1 Introduction
1.1 Historical Context
- Non-Indo-European, non-Semitic language.
- Spoken in northern Mesopotamia and southeastern Anatolia from the late 3rd millennium BC until the late 2nd millennium BC.
- Usually written in the cuneiform syllabary.
- Examples will be given in transliteration, with sign values divided by dashes, followed by a phonological transcription with morpheme boundaries, a morphemic gloss, and a translation.

1.2 Poetic Meters of the Ancient Near East
- In many of the ancient Semitic languages, there was a poetic form characterized by groups of 2-3 lines forming a semantic and syntactic unit, with syntactic parallelism and other stylistic features.
- Most accounts treat such meters as having no formal meter regulating stress or syllable count (e.g. Michałowski 1996).
- Some accounts (e.g. Hecker 1974) propose a pattern of stress syllable count.
- A stress-based meter has also been identified within Hittite (e.g. Melchert 1998) and Hurrian (e.g. Bachvarova 2012).
- It has also been suggested that the pattern of unstressed syllables contributes to the stress-counting meter of Hittite and Hurrian, with a tendency for lines to contain a similar number of syllables (e.g. Haas and Wegner 2007; Thiel 1975).

2 The Parables
A cuneiform text from Boğazköy, KBo XXXII 14, published in Neu 1996. There are 96 legible lines. This text is a bilingual in Hittite and Hurrian.

2.1 Metrical Lines
- Bachvarova (2012) has proposed that this text has a stress-based meter, with four stressed syllables per line (here, stress is marked with “S”).
- There are consistently four stressed syllables in each syntactic unit, which seem to correspond to metrical lines, though they are not split up graphically.
- Apparent exceptions to this pattern can be explained (see Appendix I).

(1) lines 21-22 (Vs. 31-32)
\[
\begin{align*}
&\text{S} & \text{S} & \text{S} & \text{S} \\
&\text{[na-a]-li} & \text{ma-a-an-nu-u-bur} & \text{ma-[a-an-ni]} & \text{tar-žu-wa-a-ni} \\
&\text{nāl=i} & \text{mān=ō=vor} & \text{mānn=i} & \text{taržuvān=i} \\
&\text{deer}=\text{THV} & \text{is}=\text{THV}=\text{NEG} & \text{is}=\text{3sg} & \text{man}=\text{THV} \\
\end{align*}
\]
“It is not a deer; it is a man.”
“As a district administrator his lord appointed him.”

2.2 Couplets and Tercets

2.2.1 In Languages which Hurrian Encountered (or Encountered Relatives of)
- Couplets and tercets are characteristic of poetry in several languages of the ancient Near East, though without regularity in number of syllables.
- Vedic Sanskrit also has meters with verses in groups of 2-3 lines, though these meters are based on syllable weight and not stress.
- Metrical lines in Vedic pattern differently within couplets than across couplets.

2.2.2 In the Hurrian Parables
- Winkelhaken, non-phonetic wedge-marks, occur at some line-ends, particularly when the line break is in some way unusual.
- Horizontal lines mark divisions into larger semantic units; these always contain an integer number of metrical lines.

-9-15 syllables per line.
- Pairs of lines formed based on semantic and syntactic units differ on average by 0.88 syllables. In calculations, identical couplets were counted only once and one section of three lines whose divisions are unclear was omitted.
- On the other hand, pairs of lines that are adjacent but don’t form a semantic unit have an average difference of 1.34 syllables.
- 33% of paired lines match exactly in length, vs. 15% of lines paired otherwise.
- The t value for comparing naturally paired lines to lines paired by shifting is significant at $\alpha = 0.025$.
- The matching of syllable count between lines of a couplet can be improved by a small number of phonological processes.

2.3 Processes Potentially Reflected in the Parables

2.3.1 Disyllabicity of Vowel Sequences
- In sequences of (C)a-a-i, the middle <a> may reflect a glottal stop as it sometimes does in Akkadian (Huehnergard 2011).
- How to interpret vowel sequences seems to depend on the particular morpheme; it does not seem that every sequence of two vowels was disyllabic (e.g. ma-a-i, also spelled ma-i, seems to be monosyllabic).

(2) lines 21-22 (Vs. 31-32)
[na-a]-li ma-a-an-nu-u-bur ma-[a-an-n]i tar-žu-wa-a-ni
nāl=i mān=ō=vor mānn=i taržuvān=i
deer=THV is=THV=NEG is=3sg man=THV
“It is not a deer; it is a man.”
syllable count:11
As a district administrator his lord appointed him.

