Guidelines for Stress and Juncture Transcription

*Used in compilation of corpora for Hayes, Wilson and Shisko (submitted)*

**STRESS**

1. **A Scheme for Encoding Stress Patterns**

   limit of four levels is artificial; imposed by needs of a practical project

   
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>least stress</td>
<td>most stress</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. **Lexical (NAV) Stress**

   - Strongest stress of a word receives [3 stress] or [4stress], depending on phrasal context (below).
   - Secondary stresses that define a local maximum on either side receive 2 (roughly following Kiparsky 1977)
   - Other syllables receive a 1.

   
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>1</th>
<th>3</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>abbreviation</td>
<td>vs. classification</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Syllables next to primary: contact maintain, even if they have a full vowel.

3. **Compound stress**

   - Strongest stress receives [3 stress] or [4stress], depending on phrasal context (below).
   - Weaker stresses receive [2 stress]
   - Note that this system will not be able to capture all nuances, as in second example.

   
<table>
<thead>
<tr>
<th>3</th>
<th>2</th>
<th>3</th>
<th>1</th>
<th>2</th>
<th>1</th>
<th>2</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>dog days</td>
<td>elevator operator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. **Function word stress**

   - Monosyllables generally receive [1stress].
   - Disyllabic words (*over, upon*) generally receive [2stress] on their strong syllable, [1stress] on their weaker syllable.

   
<table>
<thead>
<tr>
<th>2</th>
<th>1</th>
<th>1</th>
<th>4</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>any tomatoes</td>
<td>vs. runny tomatoes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Function words pronounced with phrasal stress (particle verbs, focus, isolation) are prosodically treated like content words.

1  3  4
It gave o’er.

1  1  4
‘Tis for thee.

1  1  1  4  1  1  4  1
Not for myself, but for thee will.

4
When?

5. **Phrasal Stress**

• Assume the Nuclear Stress Rule, overridden by focus stressing.
• Strongest stress of each intonational phrase receives [4stress].
• Deploy [2stress], [3stress] and [4stress] as needed to depict local ups and downs.
  ➢ The default for stresses that are not the strongest of their intonational phrase, is [3stress].
  ➢ Use [2stress] only where needed to depict a “stress valley,” below.

6. **Nuclear Stress Constraint**

In phrases, the element on the right wins.

1  3  4  3  1  4  1  3  1  1  1  4  1  1
a big bird, grów tomatoes, wònderfully magnificent

7. **Recursive Application**

• Build sufficient metrical structure so that the Nuclear Stress Constraint is satisfied everywhere.

2  3  1  4
[ Ten turtlés ] sang.

• Note that when phrasing is tight, and the syllables are close, the Nuclear Stress Constraint is overridden by the Rhythm Rule.
8. **Rhythm Rule**

\[ x \rightarrow x \quad \text{e.g. thirteen men} \]
\[ xx \rightarrow xx \]
\[ xxx \rightarrow xxx \]

(condition: the "landing site" must bear stress)

\[ 2 \quad 3 \quad 1 \]

in folk verse: **milk-white** steed

\[ 3 \quad 1 \quad 2 \quad 4 \]

And two and two are **lily-white** babes

in pentameter:

\[ 1 \quad 4 \]

And who she finds **forlorn** she doth lament (Ven. 1500)

\[ 3 \quad 1 \quad 4 \]

And from the **forlom** world his visage hide (Son. 33)

a nonlocal application, metrically crucial in this context because the verse is dipodic:

\[ 1 \quad 1 \quad 4 \quad 1 \quad 2 \quad 1 \quad 4 \quad 1 \quad 1 \quad 3 \quad 1 \quad 2 \quad 1 \quad 4 \]

Oh Galuppi, Baldassaro, this is **very sad to find**!

9. **Beat Addition**

- In a right branching structure, particularly with three adjacent syllables, an alternating pattern tends to be established, with the first non-nuclear stress stronger than the second (e.g. Selkirk 1980).

\[ x \rightarrow x \]
\[ xx \rightarrow xx \]
\[ xxx \rightarrow xxx \]

\[ 3 \quad 2 \quad 4 \quad 3 \quad 1 \quad 2 \quad 1 \quad 4 \]

(e.g. **big bad wolf**, twenty **little cats**)

From Shakespeare’s Sonnets:

\[ 3 \quad 2 \quad 4 \]

Which steals men's eyes and women's souls amazeth.

\[ 3 \quad 2 \quad 4 \]

May make seem bare, in wanting words to show it,
• Note that this requires the use of a [2stress] on a content word; probably worth it, since it makes clear that it’s a “stress valley” in W (cf. Jespersen 19001)
• The cost is that we can’t always use [2stress] vs. [3stress] to distinguish content word from function word stress.

