Microvariable lexical stratification: The view from honorifics

Workshop on Morphology at Princeton

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Three empirical generalizations about Japanese honorification & the associated theoretical puzzles

- **Generalization 1**: Words from different lexical strata exemplify different honorification strategies.
- **Generalization 2**: Multiple honorification and stratal reassignment, although stigmatized, are pervasive.
  - **Puzzle 1**: Are different strategies of honorification still associated with a uniform syntax?
- **(Generalization 3**: Suppletion is pervasive.
  - **Puzzle 2**: How do we know whether two forms are in a suppletive relationship?) **-- WE MAY NOT GET HERE, AND THAT IS OKAY**

Broader goal: Invite attendees to think about lexical stratification in their languages (and tell me about it!).

Honorification as a nexus that connects linguistic structure and population structure

- Intergroup contact (including language contact)

- Lexical stratification

- Social differentiation

- Register (social/discourse-based conditioning of forms)

- Allomorphy & suppletion (structural conditioning of forms)

Lexical stratification in English

(1)

sickness	*disease*	*pathology*
earthly	*terrestrial*	*geological*
tale	*fable*	*myth*
living	*vital*	*biotic*
Water Gun	*Aqua Jet*	*Hydro Pump*
deadly	*mortal*	*lethal*
bodily	*corporal*	*somatic*
beastly	*animalistic*	*zoological*
twi-tongued	*bilingual*	*diglossic*
fire	*flame*	*pyre*
time	*tempo*	*chronology*
snake	*serpent*	*herpes*
fatherly	*paternal*	*patriarchal*
fishy	*Piscean*	*ichthyological*
uncovering	*revelation*	*apocalypse*
*warm-**th***	*curios-**ity***	*lito-**tes***

Lexical stratification is not (necessarily/just):

- **Synonymy**--words in different strata can diverge in their connotations (= registers) and denotations (= referents)

- **Suppletive/paradigm-establishing** (*water → hydro-* / _ *philic* would be a "fishy allomorphy rule" [Karlos Arregi p.c.])

- **System-external etymological knowledge**--stratal assignment is associated with observable, rule-governed phonological and syntactic consequences

- **Uniform**--stratal assignment is subject to diachronic, interspeaker, and situational variation

Dative immobility of Latinate forms (Larson 1988)

(2)   Alakai[1] gave money to the charity.
(3)   Alakai gave the charity money.

(4)   Alakai donated money to the charity.
(5)   */%Alakai donated the charity money.

(6)   Alakai distributed money to the participants.
(7)   *Alakai distributed the participants money.

[1] Name comes from the Diverse Names Generator (O'Leary et al. 2023).

Non-palatalization of Germanic forms

(8)   *g + i* = [g] in Germanic: *gift, gimp, gig, gilded, gird, giddy, give, girl, girth*

(9)   *g + i* = [d͡ʒ] in French, Latin, & Greek: *gigantic, ginger, gingivitis, giardia*

How should we pronounce GIF?

■   'It's [g]*raphics Interchange Format*, and therefore [g]*IF*.'

■   "It comes from Latin *graphicus*, which comes from Greek *γραφικός graphikós*, and therefore [d͡ʒ]IF."
   ○   Compare: *analo*[g]*ue, analo*[g]*ous* vs. *analo*[d͡ʒ]*ical*

Erudite maintenance of foreign plurals/singulars

(10) **Greek**: *%clitori-des, %dogma-ta, %metropol-eis*
(11) **Latin**: *%aurora-e, %for-a*
(12) **French**: *%cul-s-de-sac, %bureau-x*
(13) **Italian**: *%cell-i*
(14) **Hebrew**: *%cherub-im*

(15) **Latin**: *%dat-um, %agend-um, %insign-e, %op-us*
(16) **Italian**: *%biscott-o, %graffit-o, %panin-o, %paparazz-o*
(17) **Arabic**: *%talib*

SG/PL asymmetry here: Stratal maintenance of singulars seem to be much more poorly evaluated, perhaps because of a markedness clash.