Syllable count: 10
Syllable count if =lai is disyllabic: 11

Table 1: Average difference in number of syllables, between pairs of lines, with the assumption of disyllabic vowel sequences

<table>
<thead>
<tr>
<th></th>
<th>unamended</th>
<th>disyllabic Ca-a-i, excl. ma-a-i</th>
<th>disyllabic sequences with other vowels also</th>
</tr>
</thead>
<tbody>
<tr>
<td>actually paired lines</td>
<td>0.88</td>
<td>0.83</td>
<td>0.81</td>
</tr>
<tr>
<td>lines paired by shifted assignment</td>
<td>1.34</td>
<td>1.18</td>
<td>1.16</td>
</tr>
</tbody>
</table>

2.3.2 Elision

Perhaps final short vowels (which are always unstressed) were deleted when followed by another vowel in the next word: V > ∅ /__# V

(3) lines 11-12 (Vs. 17-19)

“IT is not a deer; it is a man.”

syllable count: 11

Table 2: Average difference in number of syllables, between pairs of lines, with the assumption of elision

<table>
<thead>
<tr>
<th></th>
<th>unamended</th>
<th>with elision</th>
<th>with optional hiatus at syntactic break</th>
</tr>
</thead>
<tbody>
<tr>
<td>actually paired lines</td>
<td>0.88</td>
<td>0.86</td>
<td>0.71</td>
</tr>
<tr>
<td>lines paired by shifted assignment</td>
<td>1.34</td>
<td>1.24</td>
<td>1.18</td>
</tr>
</tbody>
</table>
2.3.3 High Vowel Diphthongization/gliding

-I propose that high vowels (i and u) become glides (y and w) when followed by another vowel, and are written as high vowel followed by glide. There are no cases within this text of a spelling VC-yV or VC-wV.

-This is seen more clearly for [i] than [u], due to ambiguity between <w> and <u>.

-From the morphology, it is clear that /i/ + /a/ produces such sequences.

(4) lines 7-8 (Vs. 9-11)

na-a-li pa-pa-an-ni-iš ši-ta-ar-na ku-lu-u-ru-um
nāl=i fab(a)n(i)=ni=š šid=ar=na kul=ūr=o=m
deer=THV mountain=INDV=ERG curse=NMZ=INDV.PL say=INDC=DUR=3sg

“The mountain said curses to the deer”
syllable count: 11

i-ja-a-at še-e-du-i-ilja-ni-iš ši-ta-a-ra na-a-al-li-iš
ijā=t(ta) šēdu=il=a=ni=š šid=ār=a nāl(i)=ni=š
why=1sg grow=PASS.PRT=INDV=ERG curse=TR=3sg deer=INDV=ERG

“Why does the deer, grown fat, curse me?”
syllable count: 12
syllable count if the internal <ij> is nonsyllabic: 11

<table>
<thead>
<tr>
<th></th>
<th>unamended</th>
<th>/i/ gliding</th>
<th>/i/ and /u/ gliding</th>
<th>optional gliding of /i/ and /u/</th>
</tr>
</thead>
<tbody>
<tr>
<td>actually paired lines</td>
<td>0.88</td>
<td>0.90</td>
<td>1.0</td>
<td>0.69</td>
</tr>
<tr>
<td>lines paired by</td>
<td>1.34</td>
<td>1.32</td>
<td>1.42</td>
<td>1.29</td>
</tr>
<tr>
<td>shifted assignment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Average difference in number of syllables, between pairs of lines, with the assumption of gliding

2.3.4 Net Result for These Processes

-Applying these rules together improves couplet length matching between lines of a pair more than each independently.

<table>
<thead>
<tr>
<th></th>
<th>unamended</th>
<th>disyllabic Ca-a-i</th>
<th>elision</th>
<th>gliding</th>
<th>optional rules</th>
<th>misc. others</th>
</tr>
</thead>
<tbody>
<tr>
<td>actually paired lines</td>
<td>0.88</td>
<td>0.83</td>
<td>0.66</td>
<td>0.55</td>
<td>0.29</td>
<td>0.26</td>
</tr>
<tr>
<td>pairs by shifting</td>
<td>1.34</td>
<td>1.18</td>
<td>1.08</td>
<td>1.16</td>
<td>1.03</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table 4: Average difference in number of syllables, between pairs of lines, with the assumption of all of the preceding rules as applied additively as the columns go right.
-Optional rules and reinterpretation of specific words could also improve matching, but this result is not clear evidence for their existence, in such a small corpus.
-Applying these rules doesn’t reduce range in line length but does reduce the maximum difference in length between paired lines.

