešā [... ] to the king of Kuššara ... §’

¹nepiṣṣu(-) has been analyzed as either a genitive form or an ablative. See Neu (1974:47-
50) for arguments for a genitive (with antecedent bibliography), accepted by Tischler
(1977ff. II(7):311). CHD (L-N:448) and Melchert (1994:112) judge it to be an
ablative.
Earlier Uhna, King of Zalpuwa, took (the statue of) our god Siu from Neša to Zalpuwa. But later I, Anitta, Great King, conveyed (the statue of) our god Siu from Zalpuwa back to Neša. And [H]uzzia, King of Zalpuwa I brought / alive to Neša Hattusa... [ ] inflicted'. I left it. But when it / later suffered starvation, my god Siu delivered it [to] the Throne god. And in the night I took it by force. And in its place I sowed weeds.

§ When I [ ] went to battle, / the man of Purušhanda with me offered a one iron throne and one iron scepter as gift(s). He brought me one iron throne and one iron scepter as gift(s). And when I [came] back to Neša, / I brought the man of Purušhanda with me. And when he goes into the throne room, that one / sits before me on the right. §'

1See note 17a.
#20: KBo 22.1 Vs. 7', 12'-13'

§ nTāš Lūṭšī URUKüluppa …
VI PA ZIRD. DA ZIZ ANA NINDA. KASKAL daškizzi
§ kī=ma ḫenkuwaš=šaš I NINDAḪLA …

‘§ Tāš, the chariot-fighter of Küluppa … has been taking [list of people] (and) as provisions … 6 half-measures of emmer meal.
§ But this is (part) of his allotment: 50 (loaves of) bread …’

#20.5: KBo 20.10+ Vs. I 4-6

GAL DUM.É.GAL LŪ dIM-an anda! pehutezi LŪ dIM 1ANA š LUGAL ḫ[e]kta1
ta anizzi mān zinniz[i]=šaš ANA LUGAL ḫek[t]a
āppa=ea ḫek‘tša LUGAL-uš tunna paizzi …

‘The head page brings in the man of the Storm-god. The man of the Storm-god b[ows] to the king, / and he performs (the ritual action). And when he finishes, he bow[s] to the king, / and he bows again.1 The king goes into the inner room …’
1With Garrett (1990:17).

#21: StBoT 8 Nr. 2 Vs. I 2'-5'

[ ]× DUM.É.GAL nu=kkāb kalul[ušmi …] / [k]ān[ki]
§ ananda=ma namma II GAL läleš AN.BA[R … ]
anda DUM.É.GAL pētai I-EN ANA LU[GAL … ]

‘ … the page. And that one [h]an[gs … on their] / fing[er].
§ And [i]n addition another 2 large tongues (of) iron lie7. And them7] the page carries in. One to the ki[ng he gives … ]’

#22: StBoT 8 Vs. I 7'-8'

§ [ug]=a arhari nu ĥurtiyallar ĥarmi ĥurtiyali=ma
[AN.B]AR-aš nēpiš I-EN kitta URUDU-ašš=a I-EN kitta

‘§ But [I] am standing and I have a bowl. And in the bowl lies one heaven of [iron] and one of copper lies (therein).’
§ apūš ḥantezummi tēḫḫi weš=a namma anda
[p]aiwani II ḫantašepuš ḫawwani GIS-aš ḫarkanzi=ma=an
 ḫantašepes anduššaš ḫaršarr=ma GISŠUKURUL-ya
šākuwa=šmet išḫaškanta weššanda=ma
išḫarwantuš TŪGUL-šu putilyantešš=a
§ anda=kan ḫalinaš teššummiuš tarlipit šuwaruš
Ⅻ-ki, pētumini tarueni=ma=at ešḫar DUMU.Ē.GAL-iš
 ḫanti[aš]epan LUGAL-i kišari dāi
teššumm[en]a pāi SAL.LUGAL-ša Q[A]TAMMA pāi
NINDAšarr[u]=ma=sšan ERÎNMEŠ-aš ešzi
§ šer=šemet=a [ G]ĪR ZABAR kitta apatt=a=n? anda / pētumeni ...

