Introduction to exceptions

(1) A pervasive phenomenon, that has cropped up in virtually every area we have discussed this semester: exceptions

- Sometimes omitted from discussion—e.g., our discussion of English nicknames
  - Usual pattern: maximal syllable + [i] (Bar.b.a → Barbie, Car.ly → Carly, Shel.don → Sheldie, A.man.da → Mandie; but Ag.nes → Aggie, *Agnie, Cath.ryn → Cathy, *Cathry)
  - But nicknames sometimes preserve less: Mil.dred → Millie, Wan.da → Wannie

  "Wanda, affectionately called 'Wannie' by family and friends, …[
  (Wandie and Mildie also attested)
  - And sometimes involve other exceptional changes

  Sa.rah → Sally, Sadie
  Shet.land sheepdogs, ponies → Shelties (Shetlies also occasionally found, according to Google; *Shetties is apparently strictly found on German/Dutch pages, though Scot­­land terriers → Scotties is regular in English)

- Sometimes mentioned but set aside—e.g., Russian single vs. double retraction

<table>
<thead>
<tr>
<th>'ring'</th>
<th>sg.</th>
<th>pl.</th>
<th>'trade'</th>
<th>sg.</th>
<th>pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>nom.</td>
<td>kol'tsó</td>
<td>kól'tsa</td>
<td>nom.</td>
<td>remesló</td>
<td>remésła</td>
</tr>
<tr>
<td>gen.</td>
<td>kol'tsá</td>
<td>kol'étś</td>
<td>gen.</td>
<td>remeslá</td>
<td>remésel</td>
</tr>
<tr>
<td>dat.</td>
<td>kol'tsú</td>
<td>kól'tsam</td>
<td>dat.</td>
<td>remeslú</td>
<td>reméslam</td>
</tr>
<tr>
<td>acc.</td>
<td>kol'tsó</td>
<td>kól'tsá</td>
<td>acc.</td>
<td>remesló</td>
<td>remésla</td>
</tr>
<tr>
<td>instr.</td>
<td>kol'tsóm</td>
<td>kól'tsamí</td>
<td>instr.</td>
<td>remeslóm</td>
<td>reméslami</td>
</tr>
<tr>
<td>loc.</td>
<td>kol'tsjé</td>
<td>kól'tsxá</td>
<td>loc.</td>
<td>remesljé</td>
<td>remés lax</td>
</tr>
</tbody>
</table>

- Paradigm-based analysis can explain double retraction as columnar stress (remésel instead of *remésél), but doesn't explain why double retraction fails to apply in words like kol'étś 'rings-GEN.PL.'

- Often introduced to cast a shadow of doubt
  - Polish o-raising; numerous exceptions correlates with low productivity, casts doubt on the synchronic status of the alternation

- Just a few of the cases we've discussed, giving incomplete discussion of exceptions:
  - English nicknames; Lakhota reduplication; Tagalog pseudoreduplication; all cyclic processes in English; Latin rhotacism; Russian yers and stress; Spanish stress; Polish o-raising; Rendaku; the rui part of Sanskrit ruki rule; etc. etc. etc.

(2) Why it is sometimes important for phonology to proceed this way

- Innocent simplification: the overall pattern is interesting and important, and existence of exceptions does not change the fact that we need to capture the overall pattern somehow
  - Existence of Shelty doesn't change the fact that C2 in rising sonority sequence is usually not preserved (with or without metathesis); e.g., Kaplan → Kappie, *Kaplie, *Kalpie

- In some cases, exceptions are the result of loanwords disrupting a previously “clean” system; by excluding them, we are simply examining the previous stage of the language (an utterly valid object of analysis)
  - E.g., Lyman's Law and rendaku: hold only in “older” components of Japanese lexicon

¹We would need to check and make sure there is no Dutch influence here; I’ve noticed that other similar cases, like Sannie for Sandra, occur mostly with Dutch web pages (or writers)—e.g., "My name is Sandra, but people call me Sannie, feel free to do the same."
(3) Why it is sometimes dangerous for phonology to proceed in this way
- Must provide evidence that cleaner stage of language truly existed in hypothesized form, or
  that speakers discover generalizations as claimed, in spite of exceptions
- Without such evidence, it’s not clear that we are analyzing either the language or the speaker

(4) Why it is interesting to look into the exceptions: systematic patterns and subregularities
Sometimes the pattern is seemingly quite arbitrary
- Russian single vs. double retraction:
  - Sg. ~ pl. stress alternations are not all that common in the language, but among nouns
    with stress retraction in entire plural, most show double retraction (more nouns like
    remésel that kol’êts)
  - Nouns that have single retraction:
    ➢ Neuter kol’co, jajco, fem. ovca
      A possibly related fact: there are many nouns ending in -c with suffixal stress throughout
      the paradigm—except the gen. pl.

