

## Class 12, 5/6/15: Quatrains I

### 1. Assignments and readings

- For next week: Read Hayes and MacEachern (1998) on quatrains; see Web site for download link.
- Discuss papers with us.
- Week 10: class presentations on projects.

### QUATRAINS AND OTHER HIGHER LEVELS

### 2. The sophisticated and the naïve

- Written poetry can manifest higher-level structure in somewhat outré ways:
  - typography
  - elaborate, hard-to-keep-in-your head rhyme scheme
  - hence such magnificent edifices as the Shakespearian or Petrarchan sonnets
- Vernacular
  - in English and related languages have a very strong tendency to quatrains and other, unmarked supralinear structures.
  - Victoria Anderson's rapper (see her paper, posted on course web site) — only the entries of the musicians indicate quatrainhood

### 3. Burling's (1966) Contributions

- Reference: Burling, Robbins (1966) The metrics of children's verse: a cross-linguistic study. *American Anthropologist* 68:1418-1441. (readings)
- Use of children's verse as a means of getting at the unmarked.
- The claim of greater convergence between metrical systems at the kiddie level.
- Characteristic articulation of the quatrain structure through line length
  - and not just line length, but the actual rendition of **empty beats** that come after short lines, in quasi-isochronous recitation.
  - I.e. in terms of three-levelism, nursery rhymes seem to be likely cases for the straightforward outcome when metrical and sung grids match.

### 4. Another reference well worth reading on quatrains

- Derek Attridge (1982) *The Rhythms of English Poetry*, in UCLA library and borrowable
  - see sections on "four-beat verse"

## 5. Fundamental Principle of Nursery Rhymes: Binary Hierarchy

$$X_n \rightarrow X_{n+1} \quad X_{n+1} \quad (\text{repeated})$$

- with conventional labeling, levels are Quatrain, Couplet, Line, Hemistich, Foot, Metrical Position
- If the grid is the Standard Grid, you can imagine the binary tree:
  - 1 Quatrain
  - 2 Couplets
  - 4 Lines
  - 8 Hemistichs
  - 16 Feet
  - 32 MP
  - 64 grid slots
- This is Lerdahl/Jackendovianism at its least marked state.

## 6. Back to Burling: Lines with empty positions

Máry hād a líttle lámb  
 B   B   B   B  
 Its fléece was whíte as snów  
       B           B       B  
 And éverywhére that Máry wént  
       B       B       B   B  
 The lámb was súde to gó.  
       B       B       B

## 7. This emerges as “4343”

## 8. More Patterns: 3333

This little píg went to márket **R**  
 B       B           B   B  
 This little píg stayed hóme **R**  
 B       B           B   B  
 This little píg had roást beef **R**  
 B       B           B   B  
 This little píg had nóne **R**  
 B       B           B   B

### 9. The limerick/short meter pattern: 3343

There wás a young mán of Devíses **R**  
           B                  B          B      B  
 Whose eárs were of twó different sízes **R**  
           B                  B                  B      B  
 The óne that was smáll was of nó use at áll  
           B                  B          B      B  
 But the óther one wón several prízés **R**  
           B                  B          B      B

- Note the characteristic arbitrariness of conventional limerick typography here (5 lines).  
   ➤ Seuss is another clear case (though his line divisions appear to be expressive).

### 10. Burling: amassing the data

4 4 4 4  
 4 3 4 3  
 4 4 4 3  
 3 3 3 3  
 3 3 4 3

### 11. Some new nursery rhymes that go against existing patterns

a. Híckory, díckory, dúnn **R** (3 4 3 4)  
       B          B          B      B  
 The fríghtened móuse ran úp the clóck  
       B          B          B      B  
 Just áfter the clóck struck óne **R**  
       B          B          B      B  
 Híckory, díckory, plíckory, dóck.  
       B          B          B      B

b. Nine little Indian boys: **R**  
       B          B          B      B  
One little, two little, three little boys,  
       B          B          B      B  
Four little, five little, six little boys,  
       B          B          B      B  
Seven little, eight little, nine little boys.  
       B          B          B      B

c. Lónesome Máry hád a líttle lám̃b

B            B   B   B   B

Whose fléece was whíte as snów

B            B            B

And éverywhére that Lónesome Máry wént

B        B            B            B    B

The lám̃b was súde to gó.

B            B            B

## 12. R. Burling prowls the halls at UM seeking UM<sup>1</sup>

Mandarin Chinese nursery rhymes:

1	2	3	4
Syǎu	hár,	syǎu	hár shāngjǐng
5	6	7	8
Shwǎile	ge gēntóu,	jyǎnle	ge chýér
9	10	11	12
Yòu	dǎ tsù,	yòu	mǎi yér
13	14	15	16
Yòu	chyǔ syífù,	yòu	gwò nyěr.