'S I lay those in the forecourt. And we go back in. / We have two Ḥantašepa divinities of
wood. But the Ḥantašepa divinities / have both human heads and lances. / Their eyes
(are) bloodied. And they are wearing / blood-red garments and (are) girded.
§ Twice we bring in clay cups / full of tarlipa liquid. And we call it blood. The page / sets
a Ḥantašepa divinity in the king's hand / and gives (him) a cup. To the queen he gives
likewise. / But on a šarruwa bread sits a troop.
§ And over them lies a bronze dagger. And (all) that we carry in. ... ' 

#27: StBoT 8 Vs. Ⅱ 31'35'

... [ u]lg=maš=sšan ERÎNMEŠ-an šēr
III-ŠU waḥnumi |LUUGAL-uš? |II]-ŠU SAL.LUGAL-ašš=ma III-ŠU ERÎNMEŠ-an
allappall[anh] ERÎNMEŠ-]=ma=sšan šēr GĪR ZABAR
kitta MUŠENhāran[an] ERÎNMEŠ-an[n]=a LUGAL-aš SAL.LUGAL-ašš=a šēr=sšemet
waḥnumenini ... 

'... And I wave the troop over them
three times. The king thrice and the queen thrice spit on
the troop. But above [the troop] lies a bronze
dagger. We wave the eagle and the troop over the king and queen. ... ' 

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... [t]a LUGAL SAL.LUGAL-ašš=a
kitkaršamet dāī MUŠENḥāran[a]mn=a après ĭlan[na]
pētumeni ta šašušeni
§ mān lūkkattā=ma LUGAL-uš ara[ḥz]a nāwi x[ ]

‘... and sets (it) at the heads of the king and queen. And the eagle we carry out
[to] the gate. And we sleep.
§ And when it dawns, the king (has) not yet [come?] out ...’

§ ta namma MUŠENḥāran nēpiša tarnaḫhi
āppan-anda=ma=šše kē mēmāḫhi natta=an ūk
tarnaḫḫun LUGAL-š=an SAL.LUGAL-š=a tarnaš ...

‘§ Then I release the eagle into heaven
and after(wards) I say these (words) to it: “Not I have
released it, the king and queen have released it. ...” ’

... pattarr=a ḫarmī nuššan NUMUN-an [ ]
[.ʔ, an]da kitta GİŞzupāri kitta I MĀŠ.GAL-ri
garaunišī muriyaleš ganganteš kett=a
gar[aunišši] muriyaleš ganganteš anda=ma IX muriy[al]n
išgarandān ūk kuin ḫarmi §

‘... and I have a basket, and seed / lies [in]side; a torch lies (inside). On one he-goat’s
horn grape-rolls (are) suspended. And on the other side
[on i]ts hor[n] grape-rolls are suspended. But in addition (there are) 9 grap[e-rol]ls
attached which I hold. §’
... a[tu]ieni akueni LUL.MEŠA.ZU-š=a kattim mi ta(-) × [uwaweni m[a]n1 lukkatt=ma nu LUL.A.ZU ugg=a paiwani nu išhanāš [tarlipa]š=ršan teššumin ḥāššann=a umeni

‘... We eat (and) drink. And the medicine men (are) with me. And? ... [we come. But when it dawns, the medicine man and I go and we observe the tarlipa of blood, the cup, and the hearth.’

ma[-a-a]n

§ [m]ān LUGAL-uš SAL.LUGAL-ašš=š=taranzi ta DUMU.MEŠ-an parna paimi [takk]u natta=ma taranzi nu natta paimi karū=ma [ŠA‘] É DUMU.MEŠ-an paišgaḥat kinun=š natta kuwaššikki pāun §

‘§ When the king and queen say (so), I go to the house of the children. But [i]f they do not say (so), then I do not go. But previously, I used to go [in? the house of the children, but now I have not gone at all. §’

§ III NINDA ḥaršaeš išpantuzzi=ya marmuan kita
mān luggatt=ma nu LUL.ḪUB-za ugg=a paiwani t=š=štarā tumeni LUGAL-uš SAL.LUGAL-š=a ašanzi ta kalulupušš=šmuš gāpinit ḫulāliemi ŠA QAŢI-SUNU ug=a ḥāḫhal ḥarmi šīnann=a ḥarmi Giršarpa=ma I-anta LUGAL-aš GIR=ši kita SAL.LUGAL-š=a I-anta kita ta šini tēmi dā LUGAL-aš SAL.LUGAL-š=a a[m / x wām]n pittiliušš=šmušš=a ...‘§ Three thick breads and the marmuan libation lie (ready). But when it dawns, a deaf man and I / go, and we take them up. The king and queen are (there). / Then I wind their fingers with the thread, (i.e. fingers) of their hand(s). And I hold a twig and I hold a figurine. But woodpiles, one lies at the king’s foot and one lies (at) the queen’s. And I say to the figurine: “Take the king’s and queen’s pain, / [?] woe, and worries!”’
§ Rule VII (A Vs. 19'-10')

If someone blinds a free person or knocks (out) his tooth, previously they would pay 1 mina of silver, but now he shall pay 20 shekels of silver, and he shall look to (his own) house (to provide it) for him. §'

For #36-#37, please see #6.

