DECHI PROJECT 2008-2009

On the Nature and Distribution of Nesiga (Stress Retraction) in Tiberian Hebrew: 
Evidence from the Dechi Phrase 
regarding Simplification, Virtual Disjunctives and AlignXP
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Separate-traditions Model (Revell 1987 et passim)

Prosodic-interface Model (following Dresher 19xx, 19xx, 1994)
1 Introduction: Phonological-phrasing Simplification

1.1 Reduction or compression or “simplification” (Dresher 1994 citing Cohen 1969) of accentual phrasing is observed in the prose system of accents.

1.11 This simplification of phrasing is plausibly and naturally explained, following Dresher’s analysis of the Tiberian Hebrew (TH) accent systems in terms of prosodics, as an effect of tempo or grain (Dresher 1994).

1.2 A further systematic “simplification” characterizes the so-called “poetic” accent system of accents vis-à-vis the prose system (Price formalizing Wickes), triggered by consecutive disjunctives under certain prosodic conditions.

1.21 The trigger of this poetic transformation is insufficient prosodic weight (moraic structure) and resulting clash (DeCaen 2008; cf Khan).

1.22 The proposal of “virtual disjunctive” accents to explain the output of the poetic transformation must be the correct analysis, in principle if not in detail (Price).

1.221 Virtual disjunctives imply an abstract underlying representation in which the original phonological phrasing is preserved, despite the apparent loss in the surface accentual output (DeCaen 2008, 2009).

1.2211 It is proposed that an intermediate, abstract, hence “opaque” prosodic interface representation intervenes between the syntax and the accents, pace Revell (see diagrams above).

1.2212 The surfeit of unexplained failures of nesiga (stress retraction; see Revell 1987) in the poetic system can be explained in terms of this preservation of phonological phrasing (DeCaen 2008 with exhaustive lists, 2009).

1.2213 No doubt other failures of other rules can also be explained in these terms.

1.23 In terms of Dresher’s prosodic analysis, the poetic system appears to be a sped-up version of the prose phrasing: a poetic presto to the prose allegro to the underlying adagio (Dresher pc).

1.3 A phrase-by-phrase comparison of Hebrew poems with both a prose and poetic accentuation (DeCaen & Dresher in progress) reveals another family of systematic poetic simplification rules.

1.31 This further suite of simplification rules is consistent with the view that the poetic system represents a presto to the prose-system allegro (1.23).

1.32 N.B. Failures of such simplification rules obtain where nesiga also fails.

1.321 Some failures of simplification/nesiga are directly attributable to the presence of virtual disjunctives resulting from the better understood Price/Wickes poetic transformation triggered by clashing disjunctives (1.2).

1.322 Further failures can be explained by generalizing the explanation of virtual disjunctives.

1.323 A portion of the unexplained residue of such failures of simplification/nesiga also has a prosodic explanation: superheavy syllables, implying that the correct characterization of nesiga should be in terms of mora, not syllable.

1.33 It is likely that other failures of other rules, e.g., external gemination (Revell studies), can be explained in the exact same terms (1.2213).
2 Simplification of the Dechi (D2f) Phrase

2.1 Comparison of prose vs poetic accentual phrasing reveals that the string *munach* + *dechi* (D2f) among others, is simplified under certain global and local prosodic conditions (DeCaen in progress) to *maqqef* + *dechi* (with *metheg* accompanying *maqqef* in compensation for the lost *munach*).

2.2 Example of **dechi-simplification**: prose unsimplified as expected in (1); poetry unexpectedly simplified in (2) with compensating *metheg*.

(1)  
```
φ
 /\  
| \ 
|  \  šîrû lô  
/    
/     (1Chr 16:9)
```

(2)  
```
φ
 |
/\  
/  
/   \  šîrû— lô  
/    
/     (Ps 105:2)
```

2.21 Two further parallel examples are **Ps 18:22a** || 2Sam 22:22a; and **Ps18:30a** || 2Sam 22:30a.

2.22 A similar simplification is found in *revia-mugrash* phrases (D1f) in four parallels: **1Chr 16:29b** || Ps 96:8b; **Ps 18:22b** || 2Sam 22:22b; **Ps 18:38b** || 2Sam 22:38b; **Ps 18:45b** || 2Sam 22:45b.
3 Failure of Dechi-simplification = Failure of Nesiga: (#1) Recursive Phonological Phrasing

3.1 Two failures of both dechi-simplification and nesiga are clearly cases of virtual disjunctives.

(3)

\[ \phi \]

\[ \phi \quad \omega \]

\[ \omega \quad \omega \]

bînû—nâ  zô’t (Ps 50:22)

(4) mî—yâqûm  lí (Ps 94:16)

3.11 Virtual D3f (appearing here as munach on nâ and yâqûm) governs maqqef + compensating metheg (instead of an additional conjunctive). Apparently the system runs out at this point.