Little child, little child  
climbs the well platform  
Falls head over heels, picks  
up a coin  
And vinegar, and buys  
salt  
And gets married and lives  
out his years.

1	2	3	4
Yí,	èr,	sān,	sù, wǔ,
5	6	7	8
Jīn,	mòu,	shwěi,	hwǒ, tǔ,
9	10	11	12
Yàndz	lǎi gwò	chyáu,	R
13	14	15	16
Gēr	gā yī	chī shǔ.	R

One, two, three, four, five,  
Gold, wood, water, fire, earth  
Cross the bridge  
(Noise of flying birds), let us  
count together.

<sup>1</sup> University of Michigan; Universal Metrics

**13. Bengkulu Nursery Rhyme (Austronesian family, Sumatra)**

<b>R</b> Puk ambai ambai	(Sound of clapping hands)
B B B B	
Belalang kupu kupu	Grasshopper, butterfly
B B B B	
<b>R</b> Nani leke pandai	Nani learns quickly
B B B B	
Buli diupa air susu	Will be rewarded with milk
B B B B	

**14. Bengkulu seems to be mirror-image with respect to English**

they have rest-initial 3333, 3434 (above), 3334:

1	2	3	4
<b>R</b>	Lenggang	lenggang	kangkung
5	6	7	8
<b>R</b>	Kangkung	ditengah	sawah.
9	10	11	12
<b>R</b>	Nasib	tidak	untung
13	14	15	16
	Punja	kawan	seperti dia.

**15. Languages with 4 x 4 Verse**

Chinese, Bengkulu, Arabic, Yoruba  
 Hausa, Serrano, Ponapean (plus familiar European languages)  
 I can add, based on student work: Korean and Japanese

**16. Scansion Exercise: “Rubber Duckie” (1970, Jeff Moss)**

Rubber Ducky, you’re the one,  
You make bathtime lots of fun,  
Rubber Ducky, I’m awfully fond of you;

(vo vodio)

Rubber Ducky, joy of joys,  
When I squeeze you, you make noise!  
Rubber Ducky, you’re my very best friend, it’s true!

**BEYOND BURLING: REFINING THE TRANSCRIPTIONS AND THE TAXONOMY****17. Burling had no grids**

- Nor, perhaps, the ability to gridify? He’s clearly aware there is an issue here ....

**18. With grids we can create a sharper taxonomy of how lines end**

- Lines can be taxonomized according to the omissions they make at their right edge (English; Bengkulu: left edge)
- We align them with a grid representing the meter and examine gaps.

### “4” (no gaps):

[	x								x			]	line	
[	x				x				x			]	hemistichs	
[x	x	]	[x	x	]	[x	x	]	[x	x	]		dipods	
[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	feet
The	keep-	er	did	a	shoot-	ing	go						Sharp #79	

3: [

x									x			]	line	
[	x				x				x			]	hemistichs	
[x	x	]	[x	x	]	[x	x	]	[x	x	]		dipods	
[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	feet
As	bright	as	the	sum-	mer	sun							Ritchie (1965), p. 36	

G: [

x									x			]	line	
[	x				x				x			]	hemistichs	
[x	x	]	[x	x	]	[x	x	]	[x	x	]		dipods	
[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	feet
A-	mong	the	leaves	so	green	O							Sharp #79	

3<sub>f</sub>: [

x									x			]	line	
[	x				x				x			]	hemistichs	
[x	x	]	[x	x	]	[x	x	]	[x	x	]		dipods	
[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	[x	x]	feet
She's	gone	with	the	gyp-	sen	Da-	vy						Karpeles (1932), #33A	

- Collecting a large body of folk quatrains indicates that there are principles of well-formedness governing the sequencing of these types.
- What sort of grammar could accurately characterize the inventory of well-formed types (no overgeneration, no undergeneration)?

## 19. Goal

- Burling is basically contrasting 4 + G with 3 + 3<sub>f</sub>.
- Let's take the full system and gather quatrain data sorted in this way.
- This of course requires that we be able to gridify...