10. Phrasal Bounding of the Rhythm Rule and Beat Addition

• Beat Addition and the Rhythm Rule apply more readily in close phrasal conjunction:

```
2 3 2 4       3 2 2 4
```

*Three cats ate birds* -/-> *Three cats ate birds*

11. Beat Addition and Verbs

Verbs are reluctant to be promoted by Beat Addition:

`ate two birds` $\rightarrow$ 224, 234, less likely 324

JUNCTURE/PHRASING

12. A Particular Version of the Phrasal Hierarchy (Hayes (1989))

• The digit shown is affiliated with the last syllable of the group.
• Where two groups at different levels end at the same place, assign the higher digit.

```
Utterance 5
    | Intonational Phrase 5
    | Phonological Phrase 4
    | Clitic Group 3
    | Word 2
(word non-final: 1)
```

---

13. **Tightest juncture: simplex words**
   
   - Use [1 juncture] to indicate a syllable that is in the same simplex word with the following syllable.

14. **Compounds**
   
   - Use “2” to separate syllables that belong to different compound members.
   - Do not treat a form as a compound if part of it is phonologically reduced, e.g. *cupboard*, *forehead*, where [ˈfɔːrd]

\[
\begin{array}{cccc}
\text{2} & 5 & & \\
\text{doughboy} & & & \text{1} & 5 & \text{helmsman} \\
\end{array}
\]

[3]

15. **Clitics**
   
   - A very broad assumption is that any non-content word is a clitic, and is phrased more tightly to its host than an equivalent content word would be.
   - A partial list:

   **Monosyllabic (146):**

   shall, a, to, thee, I, more, and, art, thou, of, the, do, too, all, hath, his, is, from, or, by, not, thy, but, that, nor, in, when, can, as, so, this, we, might, should, own, thine, with, where, be, on, will, then, an, were, much, how, mine, couldst, if, my, it, whose, some, dost, she, for, he, who, her, shalt, through, why, doth, are, those, canst, yet, what, must, th', which, did, there, him, quite, was, no, they, though, their, ere, that's, one, than, shouldst, could, each, up, like, wilt, hast, may, toward, such, most, 'gainst, O, at, me, mayst, would, whom, o'er, since, you, your, here, had, have, them, wouldst, out, less, wert, till, am, 'tis, whilst, once, thus, these, while, I'll, didst, both, our, lest, who's, is't, us, hadst, mightst, ye, whence, towards, gainst, been, he's, few, twixt, for't, what's, you've, were't, there's

   **Disyllabic, rising stress: (33):**

   within, despite, upon, thyself, unless, behind, without, among, themselves, against, yourself’s, whereon, before, yourself, whate'er, beside, wherein, where-through, therein, because, although, until, betwixt, whereof, wherewith, thereof, above, cannot, about, wheroeto, beyond, herself, withal

   **Disyllabic, falling stress (17):**

   every, being, having, under, many, any, after, wherefore, almost, whether, into, cannot, unto, either, neither, over, only
16. **Unreduced Auxes**

These are not common but occur in Gapping constructions. We are treating them as 3, being not really clitic.

Not more the mother’s soul that infant warms
3
Than thou hast [e] mine …

17. **Direction of attachment**

- For English, a reasonable guess is that clitics attach to the adjacent host which they c-command.\(^2\)

Then how when nature calls thee to be gone, 

Sonnet 4

- Following English syntax, this means that the great majority of function words will be proclitic (attach rightward); only the object pronouns can c-command leftward.

\[
\begin{array}{cccc}
2 & 2 & 2 & 5 \\
\text{Thou dost love her} & \text{(two proclitics and an enclitic)}
\end{array}
\]

\[
\begin{array}{cccc}
4 & 2 & 3 & 1 & 5 \\
\text{Will doth love Henry.} & \text{(doth, an Aux, is proclitic)}
\end{array}
\]

18. **Postverbal subject pronouns**

These are assumed not to be cliticized.

3
Grievst thou for me …

19. **Intonational Phrases**

- This is more or less detectable through punctuation, particularly when the punctuation is the work of a modern editor rather than the original poet.
- If you really feel that poet *should* have put in a comma, go ahead and put in a 5.
- Intonational Phrase breaks tend to come at moments of “syntactic disconnectivity:
  - parentheticals
  - nonrestrictive relative clauses

\[
\begin{array}{cc}
5 & 5 \\
\text{Some word there was, worser than Tybalt’s death} & \text{RJ 3.2.108}
\end{array}
\]

---

\(^2\) Start with your clitic, go uphill in the tree by one node then go downhill.
after syntactically dislocated phrases

5  
At seventeen years many their fortunes seek  AYL 2.3.72

long left branches (English is in general a right-branching language)

vocatives

5      5      5
Welcome, gentlemen! I have seen the day  RJ 1.5.23

5      5      5      5
Romeo, Romeo, Romeo, I drink to thee  RJ 4.3.58

lists

5    5
Unwieldy, slow, heavy and pale as lead  RJ 2.5.17

20. **Overriding horrendous punctuation**

Go ahead.

2  
Grievst thou for me, or for, my martial band?

21. **[3 juncture] vs. [4 juncture] based on XP structure**

- All others: place 4 at the end of an XP, 3 otherwise.
- Hence 3 goes on the last syllable of lexical heads that have some phrase following them in their XP, 4 otherwise.
- This is not sophisticated enough, really (cf. branching vs. non-branching complements), but will have to suffice; five levels of juncture is already a lot to deal with.

