Rule exceptionality I

Exceptionality (EGG 2025, Zagreb)

1 Introduction

- Our goal of this course is be to provide a good definition to the notion *exceptionality* and then to relate that to theories of how exceptionality is encoded in the grammar.

- What makes a scientific definition "good"?

    – Clarity, precision, unambiguity.

    – Supports/enables prediction/explanation.

- Let's begin with a simple idea I'll call the RULE PRINCIPLE.

    (1) RULE PRINCIPLE: A rule applies iff its structural description is met.

    (2) EXCEPTION: A linguistic representation *l* is an *exception* (w.r.t. rule *R*) if *l* violates the Rule Principle (w.r.t. *R*).

- The term *linguistic representation* in (2) is a little vague and we'll try to make them more precise below.

2 Shortening in English

- In English, a certain class of words undergo SHORTENING in its second syllable when suffix suffixation of certain derivational suffixes.

    (3) SHORTENING examples:

    a. /aɪ ~ ɪ/:   div[aɪ]ne–div[ɪ]nity, der[aɪ]ve–der[ɪ]vative
    b. /iː ~ ɛ/:   imp[iː]de–imp[ɛ]diment, obsc[iː]ne–obsc[ɛ]nity, ser[iː]ne–ser[ɛ]nity
    c. /eɪ ~ æ/:   prof[eɪ]ne–prof[æ]nity, gr[eɪ]teful–gr[æ]titude
    d. /aʊ ~ ʌ/:   prof[aʊ]nd–prof[ʌ]ndity, pron[aʊ]nce–pron[ʌ]nciation
    e. /oʊ ~ ɑ/:   prov[oʊ]ke–prov[ɑ]cative, s[oʊ]le–s[ɑ]litude

- However, a few words unexpectedly fail to undergo SHORTENING.[1]

---

[1]Thanks to Katalin Balogné-Bérces (p.c.) for help identifying additional exceptions.

(4) ent[aɪ]rety, ob[iː]sity, den[oʊ]tation

- Lakoff can imagine no explanation for these facts other than that these words are exceptional (w.r.t. SHORTENING).

  > No other fact about *obese* is correlated to the fact that it does not undergo this rule. It is simply an isolated fact. (Lakoff 1970:13)

- Still speaking pre-theoretically, let us say that *obesity*—or some part of its linguistic representation—is a *exception* to SHORTENING.

  (5) Levels of representation:

  a. /...iː.../   (the non-alternating segment itself)
  b. /obiːs/   (the UR of *obese*)
  c. √OBESE   (the morphosyntactic root of *obese*)
  d. /obiːsity/   (the UR of *obesity*, somehow stored as a whole)
  e. √OBESE ⁀ n_{Abs} (the morphosyntactic structure of *obesity*)

- Different theories of exceptionality (and of the phonology and morphology more generally) will naturally identify different linguistic levels as exceptional.

3   Masculine animate genitives singulars in Polish

- Nearly all masculine animate (masc. anim.) nouns in Polish have a genitive singular (gen.sg.) in *-a* (e.g., *brat–brata* 'brother', *bóbr–bobra* 'beaver', *rycerz–rycerza* 'knight'), but *wół* 'ox' has the gen.sg. *wołu*.

- Three questions:

  - Is this an exception?
  - If so, to what rule?
  - And at what level of representation?

- Lakoff's discussion of "umlauting" English plurals like *foot–feet* and *goose–geese* suggests he regards irregular inflection as exceptionality. Let's see where that takes us.

- Let us assume (à la Gorman and Yang 2019) that *-a* is the default masc. anim. gen.sg. and *-u* is exceptional, and let us adopt a simple form of Distributed Morphology (Halle and Marantz 1993) as our theory of inflection.