## 20. Hayes and MacEachern's target data

From Appalachian folk songs: inventory and frequency

## (1) Predicted by the H/M Analysis

Metrically Replete	Line- Marking	Couplet- Marking	Quatrain- Marking	Long-Last	Three- Cadence
4444 203	GGGG 3 3 <sub>f</sub> 3 <sub>f</sub> 3 <sub>f</sub> 3 <sub>f</sub> 2 3333 1	4G4G 38 43 <sub>f</sub> 43 <sub>f</sub> 21 4343 188 G3G3 26 3 <sub>f</sub> 33 <sub>f</sub> 3 28 F3F3 29  F3 <sub>f</sub> F3 0 f	444G 7 4443 <sub>f</sub> 1 4443 35 GGG3 2 3 <sub>f</sub> 3 <sub>f</sub> 3 <sub>f</sub> 3 1	GG4G 0 3343 6 33G3 1 3 <sub>f</sub> 3 <sub>f</sub> 43 <sub>f</sub> 0 33F3 0 3 <sub>f</sub> 3 <sub>f</sub> F3 0 f	G343 6 3 <sub>f</sub> 343 2 3 <sub>f</sub> 3G3 1 3 <sub>f</sub> 3F3 0

## (2) Not Predicted by the H/M Analysis

Quatrain	Cases with Refrain	Cases without Refrain	Total Cases	Quatrain	Cases with Refrain	Cases without Refrain	Total Cases
4433	5	1	6	3 <sub>f</sub> 3 <sub>f</sub> 4	0	1	1
43 <sub>f</sub> 4G	0	4	4	4434	1	0	1
4344	2	1	3	433 <sub>f</sub> 3	1	0	1
4G43 <sub>f</sub>	1	1	2	434G	0	1	1
4G43	2	0	2	4GF3	0	1	1
4F43	0	1	1	3 <sub>f</sub> 333	0	1	1
44G4	1	0	1	<b>Totals</b>	<b>14</b>	<b>12</b>	<b>26</b>
44G3	1	0	1				

where F = “G or 4, depending on whether the line has a feminine or masculine ending”

Note that there are 625 *logical* possibilities.

## 21. Goals

- Develop analysis in which only the attested forms are derived.
- Match their observed corpus frequencies.

## 22. Approaches: grammatical architecture

Plausibly, a constraint system, but also some way to deploy the constraints.

- Hayes and MacEachern: the attested array is the factorial typology.
- Scheme: poet gears up by setting constraint strengths

## 23. The basis for quatrain-structure constraints

- The view in Hayes/MacEachern is that quatrain-structure constraints are “derived cognitive entities”, along these lines:



temporal contiguity encourages perception of unithood

- big temporal breaks between entities
- small breaks within them

→ grammatical constraints on well-formed units are set up so that the lines that result will be appropriately parsed

- The outlook is both functionalist and extra-grammatical.
- For similar views on the role of phonetics and phonology, see Hayes/Kirchner/Steriade *Phonetically-Based Phonology* (2004)
- For a contrasting “form-only” classical generativist approach, see Kiparsky’s (2006) reanalysis, to be posted on course website.

## 24. Specific constraints in the Hayes/MacEachern account

- “saliency” = “perception of separateness created by temporal breaks”
  - This comes in degrees, depending on how truncated the line is (G, 3f, 3)
  - and it holds of different levels, e.g. 3333, 4343, 4443 as quatrains with salient lines, couplets, and quatrains.

## 25. Some quatrains, with invited saliency intuitions: Couplet

4 The squire come home late in the night,  
 G Enquiring for his la——dy.  
 4 She answered him with a quick reply:  
 G She’s gone with the gipsy Da——vy.<sup>9</sup>  
 4 Send for the fiddle and send for the bow,  
 3<sub>r</sub> And send for the blue-eyed daisy; Ø  
 4 Send for the boy that broke my heart  
 3<sub>r</sub> And almost sent me crazy. Ø<sup>10</sup>  
 G The war——fare is rag——ing  
 3 And Johnny you must fight. Ø  
 G I want——to be with——you  
 3 From morn——ing to night. Ø  
 3<sub>r</sub> Last night as I lay on my pillow, Ø  
 3 Last night as I lay on my bed, Ø  
 3<sub>r</sub> Last night as I lay on my pillow Ø  
 3 I dreamed little Bessy was dead. Ø

## 26. Some quatrains, with invited saliency intuitions: Quatrain

The first of these has been recorded by Jean Ritchie; let us listen if we have time. (course web site)

4 There was a little ship and she sailed upon the sea.  
 4 And she went by the name of the Merry Golden Tree,  
 4 As she sailed upon the low and the lonesome low,  
 3 As she sailed upon the lonesome sea.  $\emptyset$   
  
 4 Next morning a burning sun did rise  
 4 Beneath the eastern cloudless sky,  
 4 And General Beauregard replied:  
 G Prepare to march to Shi—loh.<sup>14</sup>  
 4 London Bridge is falling down,  
 4 Falling down, falling down  
 4 London Bridge is falling down,  
 3<sub>f</sub> My true lover.  $\emptyset$ <sup>15</sup>