Differential assimilation & doublet formation

(18) %*octopus-es* (assimilation)
(19) %*octop-i* (assimilation to Latinate)
(20) %*octop-odes* (erudite maintenance)

(21) %*cact-i* (maintenance as Latinate)
(22) %*cactus-es* (assimilation)
(23) %*cactus-∅* (Arizona English, Knapp 2017: analogy to *sheep*)

(24) *stigma-s* `intersecting discourses of social disapproval'
(25) *stigma-ta* `wounds of the Lord'
(26) *atlas-es* `collections of maps'
(27) *Atlante-s* `statues of the Titan'

All modern languages exhibit stratification

(28) **Hindi-Urdu**: *tadbhavas* (< Old Indo-Aryan) + *tatsamas* (< Sanskrit) + Perso-Arabic + English

(29) **Javanese**: native + Sanskrit + Malay + Dutch

(30) **Estonian**: native + Germanic (German, Saxon, Swedish) + Russian

(31) **Turkish**: native + Arabic + Persian + French

(32) **Burmese**: native + Pali + English

(33) **American Sign Language**: native + initialized signs + name signs (Brentari & Padden 2001)
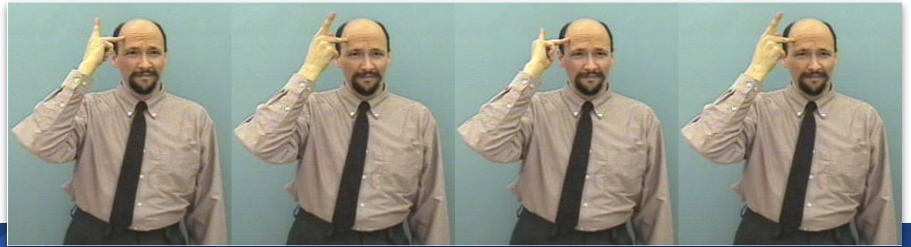
Lexical stratification in ASL (Padden 2013)

(34)

Native	Initialized (< English)
FEELING-DOWN	CLINICAL-DEPRESSION
SOUND	PHONOLOGY
GOVERNMENT	POLITICS
LIST	LAW, RULE, PRINCIPLE
GROUP	ASSOCIATION, CLASS, FAMILY, ORGANIZATION, TEAM
FIGURE-OUT	ALGEBRA, CALCULUS, TRIGONOMETRY, MATHS
SUSPICIOUS	PARANOIA
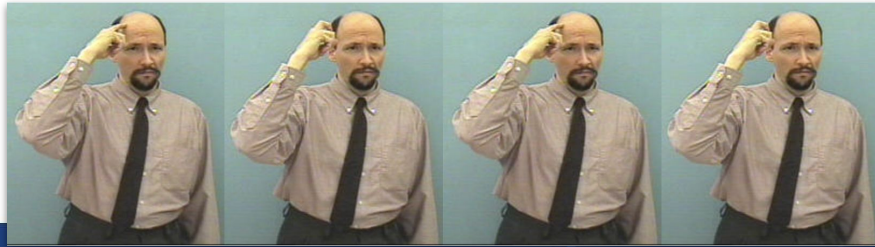
Lexical stratification & honorification I

Javanese speech levels (Fleming 2015, Davis 2024)

(35) Krama
menikô   anaq   kulôTini   éngkang   kulôtjriyôs-aken wau

Ngoko
iki	*anaq*	*ku*	*Tini*	*séng*		*taq*	*kandaq-aké*	*mau*
here	child	I	T	whom		I	told-CAUS	recently

`Here is my child Tini whom I addressed recently.'

Generalization: Krama (polite) forms are from Sanskrit, Ngoko (familiar) forms are native or phonological reductions of Sanskrit forms.

Lexical stratification & honorification I

Hindi honorific suffixes (Gurmeet Kaur p.c.)