§ Rule IV (A Vs. II 27'-29')

If someone hires a person and he goes on campaign and he dies, if the wage (has been) paid, there is no compensation, but if the wage (has) not (been) paid, he shall give one person (lit. head). §'

§ Rule X (A Vs. II 55'-57')

... man hûmanteš=pat maršer[ ]

... (they would indeed all be dishonest, or they would become thieves. This one would seize that one, and that one would seize this one. [They] would overturn the king’s authority). §'

From Hrozný’s autograph. 2 With Hoffner (1997:60 with note 197).

[40]: § Rule VI (A Vs. II 61'-62')

... / mân URU Arinna XI ITU-aš tiezzi nu apê[ ] É-ZU]
kuel=â GLŠ=eyan àški=šši šakuwân a[räuwan] §

... / When in Arinna the eleventh month arrives, then [the house of] that one?, whosever eyan tree? (is) visible? at his gate, (shall be) exempt. §’
#41: Laws I §64 (A Rs. III 43)

§ takku ANŠE.KUR.RA tūriyawaš kuiški tāiezzi uttar=šed=a ki=pat ×[ ] §

'§ If someone steals a draft horse, his case (šma) (shall be) the same (lit. this same) [?]. §'

• See notes 24 and 39.

#42: Laws I §80 (A Rs. IV 14-15)

§ takku UDU-un UR.BAR.RA-ni kuiški peššiezzzi išhaš=šiš UZU§ dāi
apāš=a KUŠ UDU dāi §

'§ If someone throws a sheep to a wolf, its owner shall take the fat, but that one shall take the sheepskin. §'

• See note 38.

#43: Laws I §98 (A Rs. IV 53'-55')

§ takku LÚ-aš ELLUМ E-er lukkezz[(i E-er) EG(IR-pa we)tezzi
andan=a E-ri kuit ḫarakzi LÚ.U[(LÚLU-ku GUD-ku) UD(U-ku)] 'eš-za nakkuš
naš= [ šarnik]za §

'§ If a free man sets fire to a house, he shall [r]ebuild the house. And that which perishes inside the house, whether it be people or cattle or sheep, (it is) damage; / he shall [make compensation for] it. §'

For #44, please see #13.

#45: KBo 22.1 Rs. 26'-32'

§ LÚ.MEŠNAŠI SÍDITI-ŠU natta punušteni
ta LÚ-ḥappindaš ištēni
parna=šša paiši ēžši eukši piyanazzzi=šy= a=tta
LÚašiwand= a šiēt dātti
DIN-ŠU natta punušši ... §

'§ You do not question his provision bearers. / You do (the will) of the rich man, you* go to his house, you eat, you drink, and he rewards you, but (from) the poor man you take (what is) his? / You do not investigate his case. ... *From this point to the end of the passage as it is given here, the addressee(s) are 2.sg., having previously been 2.pl.
For #46-#48, please see #16.

#49: Anitta A Rs. 52-54


‘§ [I] turn[ed] my face to Šalatiwara. And Šalatiwara drew its army out of the city like a against (me), and [I] brou[ght] it to Neša. §’

#50: Zalpa A Vs. 9-11

kāni=wa tunnakkis inutten nu=w[a ANŠ]E-iš aṛkat,ta
UMMA LÚMEŠ URU-LIM kuwapit arumen nu ANŠE-iš [ark]atta [ ]
UMMA DUMUMEŠ weš=a kuwapit arumen nu SAL-z[aʔ ] DUMU ×[ ḫa]-]a1-ši

‘“Here you have heated the room, and the [donk]ey mates.”
Thus (spoke) the men of the city: “Whither we have arrived, the donkey [mat]es [ ].”
Thus (spoke) the sons: “But whither we have arrived, a woman [be]ars [ ] child [ ].”