## 27. Some quatrains, with invited saliency intuitions: Quatrain

3 Lilly, lilly hoo,  $\emptyset$   
 3 Sweet Lilly I love you,  $\emptyset$   
 3 Lilly, lilly hoo,  $\emptyset$   
 3 Sweet Lilly I love you,  $\emptyset$ <sup>18</sup>  
  
 G Father get ready when He calls—you,  
 G Father get ready when He calls—you,  
 G Father get ready when He calls—you  
 G To sit on the throne with Je—sus.<sup>19</sup>

## 28. Conflict

- Due to the internal-coherence requirement, you cannot make multiple levels of structure salient at the same time.
- Moreover, any effort to create salience must do violence to the realization of the grid.

## 29. Is G more salient than 3<sub>f</sub>?

- It's hard to tell from corpus evidence, because they don't cooccur much in quatrains.
- But we could enact the relevant cases and see what experimental subjects think.
  - Try 3<sub>f</sub>G3<sub>f</sub>G vs. G3<sub>f</sub>G3<sub>f</sub>

## LONG-LAST PATTERNS

## 30. Puzzles

- In a system that plainly values parallelism, why is 3343 tolerated?
- And why is 4333 completely out?

- 4 \*Pease porridge in the pot,  
 3 Nine days old. Ø  
 3 Pease porridge hot. Ø  
 3 Pease porridge cold. Ø

### 31. Long-last tendencies in metrics

- We have seen these in pentameters, where the unmarked variants are 2+3.

### 32. Stanzas that have Two Quatrains

I ám a sáilor stóut and bóld,  
 Long tíme I've plówed the ó——ceán,  
 I fíght for my kíng and cóuntry, too,  
 Won hónor ánd promó——tíon.

I sáid my brother sáilor, I bíd you adiéu,  
 No móre to the séa to gó along with yóu,  
 I'll trável the cóuntry thróugh and thróugh  
 And I'll be a rámb ling sái——lór.

### 33. Quatrain with Repeated Final Line: 43443

'Twas éighteen húndred and twén ty fóur,  
 On Márch the éighteenth dáy, R  
 We hóist our cólors to the tó p of the mást,  
 And to Gréenland bóre awáy, brave bóys,  
 And to Gréenland bóre awáy. R

She móunted ón the mílk-white stéed  
 And léd the dápple gréy, R  
 And whén she gót to her fáther's hóuse,  
 It was óne long hóur till dáy, till dáy,  
 It was óne long hóur till dáy. R

Well mét, well mét, my ówn true lóve,  
 Well mét, well mét, says hé. R  
 I've júst retúrned from the óld salt séa,  
 And it's áll for the sáke of thée, / And it's  
 áll for the sáke of thée. R

### 34. An Quatrain Interrupted by a Couplet

Bold Nélson's práise I'm góing to síng.  
 Nót forgétting our glórious kíng  
 He álways díd good tídings bríng  
 For hé was a bóld commán——dér

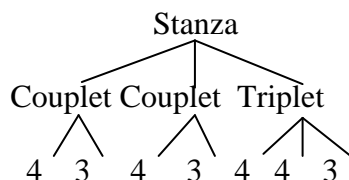
There was Sýdney Smíth and Dúncan, tóo,  
 Lord Hówe and áll that glórious créw,  
 Théy were the mén that wére true blúe  
 Fùll of cáre, yét I swéar,  
 Nóne with Nélson cóuld compáre,  
 Not éven Alexán——dér.

### 35. A Triplet Ending in a Triplet

The following stanza seems to have a triple structure, with the last element forming a triplet on its own:

There wás an old wóman and she hád a little píg,  
 Mím, mím, mím. R  
 There wás an old wóman and she hád a little píg,  
 Mím, mím, mím. R  
 There wás an old wóman and she hád a little píg,  
 Mím, mím, mím. R  
 There wás an old wóman and she hád a little píg,  
 Dídn't cost mùch, 'cause it wásn't very bíg,  
 Mím, mím, mím. R

### 36. Possible structure



### 37. “Long last” at the microlevel

Burling on Chinese: “The pattern of weak and strong syllables found [below] is very common in the Chinese children’s verses I have seen, and can be diagrammed as follows:”



See also Stein and Gil, “Prosodic Structures and Prosodic Markers,” *Theoretical Linguistics* 1980.

**38. Up next**

Modeling: how to get the data patterns to match, including quantitatively.