(36) *pandit-jī/??sāhab*   `esteemed scholar'   (Sanskrit)
adhyāpak-jī/??sāhab   `esteemed teacher'

(37) *vakīl-sāhab/??jī*   `esteemed lawyer'   (Perso-Arabic)
maulvi-sāhab/??jī   `esteemed ulama'

(38) *principal-jī/sāhab*   `esteemed principal'   (English)
driver-jī/sāhab   `esteemed driver'

Interim summary

- Lexical stratification is a natural outcome of language contact that has structural & social consequences

- Speakers need implicit awareness of stratal assignment in order to implement particular processes of syntactic structure-building & phonetic realization

- Speakers need explicit awareness of stratal assignment in order to engage in metalinguistic reflection, perform class- & education-based identities, and evaluate others' performances of same

- Stratification is a scaffold for the emergence of honorification and suppletion

Lexical stratification in Japanese (Itô & Mester 1999)

(39)

Yamato	Sino-Japanese	English		
inu	*ken*	*doggu*	`dog'	(*ban-**ken*** `watchdog')
toki	*jikan*	*taimu*	`time'	
suki	*ai*	*rabu*	`love'	
kaerigoto	*henji*	*repurai*	`reply'	
chikara	*ryoku*	*pawaa*	`power'	(*fū-**ryoku*** `wind power')
kaze	*fū*	*uindo*	`wind'	(***uindo**-faamu* `wind farm')
tsuma	*kanai*	*waifu*	`wife'	
mizu	*sui*	*uōtaa*	`water'	(***sui**-zoku-kan* `aquarium',
				*mineraru-**uōtaa*** `mineral water')

Yamato & Sino-Japanese roots honorificate differently

(40) *kak-u*
write-NPST
`write (citation form)'

(41) *o-kak-i-ni*   *nar-u*
HON-write-NMLZ-DAT become-NPST
`write (honorific form)

(42) *o-kak-i*   *su-ru*
HON-write-NMLZ do-NPST
`write (humilific form)'

(43) *benkyō   su-ru*
study   do-NPST
`study (citation form)'

(44) *go-benkyō   nasar-u*
HON-study   do.HON-NPST
`study (honorific form)

(45) *go-benkyō   itas-u*
HON-study   do.HML-NPST
`study (humilific form)'

Regular honorification of `do' not possible: *o-sh-i-ni nar-u*, *o-sh-i su-ru*
Assumption: (41,44) and (42,45) should be associated with a uniform syntax.

Passive honorific also possible (Sellner 2006)

(46) *tennō,*   *kōgōryō-heika-wa*   *senshu-ra-o*   *negiraw-are-ta*
emperor   empress-HON-TOP   player-PL-ACC   thank-PASS-PST
`Their Majesties the Emperor and Empress deigned to thank the players [of the Japanese football team for their efforts at the 2006 Olympics].'   (Yamato)

(47) *kōtaishi-sama-wa*   *senshu-ra-to*   *40-pun-amari*   *kondan*   *s-are-ta*
Crown.Prince-HON-TOP   player-PL-with   40-minutes-about   chat   do-PASS-PST
`His Imperial Highness the Crown Prince deigned to chat with the players for about 40 minutes.'   (Sino-Japanese)

Stratal assignment is subject to diachronic, interspeaker, & idiosyncratic variation

Sino-Japanese words obligatorily treated as Yamato words:

(48)   *o-cha* `tea', *o-uma* `horse', *o-genki* `health', *o-denwa* `telephone'

Yamato words obligatorily treated as Sino-Japanese words:

(49)   *go-yukkuri* `slowly', *go-mottomo* `best'

Foreign words variably treated as Yamato words:

(50)   *o-toire* `toilet', *o-Furansu* `France', *o-kokakōra* `Coke', *o-tabako* `cigarette'

Sino-Japanese words variably treated as Yamato words:

(51)   *o-renraku~go-renraku* `contact', *o-henji~go-henji* `reply'

Conservative, innovative, & intermediate speakers

(52) *sōkyū-ni*   *go-henji*   *itashi-mas-u*
     prompt-ADV HON-reply   do.HML-POL-PST
     `I will reply promptly.'

(53) *sōkyū-ni*   *o-henji*   *itashi-mas-u*
     prompt-ADV HON-reply   do.HML-POL-PST
     `I will reply promptly.'

(54) *o-kyaku-no*   *go-henji;*   *watakushi-no o-henji*
     HON-guest-GEN HON-reply   I-GEN   HON-reply
     `the guest's reply (honorific); my reply (beautificatory)'

Incomplete assimilation: (53) treats *henji* as Yamato on the nominal level (prefix selection), but as Sino-Japanese on the verbal level (auxiliary selection).