  (6) $[+\text{Gen}, -\text{Pl}]$ $\begin{array}{lll} \Longleftrightarrow & \text{-a} & / \quad [+\text{Anim}] \ \_\_ \\ \Longleftrightarrow & \text{-u} & / \quad \{\sqrt{\text{wół}}, ...\} \ \_\_ \end{array}$

- With this formulation, it's not clear that there's any exceptionality here:

  - there's just a more specific subrule ("add *-u*") that, by the *elsewhere principle*,

- indirectly blocks the application of the regular rule ("add -*a*").

- Chomsky is critical of the tendency to *reify* descriptions that are *taxonomic*.

  …there are no rules for forming relative clauses in Hindi, verb phrases in Swahili, passives in Japanese, and so on. The familiar grammatical constructions are taken to be taxonomic artifacts, useful for informal description perhaps but with no theoretical standing. They have something like the status of "terrestrial mammal" or "household pet." (Chomsky 2000:8)

  (7) Other taxonomic artifacts: the Formosan languages, fish (cf. *Why Fish Don't Exist*, a biography of the taxonomist David Starr Jordan), (non-human) primates, (non-avian) dinosaurs, wasps, crabs, trees, grasses, …

- Even our (very simple) theory of Polish inflection was sufficient to show that *wolu* is—perhaps—a *taxonomic exception* but is not a *formal exception*.

4 English bridge verbs

- Let us introduce some additional terminology.

  (8) NEGATIVE EXCEPTION: A linguistic representation l is a *negative exception* w.r.t. rule R if l meets the structural description for R but fails to undergo it.

- We have seen one potential negative exception: *obesity*.

- One can also imagine a *positive exception*.

  (9) POSITIVE EXCEPTION: A linguistic representation l is a *positive exception* w.r.t. rule R if l does not meet the structural description for R but undergoes it.

- English generally does not allow extraction from verbal complements, but a few verbs (called *bridge verbs*) permit extraction from their complement.

  (10) Who$_i$ did you say/think/know/*whisper/*ponder Luigi shot t_i?

- This has the informal flavor of a positive exception:

  - Complement-of-VP does not meet the structural description for wh-movement.
  - Yet wh-movement out of Complement-of-VP is possible when that complement is governed by certain lexical heads.

- However, the relevant generalization may be quite different in a theory with move-α, since the "structural description" that licenses wh-movement is negatively defined.

- In general, it is unclear whether positive exceptions in the formal sense actually exist: most existing theories factor them out.

Close reading

- Lakoff 1970:13–18

5 *SPE* exceptionality conventions

- The following is my attempt to synthesize the *SPE* (Chomsky and Halle 1968:§4.4.2, 8.7) conventions.

  (11) *SPE* conventions:

    a. If a morpheme is not specified −R, add +R to its specification.
    b. If a morpheme is αR, add αR to each of its segments.
    c. Rule *R* does not apply to any segment which is −R.

- Lakoff ignores (11b)—Zonneveld (1978: ch. 3) identifies a potential counterexample—and revises (11c) to refer to morphemes rather than segments.

  (12) Lakoff (1970) conventions:

    a. If a morpheme is not specified −R, add +R to its specification.
    b. Rule *R* does not apply to any *morpheme* which is −R.

- The application of *R*, as per (11c, 12b), hinges in part on whether the *target* segment/morpheme is −R. What happens if some *trigger* (i.e., environment) segment/morpheme is −R?

References

Chomsky, Noam. 2000. *New Horizons in the Study of Language and Mind.* Cambridge University Press.

Chomsky, Noam, and Morris Halle. 1968. *Sound Pattern of English.* Harper & Row.

Gorman, Kyle, and Charles Yang. 2019. When nobody wins. In *Competition in Inflection and Word Formation*, ed. Franz Rainer, Francesco Gardani, Hans Christian Luschützky, and Wolfgang U. Dressler, 169–193. Springer.

Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, ed. Kenneth Hale and Samuel Jay Keyser, 111–176. MIT Press.

Lakoff, George. 1970. *Irregularity in Syntax.* Holt, Rinehart and Winston.

Zonneveld, Wim. 1978. *A Formal Theory of Exceptions in Generative Phonology.* Peter de Ridder.