      | 'dust' | sg. | pl. |
      |-------|----|----|
      | nom.  | pul’c’a | pul’cij |
      | gen.  | pul’cij | pul’éc |
      | dat.  | pul’cé | pul’cám |
      | acc.  | pul’cú | pul’cîj |
      | instr. | pul’cój(tu) | pul’câmi |
      | loc.  | pul’cé | pul’cák |

➢ Feminine: , svin’ja, sjem’ja, skam’ja, sjestra, sjer’ga
  - Not clear to me why these should behave differently, simply note in passing that they
    seem sort of like a cohesive set
  ➢ (Also some variable words, like gumno, gumén ~ gúmen)

Sometimes the pattern has solid phonological motivation (example in a minute)

(5) Why it is necessary to look into the exceptions: data about exceptions can lead to better analysis
- Yiddish voicing assimilation (Katz 1987, Lombardi 1999)
  Regressive assimilation in obstruent+obstruent clusters: (schematically)

  vɔg ‘weight’ + f.l ‘scale’ → vɔkʃəl
  bak ‘cheek’ + ben ‘bone’ → bagbem ‘cheekbone’

  More accurately: assimilation is quite variable
  - Across compound/word boundaries, it is optional (and perhaps phonetically gradient/partial)
  - Within (monomorphemic) words, it has numerous exceptions

<table>
<thead>
<tr>
<th>C1</th>
<th>C2</th>
<th>Pattern</th>
<th>Example</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+voi]</td>
<td>[−voi]</td>
<td>Assim.</td>
<td>/plptʃ/</td>
<td>/plukθ/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No assim.</td>
<td>/kdsʃ/</td>
<td>/kdsʃ/</td>
</tr>
<tr>
<td>[−voi]</td>
<td>[+voi]</td>
<td>Assim.</td>
<td>/hekʃdʃ/</td>
<td>/hekʃdʃ/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No assim.</td>
<td>/makdiʃ/</td>
<td>/makdiʃ/</td>
</tr>
</tbody>
</table>

- An interesting statistical asymmetry:

➢ Reanalysis: Yiddish is like Mekkan Arabic (discussed last time), but with some exceptions
  Regressive devoicing (/DT/ → [TT]) but not voicing (/TD/ → *[DD])
### Properties of exceptions

(6) A useful typology of exceptions: (Kenstowicz and Kisseberth 1977, chap. 2.3)

<table>
<thead>
<tr>
<th>Negative input exceptions:</th>
<th>Positive input exceptions:</th>
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<tbody>
<tr>
<td>Segment is in proper environment to undergo rule, but exceptionally fails to do so</td>
<td>Segment should not undergo rule, but somehow does anyway</td>
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<th>Negative environment exceptions:</th>
<th>Positive environment exceptions:</th>
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<tr>
<td>Segment creates the environment to condition a rule, but it does not actually do so</td>
<td>Segment should not provide correct environment, but triggers rule anyway</td>
</tr>
</tbody>
</table>

(7) Negative input exceptions:

- Word should contain input A to undergo rule A → B / C ___ D, but exceptionally fails to
- Example: exceptions to final devoicing in Turkish (Inkelas, Orgun & Zoll 1997)

  Regular pattern: coda devoicing

  kitap  kitabü  ‘book-nom/acc’
kutup  kutbu  ‘pole-nom/acc’
iyot  iyodu  ‘iodine-nom/acc’


- Another example: exceptions to trisyllabic shortening
  - Affixation of -ity can condition shortening (op[ei]que ~ op[æ]city; ser[i:]ne ~ ser[e]nity)
  - Some words fail to undergo shortening: ob[i:]se ~ *ob[e]sity

  Failing to undergo a rule is probably the most common type of exception; but calling these exceptions raises many questions
  - Is the rule actually productive? (That is, do we need to block it from applying, or is it something that never applies to novel items anyway?)
    - Is obesity exceptional, or is serenity?
  - Do we understand the environment correctly?
    - Maybe trisyllabic shortening is blocked after voiced stops?

(8) Negative environment exceptions

- Morpheme which should create environment (C or D) for rule A → B / C ___ D fails to
- Example from Chi-Mwi:ni (Kenstowicz & Kisseberth 1977, p. 116)

  Regular pattern: suffix -il- assimilates to -iz- / s, s, z, æ

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>3sg past</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ku-jib-a</td>
<td>jib-i:l-e</td>
<td>‘answer’</td>
</tr>
</tbody>
</table>
x-so:m-a | som-e:l-e | ‘read’ |
x-ṭaraj-a | taraj-i:l-e | ‘hope’ |
ku-ra:g-a | rag-i:l-e | ‘be late’ |
| b. x-ńilis-a | nilis-i:z-e | ‘go bankrupt’ |
ku-raj:i-a | raj-i:z-e | ‘follow’ |
x-ńosa | kos-e:z-e | ‘make a mistake’ |
x-ńaj-a | faj-i:z-e | ‘do’ |