Multiple honorification possible but stigmatized

(55)   *tabe-ru* `eat'

(56)   *tabe-rare-ru* `eat (passive honorific)'

(57)   *meshiagar-u* `eat (honorific)'

(58)   **o-tabe-ni nar-u* (intended: regular honorific of `eat')

(59)   %*o-meshiagari-ni nar-u* `eat (double honorific)'

(60)   %*o-meshiagari-ni nar-are-ru* `eat (triple honorific)'

Assumption: (57-60) should be associated with uniform syntax.

`The professor writes (HON) the article.'

- Voice^0 is where the passive honorific *-rare* optionally appears

- Honorific *nar-* is a flavor of v^0
  - (Honorific *nar-* exhibits differential scrambling behavior from main verb *nar-*)

- A postsyntactic linearization rule fronts verbal *o-*, blocking *kak-i-ni-o*
  - (Verbal honorific *o-* exhibits differential pitch accent behavior from nominal *o-*)

PennState
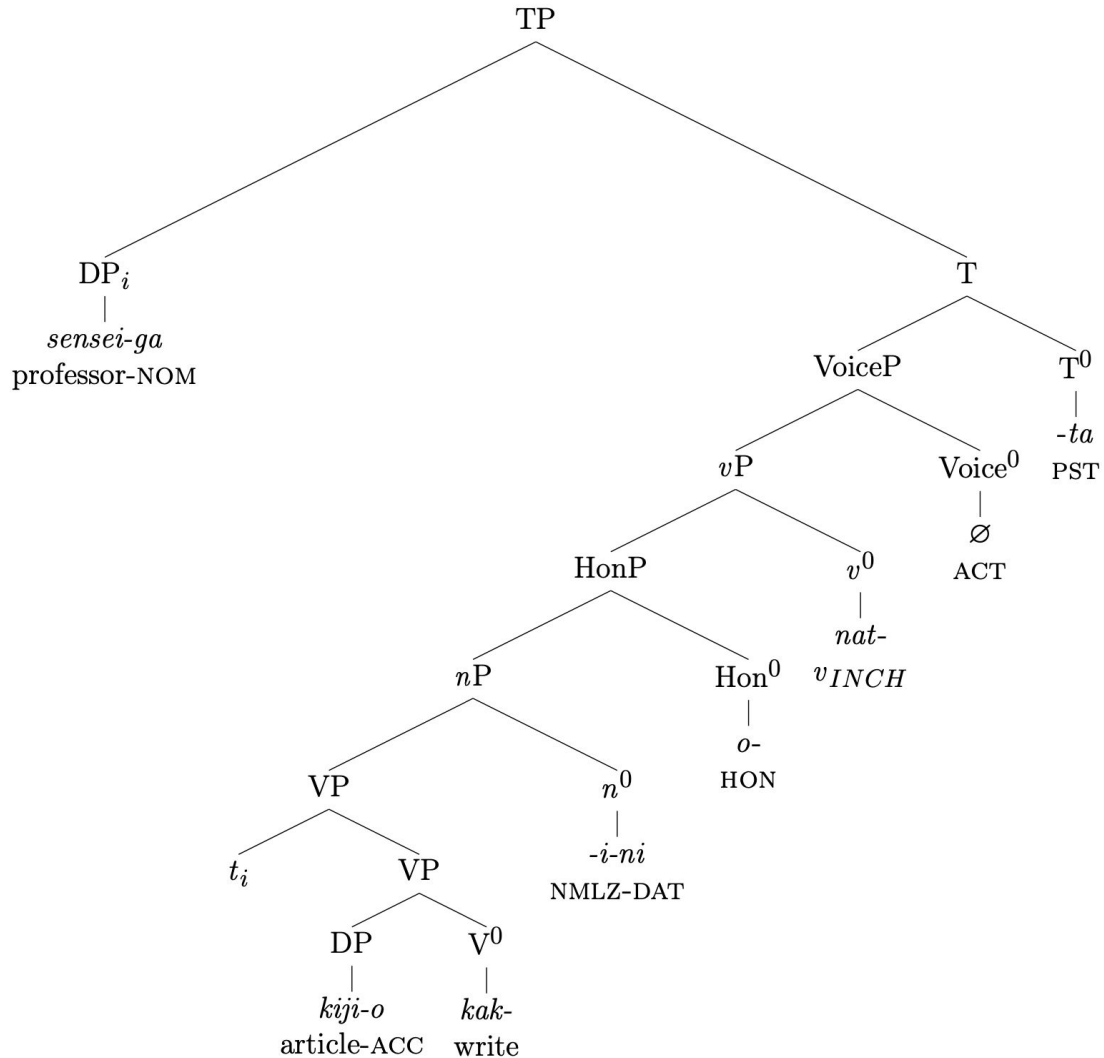
Vocabulary fragment for honorific suppletion in 'eat'

