Overview

- feet
- moras
- some stress patterns

Feet

A concept from poetic metrics. There, a foot is a stressed (or “long”, a term used more properly for Latin verse than for English) syllable and zero or more adjacent unstressed syllables.

Trochee trips from long to short;
From long to long in solemn sort.
Slow Spondee stalks, strong foot!, yet ill-able
Ever to keep up with Dactyl's trisyllable.
Iambics march from short to long.
With a leap and a bound the swift Anapests throng.
One syllable long, with one short at each side,
Amphibrachys hastes with a stately stride; --
First and last being long, middle short, Amphimacer
Strikes his thundering hoofs like a proud high-bred Racer.  (Coleridge)

In language, the only feet seem to be trochees and iambs. A language usually has all trochees or all iambs.

Moras

A *mora* is an abstract unit of weight that has been proposed for dealing with footing and stress assignment in so-called “quantity-sensitive” languages.

*What gets a mora?*

- A nucleus vowel usually does (though in some languages, not if it’s schwa).
- A long vowel or diphthong may get two.
- A coda consonant may get one.

Syllables with more moras attract stress in many languages: HEAVY $\rightarrow$ STRESS

An asymmetry: in some languages, trochees are insensitive to weight (“syllabic”): LL, LH, HL, or HH), whereas in others they group either two light syllables or one heavy (“moraic”: LL or H).

But iambs can never be HL or HH. They can be LL, LH, or H.

English (mostly) has “moraic trochees”.
Evidence for feet in English

“Expletive infixation” (English rimes with a tense V have 2 moras; VC rimes may have 1 or 2)

fan-$%#-tastic
(H)--------(LL)

Missi-$%#-ssippi
(LL)--------(LL)

Apa-$%#-lachicola or Apalachi-$%#-cola
(LL)------(LL)(LL) (LL)(LL)-------(LL)

*ra-$%#-vine but sar-$%#-dine
L-------(H) (H)------(H)

Other useful constraints

TROCHEE: feet must begin with a stressed syllable

IAMB: feet must end with a stressed syllable (and may not begin with a heavy syllable)

STRESS→HEAVY: a stressed syllable must be heavy

FOOTBINARITY: feet must have two syllables or two moras

PARSE-syll: syllables must be footed

*CLASH: no two adjacent stressed syllables

NONFINAL: the last syllable must not be stressed

ALIGN(X, L/R, Y, L/R): align the left/right edge of X (a prosodic or grammatical category) to the left/right edge of Y (a prosodic or grammatical category).

Some common ALIGN constraints:

- **ALLFootLEFT** = ALIGN(Foot, L, Word, L). For each foot, assign one violation for each syllable separating its left edge from the left edge of the word.
- **ALLFootRIGHT** = ALIGN(Foot, R, Word, R)
- **LEFTMost** = ALIGN(Head-foot, L, Word, L)
- **RIGHTMost** = ALIGN(Head-foot, R, Word, R)
- **ALIGNWdL** = ALIGN(Wd, L, Ft, L)
- **ALIGNWdR** = ALIGN(Wd, R, Ft, R)

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1 This is very stipulative, of course! There are some proposals out there to make it less so...
Latin
V rimes get 1 mora
VV or VC rimes get 2 moras

mél  ‘honey’
lák  ‘milk’
málum  ‘misfortune’
málum  ‘apple’
amí:kum  ‘friend’
kám:erum  ‘room’
ár:br:em  ‘tree’
pe:des:ter  ‘on foot’

Warrgamay (Australian language, probably no speakers any more. Data originally from Dixon.)
bá:da  ‘dog’
gái:rá:  ‘dilly bag’
gí:qá:wú:lu  ‘fish sp.’
gú:rá:gaj:ří: ‘from Niagara Vale’

Manam (Austronesian language with 7,000 speakers in Papua New Guinea. Data originally from Lichtenberk)
pá:tu  ‘stone’
si:ja:ba  ‘bush’
tañép:wa  ‘chief’
málubó:  ‘flying fox’
ém:be:ʔi  ‘sacred flute’
tañép:wa:ti:na  ‘real chief’

Let’s analyze some stress systems from G&J:
Cavineña (p. 237)
Creek (p. 238)

Preview of next time (Mon., April 22)
• Segmental phonology in OT

To do for next time
• OT problem set