## Class 14: Ineffability, a.k.a. absolute ungrammaticality

## To do for next time

- Work on project. (I'll give you your next assignment Monday)

1. Some examples (from Raffelsiefen 1996, 1998)

Deadjectival-verb-forming -en can't attach to sonorant-final stems or stems > one syllable:

|  | Google $^{\prime}$ May 18) |  |  |
| :--- | ---: | :--- | ---: |
| blacken | 64,600 | *greenen | 916 |
| whiten | 102,000 | *bluen | 2,000 |
| redden | 172,000 | *brownen | 6,500 |
| sweeten | 147,000 | *souren | 9,120 |
| sharpen | 347,000 | *dullen | 782 |
| fatten | 91,400 | *slimmen | 140 |
| thicken | 183,000 | *thinnen | 53 |
| sicken | 63,000 | *wellen | 27,000 |
| ?wetten | 79,600 | *dryen | 691 |
| sadden | 34,100 | *calmen | 412 |
|  |  | *yellowen | 20 |
|  | 635,000 | *purplen | 48 |
| broaden | 332,000 | *shallowen | 21 |
| deepen | 277,000 | *betteren | 27 |
| worsen |  |  | 15 |

But *greenen doesn't suggest a phonological repair. You just have to try again: greenify? green $_{V}$ ? make green?

-ize: | rándomize | 133,000 | *corrúptize | 7 |
| :--- | ---: | :--- | :--- |
|  | átomize | 16,800 | *obscénize |

## 2. MParse (Prince \& Smolensky 1993)

Every tableau contains as a candidate the null parse, which violates MPARSE.

| corrúpt+íze | IDENT(stress) | CLASH | MPARSE |
| ---: | :---: | :---: | :---: |
| corrúptíze |  | $*!$ |  |
| córruptíze | $*!$ |  |  |
| $\varnothing$ |  |  | $*$ |

[^0]
## 3. Orgun \& Sprouse: problems for Mparse

Tagalog-um- infixation (I have changed the analysis slightly, but the point is the same):

| um+bili | ANCHOR-stem-L | ALIGN( $u m, \mathrm{~L}, \mathrm{Wd}, \mathrm{L}$ ) |
| ---: | :---: | :---: |
| umbili | $*!$ |  |
| bumili |  | $*$ |
| bilumi |  | $* *!^{*}$ |

- If we add in the null parse, where must MpARSE be ranked?

Gaps in nonce infixations:

$$
\begin{array}{ll}
\text { fumafagi na } & \text { 'it's foggy now' } \\
\text { kumaklawdi na } & \text { 'it's cloudy now' } \\
\text { *mumimisti na } & \text { 'it's misty now' }
\end{array}
$$

$\rightarrow$ OCP-um: *m-um, *w-um

- Where should this constraint be ranked w.r.t. MPARSE? What's the ranking problem?

| um+misti |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- |
| ummisti |  |  |  |  |
| mumisti |  |  |  |  |
| mimistumi |  |  |  |  |
| $\square$ |  |  |  |  |

## 4. Control

Orgun \& Sprouse propose that rather than MPARSE, there is a separate component, CONTROL, which contains inviolable markedness constraints.
The regular ranking provides an output, and then ConTrol checks it:

| um+RED+misti | ANCHOR-stem-L | ALIGN(um,L,Wd,L) |
| ---: | :---: | :---: |
| ummimisti | $*!$ |  |
| mumimisti |  | $*$ |
| mimistumi |  | $* *!* * * *$ |


| CONTROL | OCP-um |
| ---: | :---: |
| $\&<$ mumimisti | $*!$ |

## 5. Ill-formed meter

Why does an ill-formed verse or line not always suggest its own repair? Hayes's example:
well-formed as iambic pentameter, not complex
The li- / on dy- / ing thrust- / eth forth / his paw (Shakespeare, R3)
well-formed as iambic pentameter, very complex
Let me / not to / the mar- / riage of / true minds (Shakespeare, sonnet 116)
ill-formed as iambic pentameter
Ode to / the West / Wind by / Percy / Bysshe Shelley (Halle \& Keyser 1971)
When a line doesn't work, the grammar doesn't tell you what to do-you just have give up and try a different way of saying what you want to say.

## 6. Componentiality in metrics

Metrical component (ranking depends on meter in use) ranks certain "metrical" constraints (the ones inviolable in that meter) higher than "phonological" ones-i.e., it does suggest a repair.

Hayes's example: *Young Emily in her cha----mber (illegal in " 4343 " verse)

- "4343" grammar says *LAPSE >> DEP-SYLL
- Line is repaired as Young Emily in her chambeler (or some such). Hayes calls this the "suicide candidate".
- The paraphonological component ("para" because slightly different from phonology of ordinary speech), however, while it allows some outputs that are illegal in colloquial speech (e.g, o'er), does not allow *Young Emily in her chambeler (DEP-SYLL >> *LAPSE).
- Because there is no common legal output of the two components, the derivation crashes, and the line is unmetrical.


## 7. Componentiality in morphology?

(Extension that has been contemplated-I don't know what he thinks about this these days-by Bruce Hayes to his proposal about componentiality in metrics (ms.).)