2.4 Stress Patterns
-The stress seems to be more regulated than just having four per line: there are no clear instances of two stressed syllables in a row; there are no clear instances of more than three stressed syllables in a row.

2.4.1 A Hurrian Dolnik
-The Hurrian meter can easily be described using rules like those found in modern dolniks, with a fixed number of stressed syllables per line (four) and a variable but limited range of unstressed syllables between them (one to three), and zero to two unstressed syllables preceding the initial stressed syllable.

(5) lines 21-22 (Vs. 31-32)

<table>
<thead>
<tr>
<th>S w w S w w w S w</th>
</tr>
</thead>
<tbody>
<tr>
<td>[na-a]-li ma-a-an-nu-u-bur ma-[a-an-n]i tar-žu-wa-a-ni</td>
</tr>
<tr>
<td>nāl=ī mān=ō=vor mānn=ī taržuvān=ī</td>
</tr>
<tr>
<td>deer=THV is=THV=NEG is=3sg man=THV</td>
</tr>
<tr>
<td>“It is not a deer; it is a man.”</td>
</tr>
</tbody>
</table>

w S w S w w w S w

[ḫal-zu-u]iquid ma-a-an-ni e-eb-re-eš na-a-ğé-la-a-i

| phalt(i)=ō=ğl(i)=a mānn=i ĕvr(i)=i=š nāg=e=lāi |
| district=THV=lord=ESS is=3sg lord=3sg.POSS=ERG appoint=TR=GER |
| “As a district administrator his lord appointed him.” |

There is a trend for similarity in the stress pattern between lines in a couplet.
-The greater matching in stress pattern of natural pairs reaches statistical significance at \( \alpha = 0.05 \) for the positions following the second stress, and at \( \alpha = 0.1 \) for the positions following the second stress.
-Matching in stress pattern within a couplet was perhaps stylistically desirable, though not metrically necessary.

<table>
<thead>
<tr>
<th></th>
<th>before first stress</th>
<th>following first stress</th>
<th>following second stress</th>
<th>following third stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>actually paired lines</td>
<td>0.95</td>
<td>0.53</td>
<td>0.53</td>
<td>0.61</td>
</tr>
<tr>
<td>lines paired by shifting</td>
<td>0.92</td>
<td>0.65</td>
<td>0.76</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Table 6: average difference in number of weak syllables, by position
3 Conclusions

3.1 Specific Features of the Meter in the Parables
- The Boğazköy parables are in meter, characterized by couplets and occasionally tercets of equal length and often matching stress patterns.
- Transparency of the poem’s obedience to this meter is improved by several phonological and orthographic features: elision, high vowel gliding, and disyllabicity of Ca-a-i sequences.

3.2 Broader Implications
- Establishing a meter for this text adds to the picture of the poetic tradition of the ancient Near East and possible relationships between meters.
- These observations can provide an alternative line of evidence for already hypothesized Hurrian phonology and aspects of Hurrian phonology that might be otherwise inaccessible.

References
Appendix I

Apparent exceptions to the four-stress pattern mostly fall into two categories:

-- quoted curses, apparently with a different meter, as demonstrated in (i).
-- lines that are not actually 5-stress, because determiners, quantifiers, and conjunctions are consistently unstressed, as demonstrated in (ii).

One 3-stress line appears twice, both times at the end of a section, given in example (iii). This may be the catalectic (or acephalic) end of a verse. There is also one case of a phrase which seems to have only two stresses despite apparently containing three lexical words, which forms the beginning of the line in example (iv).

(i) lines 39-40 (Vs. 56-59)

\[
\begin{align*}
S & \quad S & \quad S & \quad S & \quad S \\
\text{i-ti} & \quad \text{ka-a-zi} & \quad \text{te-eš-šu-u-pa-aš} & \quad \text{e-el-ki} & \quad \text{sà-am-ma-la-aš-du-uš} \\
\text{id}=\text{i}=\text{e(n)} & \quad \text{kāz}=\text{i} & \quad \text{Teššōb}=\text{aš} & \quad \text{ēlg}=\text{i} & \quad \text{sam}=\text{al}=\text{aš}=\text{oš} \\
\text{strike}=\text{TR}=\text{3sg.JUS} & \quad \text{cup}=\text{THV} & \quad \text{Teššub}=\text{ERG} & \quad \text{coat}=\text{THV} & \quad \text{tear}=\text{TH}=\text{PAT}=\text{OP} \\
\end{align*}
\]