#51: Zalpa A Vs. 16-19

... nu AMA-ŠUNU [o -u]cây natta ganesi nu=zaa DUMU.SALMEŠ-ŠA ANA DUMU.NITA MEŠ-ŠA paiš [hante]z̡iaš DUMUMEŠ nikuš=ašmuš natta ganesšiš appezziyasiš=a=ššan ]x-uš-za nekuš=šumuš daškēuen[i n]u le šalikumari

‘‘... And their mother / does not recognize [the]m?, and she gave her daughters to her sons. [The old]er sons did not recognize their sisters. But the youngest (son) [said?]: “Let[ ] (us) [not] take our sisters. [ ] Do not approach[ ] (them). ...’

#52-#53: Zalpa A Rs. 7’-9’

§ LUGAL-š=a IŠME š=a yanniš URUHaraḫšu=aš ārša Û ERÌNMEŠ URUZalpa menaňhanda uit š=an LUGAL-uš ħullit mHäppiš=a išparzašta mTamnaššun=a ĥušuwan tan IŠBATU $=an URUḪattuša uwatet §

‘§ But the king heard (about this), and he marched. He arrived at Hariššu. And the army of Zalpa / came against (him). And the king defeated them. But Häppi escaped; but Tamnaššu they took alive. And (they) brought him to Ḫattuša. §’

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'§ [Thri]ce they run (to?) the king and queen. And thrice to them he [e]xtends a figurine, and an ox he extends to them thrice. The king spits (on) the ox and one figurine thrice, and the queen spits on them (lit. it) thrice. . . .'

For #55-#56, please see #23-#26.


'dḤantašepuš teššumišš=ša dāi . . .

'The king [sp]its (on) the troop thrice[e], and the queen sp[i]ts thrice. And the horn-player calls (out). The page takes the Ḥantašepa divinities and the cups [from] the ha[nds] of the king and queen. . . .'

For #59, please see #31-#32.

'§ When the catch an eagle alive, / they bring it (in). And I fashion [a tr]oop [of] clay.'
For #61, please see #33-#34.

#62: StBoT 8 Rs. IV 34-36

\(\text{ţalinaş} \ zēri \ ţarmi \ t=\text{an} \ \text{anda} \ \text{III-}iš \ \text{LUGAL-uš} \ \text{SAL.LUGAL-š=a} \)
\(\text{zeriya} \ \text{allapaḥhanzi} \ \text{ištapulli=šet=a} \ \text{šulīaš} / \ \text{ta} \ \text{išṭaphe} \ ...\)

'I hold a clay goblet, and into the goblet the king and queen spit thrice. And its lid (is) of lead / and I close (it). ...'
### §3.0.1 Example Numbers and Citations for NH -mā

Citations found in duplicates are indicated in parentheses when the source is not immediately apparent from the edition, or when it otherwise seems helpful.

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| 1311 iv 28 | 1362 ii 32 | AM I.B (KB 16.1) |
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| 1379 ii 79 | 3016 iv 66 |
| 1380 ii 81 | AM II.7.C (KB 16.8 + 14) |
| 1381 ii 87 | 3017 ii 15' (−A ii 41) |
| 1382 ii 88 | 3018 ii 36' (≤A ii 62) |
| 1383 ii 96 | AM II.7.A (KB 5.8) |
| 1384 ii 99 | 3019 iii 5 |
| 1385 iii 1 | 3020 iii 8 |
| 1386 iii 7 | AM II.9.A (KUB 19.37) |
| 1387 iii 10 | 3021 ii 3 |
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| 1389 iii 16 | 3023 ii 48 |
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| 1393 iii 25 | 3027 iv 16 |
| 1394 iii 26 | 3028 |

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§3.2.5 Syntax with respect to Neighboring Clauses

The 37 examples of environment 2 are #1001, 1016, 1028, 1029, 1037, 1039, 1050, 1061, 1073, 1076, 1081, 1105, 1133, 1161, 1167, 1194, 1200, 1223, 1235, 1266, 1267, 1288, 1291, 1315, 1316, 1318, 1362, 1367, 1372, 1374, 1377, 1378, 1381, 1393, 1394, 1402, 1407.

The 6 examples of environment 1b with subordinators in both clauses are #1129, 1224, 1246, 1253, 1255, and 1290?. The 26 with one or no subordinator are #1125, 1144, 1209, 1215, 1234, 1242, 1243, 1244, 1256, 1260, 1270, 1292, 1295, 1296, 1301, 1307, 1308, 1309, 1311, 1312, 1313, 1314, 1386, 1403, 1404, and 1406.