The morphological component absolutely requires that -en be attached to an obstruent-initial stem. Thus, we might have suicide candidates like greenden, greeden:

| morphological component <br> green+en | MORPHO <br> CONSTRAINTS | DEP | IDENT(nas) |
| ---: | :---: | :---: | :---: |
| greenen | $*!$ |  |  |
| greenden |  | $*$ | $*$ |
| greeden |  | $*$ | $*$ |

The phonological component, however, does not allow insertion or denasalization in this context:

| phonological component <br> green+en | DEP | IDENT(son) |
| ---: | :---: | :---: |
| greenen |  |  |
| greenden | $*!$ |  |
| greeden |  | $*!$ |

Because the there's no shared output, the derivation crashes.

- How is this similar to/different from the Control story? Can it get the Tagalog case?


## 8. MacBride's Fiat-Struc constraints

SYN : PHON = A form bearing the syntactic feature SYN contains the phonological structure PHON

Affixes can delete entirely if they create a bad markedness problem and the grammar's solution to that problem fails to supply PHON:

Super-simplified Ayt Ndhir Tamazight: normally masculine nouns begin with prefix [a-] (MASC SING : a [stem)

| a-rjaz | 'man' |
| :--- | :--- |
| a-sərðun | 'mule' |
| a-xam | 'tent' |
| a-fus | 'hand' |

unless a hiatus would result:

| iləs | 'tongue' |
| :--- | :--- |
| imənði | 'grain' |
| u $\iint ə n$ | 'jackal' |

So does that mean *VV $\gg$ MAX-V? No!
/bla/ 'without' + /uði/ 'butter' $\rightarrow$ [ßlajuði] 'without butter'
/bla/ 'without' + /isrðan/ 'mules' $\rightarrow$ [ßlajsərðæn] 'without mules'

- What's the ranking for hiatus, based on the 'without' forms?
- Let's do a tableau for 'tongue':

| /ils/ MASC SING |  |
| ---: | ---: |
| ailəs |  |
| aləs |  |
| ajiləs |  |

(recall consistency of exponence: epenthetic segments have no morphological affiliation)
That's not quite what we want, though: we want cases where even leaving off the affix is no good. So...this may be a terrible travesty of MacBride's theory-I need to read his dissertation carefully-but let's try it...

| green VERB | DEP-C | IDENT(son) | $*[+ \text { son] }]_{\text {Adj }}$ en $]_{\mathrm{V}}$ | VERB : $]_{\text {Adj }}$ en | VERB : $]_{\text {Adj }}$ ify |
| ---: | :---: | :---: | :---: | :---: | :---: |
| green]en |  |  | $*!$ |  | $*$ |
| green]den | $*!$ |  |  | $*$ | $*$ |
| greed]en |  | $*!$ |  | $*$ | $*$ |
| green]ify |  |  |  | $*$ |  |

This predicts that greenify (or green $_{\mathrm{V}}$, or whatever the real winner is above) should block redify (or red ${ }_{\mathrm{V}}$ ):

| red VERB | DEP-C | IDENT(son) | $*[+$ son $]]_{\text {Adj }}$ en $]_{\mathrm{V}}$ | VERB : $]_{\text {Adj }}$ en | VERB : $]_{\text {Adj }}$ ify |
| ---: | :---: | :---: | :---: | :---: | :---: |
| redd]en |  |  |  | $*$ |  |
| red]ify |  |  |  | $*!$ |  |

- What do you think about periphrastics like make green?


## 9. Statistical ineffability?

Recall Tagalog nasal substitution in loans. Why are there so few $d$ - and $g$ - initial loans in nasalsubstituting constructions?


It's not because of the statistics of the Spanish lexicon, at least not for $d$ :
(grouped according to the initial consonant that the borrowed form would have)

and it's more extreme than what we find in the general set of Spanish loans in Tagalog:


## 10. Some other (non-morphological) gaps in Spanish loans into Tagalog

Tagalog phone inventory vs. Spanish: no [f], [r], [tf], [n]

- Spanish is [ f$]$ is borrowed as [p].

Words beginning with [p] vs. [f] in Spanish dictionary:


Spanish words beginning with [p] vs. [f] that are borrowed into Tagalog (from Panganiban 1961)


- Spanish is [ n ] is borrowed as [niy], but there are no word-initial examples.
(The Spanish dictionary I used has only $50[\mathrm{n}]$-initial words, though, so we only expect about 3 to be borrowed anyway.)
- Spanish is [ t$]$ is borrowed as [ ts$]$, [ s$]$, or [ t$]$ ].

We expect about 66 words beginning with [ t ] to be borrowed, but only 38 are.

- Spanish is [r] is mostly borrowed as [r].

We expect about 249 words beginning with [r] to be borrowed, and 284 are.
See also Andy Martin's MA thesis in progress: Navajo has sibilant harmony, which causes alternations. But, underlyingly disharmonic compounds are very underrepresented in the first place.


[^0]:    ${ }^{1}$ Used Google's restrict-to-English utility. Obviously there is a lot of junk, especially proper names and German pages that slip through.