a. $tabe \leftrightarrow \sqrt{EAT}$ elsewhere form of root

b. $meshiagar \leftrightarrow \sqrt{EAT}$ / ___ NMLZ] HON]   suppletive form of root

c. $\varnothing \leftrightarrow$ NMLZ / $\sqrt{EAT}$, $\sqrt{GO}$, ... ___   zero nominaliser under suppletion

d. $i \leftrightarrow$ NMLZ   elsewhere form of nominaliser

e. $\varnothing \leftrightarrow$ HON / $\sqrt{EAT}$, $\sqrt{GO}$, ...] NMLZ] ___   zero honorific prefix under suppletion

f. $o \leftrightarrow$ HON   elsewhere form of honorific prefix

g. $\varnothing \leftrightarrow$ DAT / $\sqrt{EAT}$, $\sqrt{GO}$, ...] NMLZ] HON] ___   zero dative under suppletion

h. $ni \leftrightarrow$ DAT   elsewhere form of dative

i. $\varnothing \leftrightarrow v_{INCH}$ / $\sqrt{EAT}$, $\sqrt{GO}$, ...] NMLZ] HON] ___   zero auxiliary under suppletion

j. $nar \leftrightarrow v_{INCH}$ regular honorific auxiliary

k. $ru \leftrightarrow$ NPST / [−consonantal] ___   nonpast for V-final roots

l. $u \leftrightarrow$ NPST   nonpast for C-final roots

Realizational rules for the normative system

Desiderata

- **Economy**: Uniform syntax for regular & suppletive honorifics

- **Flexibility**: Zero nodes can be filled in stigmatized varieties; differential strata assignment can be microparameterized as diacritic features

22

Why so much instability here?

- **Social reasons**
  - Acquired late in life, *even in the case of native speakers*
  - A site of extreme metalinguistic reflection
  - A double-bind for people who know the normative system: 'I know that it's *supposed* to be X, but so many people say Y, and if my interlocutor is someone who thinks Y is correct, then I may be negatively evaluated for using X, even if it is technically correct...'

- (**The view from English**: As linguists, we know that it is not ungrammatical to end sentences with a preposition. When we write for general audiences, we might avoid doing so anyway, because we do not wish to give the public more reason to distrust the expertise of linguists.)

Why so much instability here?

- **Structural reasons**
  - If we assume a uniform syntax for regular and suppletive honorification, then *meshiagaru* `eat (HON)' is structurally *∅-meshiagar-∅-∅-∅-u*, with
    - a zero honorific prefix (*o-*)
    - a zero nominalizer (*-i*)
    - a zero dative marker (*-ni*)
    - a zero honorific auxiliary (*nar-*)

Claim: Realizational rules that generate multiple consecutive zeroes may present acquisitional or processing difficulties, feeding double-marking for some speakers.

A realizational morphology that acknowledges stratification permits the microvariation that we see in stigmatized speech

(61) *??sensei-wa*   *gengogaku-o*   *o-benkyō-ni*   *nari-mashi-ta*
professor-TOP   linguistics-ACC   HON-study-DAT   become-POL-PST
`The professor studied linguistics.'

(62) *go-benkyō nasai-mashi-ta*   /   *s-are-mashi-ta*
HON-study   do.HON-POL-PST   do-PASS-POL-PST
`studied (honorific)'

Yes, (61) is naturalistic data! Most native speakers would simply treat this as an error when (62) is intended.