§3.3.1.1 Strong Contrast; Repeated Form

The 114 examples showing strong contrast are #1020, 1023, 1026, 1027, 1029, 1032, 1033, 1035, 1039, 1042, 1045, 1046, 1052, 1061, 1068, 1069, 1077, 1082, 1092, 1096, 1097, 1098, 1099, 1100, 1102, 1104, 1105, 1114, 1115, 1116, 1117, 1118, 1121, 1125, 1148, 1150, 1153, 1155, 1157, 1159, 1166, 1167, 1173, 1175, 1178, 1180, 1183, 1184, 1191, 1192, 1193, 1194, 1196, 1198, 1199, 1200, 1210, 1211, 1212, 1216, 1221, 1223, 1225, 1229, 1230, 1235, 1236, 1241, 1245, 1249, 1251, 1258, 1259, 1262, 1263, 1264, 1265, 1269, 1270, 1271, 1289, 1291, 1292, 1294, 1299, 1300, 1301, 1302, 1303, 1306, 1307, 1316, 1322, 1339, 1353, 1360, 1366, 1368, 1369, 1377, 1378, 1382, 1383, 1386, 1388, 1389, 1390, 1393, 1394, 1397, 1398, 1403, 1405, 1407.

The 84 examples showing weak contrast are #1010, 1014, 1015, 1016, 1017, 1025, 1030, 1038, 1043, 1050, 1053, 1055, 1074, 1076, 1094, 1095, 1103, 1106, 1107, 1109, 1119, 1123, 1126, 1127, 1130, 1131, 1134, 1139, 1144, 1152, 1165, 1172, 1188, 1190, 1195, 1202, 1203, 1219, 1227, 1228, 1232, 1237, 1239, 1240, 1242, 1248, 1252, 1254, 1275, 1277, 1278, 1282, 1293, 1297, 1298, 1310, 1315, 1318, 1321, 1324, 1326, 1327, 1329, 1331, 1333, 1334, 1335, 1337, 1338, 1341, 1342, 1344, 1346, 1347, 1349, 1350, 1351, 1364, 1372, 1380, 1385, 1387, 1392, 1412.

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The 104 examples showing repeated form are #1015, 1016, 1020, 1026, 1027, 1052, 1069, 1082, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1114, 1115, 1116, 1117, 1118, 1119, 1125, 1139, 1153, 1155, 1157, 1173, 1180, 1182, 1184, 1191, 1192, 1193, 1194, 1195, 1196, 1198, 1210, 1211, 1212, 1221, 1227, 1228, 1229, 1239, 1240, 1242, 1247, 1248, 1249, 1251, 1263, 1264, 1265, 1271, 1282, 1299, 1301, 1302, 1303, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1335, 1336, 1338, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1368, 1369, 1377, 1378, 1380, 1382, 1387, 1388, 1392, 1393, 1394, 1405, 1412.

§3.3.1.1.3 Series
There are 76 examples of series marking with -ma.

The 62 examples of series members marked with -ma are #1015, 1016; 1096, 1097, 1098, 1099, 1100, 1101, 1102; 1114, 1115, 1116, 1117, 1118, 1119; 1146; 1152, 1153; 1192, 1193; 1195, 1197, 1198, 1199, 1200; 1202, 1203; 1211, 1212; 1227, 1228; 1232, 1233; 1238, 1246, 1247, 1248, 1249; 1293, 1294; 1297, 1298, 1299, 1300; 1313, 1314; 1324, 1326, 1327, 1329, 1331, 1333, 1335, 1338, 1341, 1342, 1344, 1346, 1347, 1349, 1350, 1351.

The 14 examples where only the final member of a series is marked with -ma are #1032, 1035, 1053, 1055, 1112, 1150, 1180, 1244, 1260, 1264, 1295, 1312, 1389, 1412.

The 43 examples where the second member of bipartite structures is marked with -ma are #1019, 1020, 1029, 1082, 1125, 1137, 1139, 1144, 1155, 1156, 1157, 1159, 1167, 1184, 1194, 1209, 1215, 1224, 1225, 1236, 1242, 1245, 1251, 1254, 1262, 1282, 1291, 1296, 1301, 1307, 1308, 1310, 1311, 1321, 1334, 1337, 1360, 1378, 1386, 1394, 1403, 1405, 1406.