However, a few words ending in { s, s, z, æ} fail to trigger -il- → -iz-
(9) Positive input exceptions
- Segments which shouldn't undergo a rule do so anyway
- More data from Chi-Mwi:ní: stem-final voiceless stops \( \rightarrow s \), \( s \) before -il-

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<tbody>
<tr>
<td>ku-Iap-a</td>
<td>ìas-il-e</td>
<td>‘swear an oath’</td>
</tr>
<tr>
<td>ku-ɡit-a</td>
<td>ġis-il-e</td>
<td>‘pull’</td>
</tr>
<tr>
<td>ku-loct-a</td>
<td>ɛos-el-e</td>
<td>‘dream’</td>
</tr>
<tr>
<td>x-pik-a</td>
<td>pij-il-e</td>
<td>‘cook’</td>
</tr>
</tbody>
</table>

Note the opaque interaction with assibilation: /lap-il-e/ \( \rightarrow \) ìas-il-e \( \rightarrow \) *las-iz-e

There is one verb that ends in a voiced stop, but exceptionally undergoes this change:
- /big-il-e/ \( \rightarrow \) [bi]i-il-e

(10) Positive environment exceptions
- Certain morphemes trigger an alternation, even though they don't actually contain the right environment
- Example: irregular English past tense allomorphy

Ordinarily, the past tense suffix agrees in voicing with the preceding segment
- Devoices after voiceless: /ript/, /kikt/, /laught/, /miss[t], /wish[t]
- Voiced after voiced: /rub[d], /rig[d], /save[d], /cause[d], /seem[d], /plan[d], /fill[d], /play[d]

In some dialects, a handful of sonorant-final verbs exceptionally cause devoicing
- burnt, learnt, dwelt, spelt, spoof, smelt, spelt

(Possibly related: devoicing + vowel change: dreamt, left, lost, etc.)

(11) Why do we care about these categories
- May not reflect any deep theoretical division, but does provide some useful terminology for describing configurations, and figuring out where to pin the blame (like counterfeeding/counterbleeding terminology for opacity)
- Typological skewing?
  - Negative exceptions are quite common (many languages have them, and a language may have lots of them)
  - Positive exceptions are somewhat less common, perhaps (and typically fewer per language?)— though they are by no means rare
- Tend to come from different historical sources
  - May tell us different things about learning, representation, or productivity of allomorphy

(12) Why the classification is insufficient: exceptionality that is not due to any particular morpheme

- In many Spanish roots, mid vowels diphthongize when stressed (/e/ \( \rightarrow \) [je], /o/ \( \rightarrow \) [we])

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>venir ‘to come’</td>
<td>viéne ‘he comes’</td>
<td></td>
</tr>
<tr>
<td>volár ‘to fly’</td>
<td>vuéla ‘he flies’</td>
<td></td>
</tr>
</tbody>
</table>

Derivational affixes may also cause alternations:
- hiérrro ‘iron’
- herréro ‘blacksmith’
- pimiénto ‘pepper’
- pimentéro ‘pepper shaker’

- For a given affix, it should be predictable whether or not diphthongization should apply
  - If stress moves off of the root, no diphthongization; otherwise, diphthongize
• In fact, there are many exceptions
  – fiésta ‘party, celebration’ → fiéstero ‘partygoer’ (*festro)
• Where does exceptionality of fiéstero come from?
  – Suffix -ero is not a positive environment exception (it usually does not cause diphthongization)
  – Stem fiest- is not a positive input exception (with other affixes, it alternates as expected: festejar ‘to celebrate’)
  – Exceptionality is not property of either morpheme, but rather a property of the combination (the derived form)
• Eddington shows that this is a pervasive phenomenon in Spanish
  – Some suffixes tend to take diphthongized variants of roots, while others tend not to; but many fall in between
  – For a given combination of diphthongizing root + affix, it is not completely predictable whether or not diphthongization actually occurs (lexical idiosyncrasy)
(13) Where we are headed
• Next week, we will discuss mechanisms for handling exceptions in phonology
• You should read through Kenstowicz & Kisseberth, chap 2, section 3
• Some questions to keep in mind when looking at exceptionful patterns
  – What is the grammatical mechanism that allows exceptions to surface (that is, what prevents them from being fixed by the regular grammar?)
  – Does the mechanism constrain the set of possible exceptions? (Can words be exceptional only in one particular respect? Does the analysis capture this?)
  – Does the analysis explain the fact (?) that the exceptional pattern is the minority pattern, and that the non-exceptional pattern is the default pattern for novel items? (if these things are true…) Does it make any predictions for language change, or child errors?
  – Most important: how do learners discover which forms are exceptional? how do they see past them to discover the crucial insights of the “regular” phonological patterns?