22. **German-style Subject Inversion**

So warred both armies on the ensanguined shore

This may be assumed to be a V in situ with an unfronted subject, so there is no XP boundary after *warred*

23. **Preposed Adverbs**

4  
Meantime Patroclus to Achilles flies
We’re calling this one a 4—not a comma, but definitely a sort of break here.

3
Perhaps yon relics of the Grecian name
This one seems less weighty, as if it didn’t project an AdvP. This is going to be rather delicate and we are going to use some intuition.

24. **Restrictive Relative clauses**

are treated as postnominal modifiers like any other

3
No girl, no infant whom the mother keeps

(Nonrestrictive relative clauses are classical Selkirkian cases of 5’s.)

25. **Modifiers that precede the lexical head**

Assume that unless they have modifiers themselves, that they do not project a phrase; i.e. they are “bare adjectives” and “bare adverbs”.

3 5
tall trees

3 4 5
very tall trees

2 1 1 3 1 3 5
She carefully planted trees

She very carefully planted trees

26. **Possessives**

4
Not more the mother’s soul, that infant warms

We’ll treat these as 4’s like any other DP ending.

27. **Stress-juncture consistency**

And hoary Peleus yet extends his days

If *yet* is taken to be a full-fledged Adverb, it needs a 3 for stress and a 3 for juncture. It *yet* is take to be proclitic, it must have 1 (perhaps 2) for stress and 2 for juncture.

Ditto in the treatment of compounds like *thereby*, which can be
stress 23 juncture 2x

or

stress 13 juncture 1x

28. Light PP

i.e. preposition plus pronoun
Somewhat ambivalently, we are treating these like any other PP, getting 4 at the end.

4
What friend, what man from thee shall hope redress?

29. Postverbal not

at least for content verbs, we’re assuming is not an enclitic

3 4
Be sure thou spring’st not from a soft embrace

However, it does exhaust the postverbal “slot”, and needs a 4 after it.

30. Verbs with enclitics count as verbs

i.e. the clitic can take a 3, if appropriate, and need not have a 4

2 3
Nor ever tender goddess brought thee forth

BH PROSODICALLY ANNOTATES

- This will illustrate the systems, but also the indeterminacy and ambivalence that seems to be unavoidable in such annotation.

\[\text{Farewell! thou art too dear for my possessing,}\]

\[
\begin{array}{cccccccccccc}
\text{Fare-} & \text{well!} & \text{thou} & \text{art} & \text{too} & \text{dear} & \text{for} & \text{my} & \text{pos} & \text{ses} & \text{sing,} \\
\text{s} & 2 & 4 & 1 & 1 & 1 & 3 & 1 & 1 & 4 & 1 \\
\text{j} & 2 & 5 & 2 & 2 & 2 & 3 & 2 & 2 & 1 & 1 & 5 \\
\end{array}
\]

- Dear is not final in its AP.
And like enough thou know'st thy estimate,

And like enough thou know'st thy estimate,

The charter of thy worth gives thee releasing;

The charter of thy worth gives thee releasing;

My bonds in thee are all determinate.

My bonds in thee are all determinate.

For how do I hold thee but by thy granting?

For how do I hold thee but by thy granting?

And for that riches where is my deserving?

And for that riches where is my deserving?

The cause of this fair gift in me is wanting,

The cause of this fair gift in me is wanting,

And so my patent back again is swerving.

And so my patent back again is swerving.

Thy self thou gav'st, thy own worth then not knowing.

Thy self thou gav'st, thy own worth then not knowing.

Or me to whom thou gav'st it, else mistaking:

Or me to whom thou gav'st it, else mistaking:
So thy great gift, upon misprision growing.

\[
\begin{array}{cccccccccccc}
\text{s} & 1 & 1 & 3 & 4 & 1 & 2 & 1 & 3 & 1 & 4 & 1 \\
\text{j} & 2 & 2 & 3 & 5 & 1 & 2 & 1 & 1 & 4 & 1 & 5
\end{array}
\]

Comes home again, on better judgement making.

\[
\begin{array}{cccccccccccc}
\text{s} & 3 & 4 & 1 & 2 & 1 & 3 & 1 & 4 & 1 & 3 & 1 \\
\text{j} & 3 & 4 & 1 & 5 & 2 & 1 & 3 & 1 & 4 & 1 & 5
\end{array}
\]

Thus have I had thee, as a dream doth flatter,

\[
\begin{array}{cccccccccccc}
\text{s} & 3 & 1 & 1 & 4 & 1 & 1 & 1 & 3 & 1 & 4 & 1 \\
\text{j} & 4 & 2 & 2 & 2 & 5 & 2 & 2 & 4 & 2 & 1 & 5
\end{array}
\]

In sleep a king, but waking no such matter.

\[
\begin{array}{cccccccccccc}
\text{s} & 1 & 3 & 1 & 4 & 1 & 3 & 1 & 1 & 4 & 1 \\
\text{j} & 2 & 4 & 2 & 5 & 2 & 1 & 4 & 2 & 2 & 1 & 5
\end{array}
\]