§3.3.1.1.4 Counterexpectation
The 63 examples with counterexpectation are #1040, 1084, 1085, 1086, 1088, 1123, 1125, 1148, 1151, 1159, 1165, 1175, 1176, 1177, 1181, 1182, 1185, 1188, 1205, 1207, 1216, 1218, 1243, 1244, 1256, 1262, 1281, 1285, 1287, 1290, 1295, 1296, 1308, 1309, 1311, 1312, 1313, 1314, 1315, 1316, 1318, 1320, 1321, 1323, 1325, 1328, 1330, 1332, 1334, 1336, 1337, 1340, 1343, 1345, 1348, 1352, 1353, 1354, 1355, 1358, 1385, 1400, 1404.

§3.3.1.2 New Referents
In the 408 clauses with -ma there are at least 107 new referents in 105 clauses.

The 65 examples with new subject can be grouped as follows. The 23 examples with initial new subjects are #1001, 1005, 1037, 1046 (also with new direct object), 1068, 1076, 1079, 1146, 1147, 1148, 1160, 1204, 1214, 1226, 1300, 1303, 1334, 1336, 1337, 1377, 1401, 1408, 1409.

The 21 examples in which the new subject occurs non-initially in the border-setting formula are #1098, 1099, 1102, 1155, 1227, 1322, 1324, 1326, 1327, 1329, 1331, 1333, 1335, 1338, 1341, 1342, 1344, 1346, 1347, 1350, 1351, 1352, 1353, 1368, 1369, 1377, 1378, 1380, 1382, 1387, 1388, 1392, 1393, 1394, 1405, 1412.
The remaining 21 examples in which the new subject occurs non-initially are #1006, 1008, 1018, 1063, 1071, 1091, 1111, 1135, 1145, 1154, 1177, 1189, 1197, 1230, 1244, 1254, 1315, 1378, 1387, 1391, 1399.

The 42 new non-subject referents are #1012 (2 new non-subject referents), 1017, 1025, 1027, 1030, 1033, 1038, 1045, 1046 (also with new subject), 1047, 1052, 1060, 1069, 1103, 1113, 1125, 1149, 1150, 1151, 1153, 1163, 1164, 1183, 1195, 1210, 1211, 1212, 1220, 1257, 1282, 1287, 1294, 1304, 1353, 1355, 1358, 1366, 1379, 1383, 1385, 1388.

There are 48 non-distributive relative clauses; 3 of these have breaks that compromise information about activation status: #1048, 1275, 1276.

Of the 45 remaining clauses, 13 have referents with semiactive status: #1024, 1152, 1162, 1196, 1198, 1202, 1203, 1232, 1357, 1359, 1370, 1392, 1396.

Of the 32 clauses with new relativized referents, 7 have indeterminate relative forms: #1204, 1300, 1303, 1366, 1401, 1408, 1409; 12 clauses have previously mentioned referents that are made more specific: #1017, 1030, 1033, 1045, 1046, 1071, 1103, 1149, 1189, 1197, 1210, 1391; and 13 clauses simply have relativized referents that are new: #1005, 1006, 1047, 1111, 1160, 1164, 1183, 1220, 1282, 1287, 1304, 1334, 1337.

§3.3.1.3.2 Orthotonic Personal Pronouns

The 52 examples with orthotonic personal pronoun are #1050, 1073, 1094, 1134, 1138, 1158, 1176, 1178, 1181, 1183, 1185, 1187, 1189, 1200, 1201, 1206, 1224, 1231, 1232, 1234, 1235, 1247, 1248, 1253, 1255, 1259, 1260, 1261, 1266, 1267, 1268, 1269, 1272, 1274, 1276, 1286, 1288, 1292, 1305, 1307, 1309, 1313, 1361, 1362, 1364, 1367, 1368, 1369, 1372, 1402, 1404, 1407.

Four examples with other orthotonic pronouns are #1177, 1294, 1298, 1355.

§3.3.2 Orientation

There are 153 clauses with -ma that adjust the orientation.

There are 94 examples with initial expressions of orientation, categorized as follows. An asterisk indicates cooccurrence with an orienting subordinating conjunction.

The 35 examples with initial expressions of temporal orientation are #1002, 1006, 1028, 1031, 1034, 1036, 1044, 1054, 1056, 1058, 1061, 1062, 1075, 1104, 1130, 1135, 1184, 1213*, 1222*, 1237, 1239, 1240, 1282, 1287, 1289*, 1293, 1297, 1310, 1363, 1376, 1378, 1382, 1393, 1403, 1406.