3.111 Left-recursion is accordingly distinguished—here as elsewhere in the poetic system—from right-recursion, in which, by contrast, an additional conjunctive mahpak does in fact appear in the output: e.g., kî lôp  bəməqî (Ps 49:19).
4 Failure of Dechi-simplification = Failure of Nesiga: (#2) Right-edges
4.1 The Dresher prosodic approach predicts supernumerary phrases which fail to register directly in the accents. In particular, small-intonational-phrase boundaries induced vocatives or brief direct speech, generally fail to register.
4.11 e.g. Pr 20:14 Short utterances induce intonational phrases (I): \text{rá'}_I \text{rá'}_I \text{ó'mér haqqōneh}_I.
4.12 e.g. Pr 1:8 (cf. 4:10) Vocatives induce intonational phrases: \text{šəmá'}_I \text{bənî}_I \text{mūsār ḍābīkā}._I.
4.13 The analysis of a left-recursive virtual disjunctive, following 3.1(3), is given in (5).

\[ (5) \]

\[ \begin{array}{c}
\varphi \\
| \\
\varphi \\
| \\
\varphi \\
| \\
\varphi \
\end{array} \begin{array}{c}
\omega \\
| \\
\omega \\
| \\
\omega \\
| 
\end{array} \begin{array}{c}
[\text{rá'}]_I \\
| 
\end{array} \]

4.2 Moreover, an edge-based syntax-to-prosody mapping algorithm (DeCaen & Dresher in progress) suggests the OT ranking \text{BINMAX} \gg \text{ALIGNXP} \gg \text{BINMIN}. Such a ranking predicts many more phonological-phrase edges than appear in the accentual outputs.
4.21 e.g. Ps 42:4 Not phrased together at all: \text{dimʕātī} \text{NP} [\text{lēḥem}] \text{PP} \text{yôm} \text{NP}.
4.22 e.g. Ps 119:63 Presence of right-edges predicted by syntax: \text{ḥābēr} \text{NP} \text{ánî} \text{NP} \text{NNP}. Cf. Ps 87:5 \text{iš} \text{NP} \text{wəšiš} \text{NP}.

4.3 Generalized transformation:

\[ (6) \]

\[ \begin{array}{c}
\varphi \\
| \\
\varphi \\
| \\
\varphi \\
| \\
\varphi \\
\end{array} \begin{array}{c}
\varphi \\
| \\
\varphi \\
| \\
\varphi \\
| 
\end{array} \begin{array}{c}
\omega \\
| \\
\omega \\
| \\
\omega \\
| 
\end{array} \begin{array}{c}
\varphi \\
| \\
\varphi \\
| \\
\varphi \\
| 
\end{array} \begin{array}{c}
\omega \\
| \\
\omega \\
| \\
\omega \\
| 
\end{array} \begin{array}{c}
\varphi \\
| \\
\varphi \\
| \\
\varphi \\
| 
\end{array} \begin{array}{c}
\omega \\
| \\
\omega \\
| \\
\omega \\
| 
\end{array} \]

5 Failure of Dechi-simplification = Failure of Nesiga: (#3) Superheavy Syllables

5.1 There are many cases where no right-edge could be present, assuming the prosodic analysis.

5.11 Failure of dechi-simplification and failure nesiga are found together in smixut (bound construction), otherwise [N NP]φ, in just those cases where a superheavy syllable is involved (fem. pl. bound). Such cases can be explained by formulating nesiga in terms of mora instead of syllable.

\[
\begin{array}{c}
\varphi \\
\omega \\
\sigma \\
\mu \\
\end{array}
\]

(i) bin-

\(\text{dêšé\textsuperscript{3}}\) (Ps 23:2)

(ii) niḍ-

\(\text{bôṭ} \) (Ps 119:108)

5.12 The combination [V PP]φ also provides examples of failure of simplification and/or nesiga, in just those cases in which the verb ends in a superheavy syllable: with dechi e.g., Ps 94:13:

\[
\begin{array}{c}
\sigma \\
\mu \\
\end{array}
\]

\(\text{ləḥaš- qîṭ} \) (Ps 94:13)

6 Minimal Pairs

Minimal pairs suggest more global considerations are relevant too: there is some sort of blocking effect vs buffering in play.

A glaring minimal pair involving athnach (poetic D1) in Proverbs: 1:19 vs 15:27.

1:19 \([...]\text{D}2f \, [\text{ko}l-\text{bōśe} θ \, \text{båṣa}]\text{D}1\)

15:27 \([...]\text{D}2f \, [\text{bōśe} θ \, \text{båṣa}]\text{D}1\)
Background: review Revell (1987) in light of preceding

Nesiga typically occurs in a word which would be, in normal context, stressed on its final syllable, when it is joined by a conjunctive accent to a following word stressed on its first syllable, that is, on the vowel following its first consonant (Revell 1987: #1.12, p. 13).

Note: The standard definition is given in terms of syllable without further consideration of types of syllable. However, systematic failure of nesiga where a superheavy syllable is involved suggests correct generalization should be framed in terms of mora.

Note: The standard definition employs the conjunctive accent as the diagnostic of “phrased together”. However, the phonological phrase must be defined abstractly and independently of accentuation, as demanded by the phenomenon of “virtual disjunctives”, etc. Furthermore, an edge-based syntax-to-φphrase algorithm (DeCaen working papers) predicts the presence of more and smaller phrases than appear in the accentuation. DeCaen (2008) proposed left-recursion as the rule that can have the cake and eat it too.