- Double assimilation of Sino-Japanese *benkyō* into the Yamato stratum--it takes both the nominal *and* verbal morphology that we expect of Yamato forms

Overdiagnosing suppletion

- Recall that words that share the same core meaning across lexical strata are not necessarily in a paradigmatic/suppletive relationship

- Extending this line of thought to Japanese: **Many verbs that are linked to each other only for semantic reasons have been misclassified as morphological alternants of one another**

Overdiagnosing suppletion

- Recall that words that share the same core meaning across lexical strata are not necessarily in a paradigmatic/suppletive relationship

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Traditional grammar underdiagnoses defectivity and overdiagnoses suppletion

(63)   *au* `meet'   *o-ai suru*
         o-ai-ni naru `meet (HON)'
         o-me-ni kakaru `~~meet (humilific)~~ lay eyes on (euphemism)'

(64)   *neru* `sleep'   *o-ne-ni naru*
         o-yasumi-ni naru `~~sleep (honorific)~~ rest (HON)'
         yasumu `rest'

(65)   *shinu* `die'   *o-shini-ni naru*
         o-nakunari-ni naru `~~die (honorific)~~ become nonexistent (HON)'
         naku naru `become nonexistent'

Hai- verbs are not suppletive forms

(66) *miru* `see'        *haiken suru* `see (humilific)'
(67) *yomu* `read'      *haidoku suru* `read (humilific)'
(68) *kiku* `hear'       *haichō suru* `hear (humilific)'
(69) *kariru* `borrow'  *haishaku suru* `borrow (humilific)'
(70) *ukeru* `get'        *haiju suru* `get (humilific)'
(71) *ogamu* `pray'     *hairei suru* `pray (humilific)'

Claim: These are not suppletive (morphological) alternants, but stratal (registral) alternants.

Suppletion diagnostic 1: Maintenance of truth-conditionality

(72) *hon-o   yon-da*
book-ACC read-PST
`[I] read the book.'

(73) *hon-o   o-yomi   shi-mash-ō   ka*
book-ACC HON-read do-POL-VOL   Q
`[Because the letters are so small,] shall I read the book for you?'

(74) *go-hon   haidoku   itashi-mashi-ta   (*o-yomi shimashita)*
HON-book read   do.HML-POL-PST
`I read *(your) book.'

Claim: *Hai-* verbs are a different predicate with their own argument-structural requirements, *not* suppletive alternants.

Suppletion diagnostic 2: Maintenance of suppletion under grammaticalisation

(75)   *iru* `as main verb: exist; as auxiliary: progressive'

(76)   *irassharu* `exist (honorific)'

(77)   *oru* `exist (humilific)'

(78)   *aruite iru* `walking'

(79)   *aruite irassharu* `walking (honorific)'

(80)   *aruite oru* `walking (humilific)

(81)   *miru* `as main verb: see; as auxiliary: try'

(82)   *aruite miru* `try walking'

(83)   **aruite haiken suru* (intended: `try walking [humilific]')

Suppletion diagnostic 3: Maintenance of suppletion under compound formation

(84)   *kiru* `wear'
(85)   *ki-mono* `clothes'
(86)   *mesu* `wear (honorific)'
(87)   *meshi-mono* `finery'

(88)   *iu* `say'
(89)   *ii-wake* `excuse'
(90)   *mōsu* `say (humilific)'
(91)   *mōshi-wake* `excuse, extenuation'

(92)   *yomu* `read'
(93)   *yomi-mono* `reading materials'
(94)   **haidoku shi-mono* (intended: reading materials)'

Take-homes

- Lexical stratification is associated with morphosyntactic consequences

- Stratal assignment can differ over time, between speakers, and *exhibits gradience*
  - *o-henji itasu* `reply': Nominal morphology appropriate for a Yamato word + verbal morphology appropriate for a Sino-Japanese word
  - *o-benkyō-ni naru* `study' Nominal & verbal morphology appropriate for a Yamato word

- Spans of multiple zero morphemes are at high risk of overt realisation

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