The 20 examples with initial adverbial expressions of spatial orientation are #1041, 1081, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1110, 1118, 1119, 1126, 1131, 1145, 1155, 1210, 1227, 1228, 1245 (the adverb here is in second position after man "if").

The 24 examples with initial oblique-noun expressions of spatial orientation are #1078*, 1111, 1125*, 1150, 1296, 1322, 1324, 1326, 1327, 1329, 1331, 1333, 1335, 1338, 1341, 1342, 1344, 1346, 1347, 1349, 1350, 1351, 1354, 1397.

The 15 examples with initial expressions of metaphorical or other orientation are #1047, 1105, 1108, 1114, 1115, 1116, 1117, 1121, 1149, 1177*, 1223, 1233, 1280, 1379, 1380.
There are 65 examples where the entire clause functions to reorient the discourse. An asterisk indicates cooccurrence with a clause-initial expression of orientation.

The 1 clause with past perfect tense but without subordinating conjunction is #1068. The remaining 64 clauses have subordinating conjunctions.

The 44 examples with mahhan 'when, as' are ##1003, 1004, 1009, 1011, 1013, 1018, 1021, 1022, 1051, 1057, 1059, 1063, 1064, 1065, 1066, 1067, 1070, 1072, 1079, 1087, 1089, 1090, 1091, 1093, 1124, 1132, 1140, 1143, 1144 (under scope of mahhan), 1168, 1169, 1170, 1174, 1177*, 1179, 1182, 1208, 1209 (under scope of mahhan), 1217, 1317, 1356, 1370, 1373, 1375.

The 16 examples with kuit 'since, as, when, given that' are ##1007, 1060, 1078*, 1125* (under scope of kuit), 1129, 1138, 1186, 1187, 1215 (under scope of kuit), 1218, 1222*, 1224, 1279, 1284, 1286, 1289*.

The 3 examples with kuitman 'while' are ##1128, 1142, 1361.

The 1 example with kuwapi 'when' functioning as a subordinating conjunction is #1213*.

There are 53 examples that function as conditional protases. An asterisk indicates cooccurrence with a clause-initial expression of orientation.

The 32 clauses with man 'if' are ##1221, 1229, 1230, 1241, 1245* (the adverb here is in second position), 1246, 1247, 1248, 1249, 1251, 1252, 1254, 1255, 1258, 1259, 1261, 1263, 1265, 1268, 1271, 1274, 1283, 1290, 1360, 1366, 1382*, 1384, 1390, 1391, 1395, 1399, 1405.

The 9 clauses under the scope of a preceding man are ##1242, 1244, 1256, 1270, 1309, 1313, 1403*, 1404, 1406*.

The 12 clauses under the scope of a preceding conditionally construed nasma 'or (if)' are ##1234, 1243, 1260, 1295, 1296*, 1301, 1307, 1308, 1311, 1312, 1314, 1386.

§3.3.2.1 Paragraph-Initial -ma

The 68 examples with paragraph-initial -ma are ##1004, 1006, 1007, 1009, 1011, 1013, 1014, 1018, 1021, 1022, 1031, 1034, 1036, 1044, 1051, 1054, 1056, 1058, 1059, 1062, 1064, 1065, 1067, 1075, 1087, 1089, 1093, 1110, 1117, 1120, 1122, 1124, 1128, 1132, 1140, 1143, 1154, 1168, 1174, 1187, 1204, 1208, 1213, 1217, 1220, 1222, 1230, 1240, 1241, 1252, 1277, 1279, 1284, 1317, 1322, 1324, 1335, 1341, 1346, 1361, 1367, 1370, 1373, 1375, 1376, 1379, 1391, 1408, 1411.

§3.3.3 Subject Switch

The 11 examples with subject switch alone are ##1024, 1080, 1133, 1136 (may be interpreted as beginning new episode), 1161, 1171, 1319, 1365, 1371, 1374, 1396.

§3.4.1 Frequency, Phonological and Syntactic Distribution of NH -a/-ya

§3.4.1 Example Numbers and Citations for NH -a/-ya

Citations found in duplicates are indicated in parentheses when the source is not immediately apparent from the edition, or when it otherwise seems helpful.
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§3.4.2 Functional Contexts of -a/-ya

(87) Contrast
The 10 examples of -a/-ya with strong contrast are ##4008, 4039, 4044, 4045, 4049, 4054, 4053, 4065, 4069, 4097.