“May Tesshub strike the cup; may the coating be torn off”

\[
\begin{align*}
S & \quad S & \quad S & \quad S & \quad S \\
\text{ku-ú-du} & \quad \text{ka-a-zi} & \quad \text{pé-el-le-e-ni} & \quad \text{e-él-ki-il-la} & \quad \text{si-i-e-ni} \\
\text{kūd}=\text{o} & \quad \text{kāz}=\text{i} & \quad \text{pellē}=\text{ni} & \quad \text{ēlg}=\text{i}=\text{illa} & \quad \text{šie}=\text{ni} \\
\text{throw}=\text{PAT} & \quad \text{cup}=\text{THV} & \quad \text{canal}=\text{DIR} & \quad \text{coat}=\text{3sgPOSS}=\text{3plABS} & \quad \text{water}=\text{DIR} \\
\end{align*}
\]

“May the cup be thrown into the canal, its coatings into the water”

(ii) line 12 (Vs. 18-19)

\[
\begin{align*}
S & \quad S & \quad S & \quad S \\
\text{an-ti} & \quad \text{ta-a-ḫi} & \quad \text{ma-a-an-ni} & \quad \text{a-ar-ti-i-ta-ni} & \quad \text{du-ú-ri} \\
\text{and}=\text{i} & \quad \text{tāḫ}=\text{i} & \quad \text{mānn}=\text{i} & \quad \text{ārd}=\text{i}=\text{dan}=\text{(n)i} & \quad \text{tūr}=\text{i} \\
\text{this}=\text{THV} & \quad \text{man}=\text{THV} & \quad \text{is}=\text{3sg} & \quad \text{city}=\text{3sg.POSS}=\text{ABL}=\text{INDV} & \quad \text{go.down}=\text{3sg} \\
\end{align*}
\]

“He is this man; he ran away from his city.”

(iii) lines 43-44 (Rs. 3-5)

\[
\begin{align*}
S & \quad S & \quad S & \quad S & \quad S \\
\text{te-ḫē-eš-tab} & \quad \text{ta-al-mu-u-wa-ab} & \quad \text{at-ta-i} & \quad \text{a-mu-u-lu-tu-u-um} \\
\text{teḫ}=\text{ešt}=\text{a}=\text{b} & \quad \text{talmōv}=\text{a}=\text{b} & \quad \text{atta}=\text{(i)}=\text{j} & \quad \text{am}=\text{ö}=\text{ud}=\text{ö}=\text{m} \\
\text{be}=\text{CAU}=\text{INTR}=\text{3sg} & \quad \text{big}=\text{INTR}=\text{3sg} & \quad \text{father}=\text{3sgPS} & \quad \text{look}=\text{DUR}=\text{NEG}=\text{TR.PRF}=\text{3sg} \\
\end{align*}
\]

“He grew big; he did not look at his father.”

\[
\begin{align*}
S & \quad S & \quad S & \quad S & \quad S \\
\text{at-ta-i-bi-nē-e-ša} & \quad \text{e-nē-eš} & \quad \text{ši-ti-la-a-i} \\
\text{atta}=\text{i}=\text{vi}=\text{ve}=\text{z}=\text{na} & \quad \text{ene}=\text{z} & \quad \text{sid}=\text{a}=\text{la} \\
\text{father}=\text{3sg.POSS}=\text{GEN.RL}=\text{ERG}=\text{3sgABS} & \quad \text{god}=\text{ERG} & \quad \text{curse}=\text{TR}=\text{GER} \\
\end{align*}
\]

“The god of his father cursed him.”

(iv) line 3 (Vs. 3-4)

\[
\begin{align*}
\text{wu-ú-ru} & \quad \text{te-e-lu} & \quad \text{tap-šu-ú} & \quad \text{pa-pa-an-ni} & \quad \text{ši-ta-ri-il-lu-u-um} \\
\text{pūr}=\text{u} & \quad \text{tēl}=\text{u} & \quad \text{taps}=\text{ū} & \quad \text{fab(a)n(i)ne} & \quad \text{šid}=\text{ar}=\text{ill}=\text{ö}=\text{m} \\
\text{begin}=\text{3sg.PRF} & \quad \text{quarrel}=\text{THV} & \quad \text{low}=\text{THV} & \quad \text{mountain} & \quad \text{curse}=\text{IT}=\text{INCH}=\text{TR.PRF}=\text{3sg} \\
\end{align*}
\]