The 19 examples with weak contrast are ##4001, 4006, 4012, 4013, 4014, 4019, 4022, 4025, 4026, 4034, 4041, 4048, 4081, 4085, 4088, 4090, 4102, 4107, 4106.

The 2 examples that are somewhat contrary-to-expectation are #4030 and #4074.

(87) Orientation
The 18 examples of orientation are ##4014, 4020?, 4023, 4029, 4038, 4051, 4052, 4056, 4061, 4064, 4067, 4077, 4081, 4086, 4089, 4098, 4103, 4104.

The 14 examples of conditional protases are ##4007, 4057, 4058, 4060, 4068 (namma), 4071 (nasha scope), 4072, 4073, 4074, 4076, 4083, 4087, 4095, 4100.

The 14 examples of -ya in paragraph-initial position are ##4049.5, 4052, 4060, 4068, 4075, 4077, 4080, 4082, 4089, 4098, 4099, 4101, 4103, 4105.

(88) New Referents
There are 29 new referents in 23 clauses. (An 'r' indicates a new relativized referent; an 's' indicates a new subject.) The examples are ##4003, 4019r, 4025rs, 4028, 4043, 4046, 4048, 4049.5rs, 4050, 4052s, 4058, 4059, 4063r, 4068rs, 4073s, 4075r, 4079s, 4080, 4084, 4086s (2 new referents), 4096rs, 4101rs (2 new referents), 4104 (5 new referents).

(89) Repeated form
The 21 examples showing repeated form are ##4001, 4029, 4034, 4044, 4045, 4046, 4048, 4049, 4049.5, 4065, 4069, 4079, 4085, 4088, 4090, 4091, 4094, 4097, 4102, 4107, 4106.

(89) Series
The 11 examples of series marking with -ya are ##4044, 4045, 4047, 4048, 4064 (final member only), 4072, 4084, 4085, 4086, 4093 (final member only), 4108 (final member only).

The 17 examples with -ya marking the second of a pair of clauses are ##4012, 4013, 4014, 4028, 4029, 4036, 4040, 4042, 4046, 4051, 4053, 4056, 4062, 4063, 4065, 4069, 4096.

(90) Special Focus
There are 16 examples of special focus (emphasis).

The 2 examples identified as having the variant word order of the possessive construction are #4073 and #4099.

The 14 examples with orthotonic personal pronouns are ##4039, 4044, 4047, 4049, 4053, 4055, 4057, 4065, 4069, 4070, 4071, 4074, 4092, 4094. Three other examples with initial demonstrative pronouns are ##4045, 4078, 4105.

(90) Subject Switch
The 10 examples where subject switch is the only -ma-oriented context present are ##4004, 4009, 4011, 4015, 4018, 4032, 4033, 4035, 4037, 4066.
(92) Close Connection
The 33 examples where -a/-ya connects clauses having a close connection are ##4001, 4002, 4012, 4013, 4015, 4017, 4018, 4022, 4025, 4026, 4034, 4040, 4041, 4046, 4049, 4051, 4054, 4053, 4056, 4062, 4063, 4064, 4065, 4069, 4085, 4088, 4090, 4092, 4097, 4102, 4107, 4106.

The 37 clauses with -ma showing close connection are ##1029, 1061, 1069, 1082, 1139, 1144, 1157, 1167, 1173, 1175, 1223, 1224, 1225, 1236, 1237, 1239, 1240, 1242, 1264, 1267, 1293, 1297, 1299, 1301, 1310, 1314, 1368, 1369, 1377, 1378, 1380, 1383, 1386, 1393, 1394, 1403, 1406.

§3.5 Conclusion
There are 29 examples with -ma showing only one of the pragmatic environments examined. The 8 with contrast are ##1010, 1042, 1043, 1095, 1107, 1109, 1127, 1306. The 6 with orientation modification are ##1002, 1041, 1057, 1072, 1108, 1142. The 2 examples with new referents are #1012 and #1257. The 1 example of a series member is #1238. The 12 examples with subject switch are ##1024, 1080, 1133, 1136, 1141, 1171, 1319, 1365, 1371, 1374, 1396.
§4.0.1 MH Text Sections Included for Analysis

Maṣat Letters (1027 lines)

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*A comma indicates that lines within one letter have been excluded. A semicolon indicates that a Zweitbrief follows.*
§4.0.1 Example Numbers and Citations for MH -ma in the Maṣat Letters

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§4.5.1 Example Numbers and Citations for MH -a/-ya in the Maṣat Letters

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