

Day 3: dependent indefinites and discourse anaphora

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1 Summery of the previous lectures

- Dependent indefinites seems to perform distributive quantification with a plural term, but it seems inert with a distributive quantifier.
 - The previous approaches suggest a co-variation condition that scopes out or projects from the scope of a distributive quantifier.
- In Day 2, I argued that this condition for dependent indefinites take scope independently of their existential force with Turkish data.
 - Furthermore, I claimed that the co-variation has to be a global constraint on the output context, which scopes under negation.
- In this last lecture, I inquire their contribution with respect to discourse anaphora.
 - Specifically, I ask whether dependent indefinites may feed *quantificational subordination*.

2 Quantificational subordination

- Discourse anaphora is number sensitive: a singular pronoun may not refer back to entities that have been introduced with plural expressions.

- Henceforth, I follow the notational convention in which the superscript u_n signals an assignment extension with new values on u_n and the subscript $_{u_n}$ signals referring back to the values already stored in u_n .
- (1) a. Tim u_1 wrote a paper u_2 .
b. He $_{u_1}$ submitted {it / #them} $_{u_2}$ to L&P.
- (2) a. Tim u_1 wrote three papers u_2 .
b. He $_{u_1}$ submitted {#it / them} $_{u_2}$ to L&P.
- Singular indefinites under the scope of a quantifier may not antecedent singular pronouns.
- (3) a. Every student u_1 wrote a paper u_2 .
b. {#It / They} $_{u_2}$ is/are well written.
- However, a singular indefinite under the scope of a quantifier may antecedent a singular pronoun if the pronoun is under the scope of another quantifier.
- This is called *quantificational subordination* (Karttunen, 1969, *et seq*).
- (4) a. Every student u_1 wrote a paper u_2 .
b. They $_{u_1}$ **each** submitted it $_{u_2}$ to a journal.
- Here, (4b) ‘retrieves’ the dependency between u_1 and u_2 introduced in the preceding sentence.
- This DPIL offers an analysis of quantificational subordination.
- Recall the example (4).
- (4) a. Every student u_1 wrote a paper u_2 .
b. They $_{u_1}$ **each** $_{\delta_{u_1}}$ submitted it $_{u_2}$ to a journal.
- The DRS of (4a) is given in (5).
- (5) $[u_1]; \delta_{u_1}([| \text{student}(u_1) |]; [| \text{Card}_1(u_1) |]; [u_2]; [| \text{paper}(u_2) |]; [u_2 = 1]; [| \text{wrote}(u_1)(u_2) |])$
- Here, the singular indefinite “a paper” comes with the collective atomicity condition $u_1 = 1$.

- However, it is evaluated under the scope of δ_{u_1} .
- i.e. the value of u_2 has to be atomic with respect to each subset assignment in which u_1 has a particular value.
- As a result, the collective atomicity condition is ‘neutralised’ due to distributivity, and u_2 may store a plural value under a PIS.
- A PIS illustrated in Table 1 exemplifies the result of a successful context update with (5).

H	u_1	u_2
h_1	student ₁	paper ₁
h_2	student ₂	paper ₂
h_3	student ₃	paper ₃

Table 1: Student-paper correspondence in the discourse

- Now, consider the DRS of (4b) given in (6).

(6) $[[u_1 > 1]; \delta_{u_1}([|u_2 = 1|]; [|submitted(u_1)(u_2)|])$

- Here, the plural pronoun “they” comes with the collective plurality condition $u_1 > 1$, and it ‘reuse’ an old dref u_1 .¹
- For an expository reason, I adopt the view that a pronoun denotes a free occurrence of a dref.
- Importantly, the adverbial “each” introduces δ co-indexed with u_1 .
- Accordingly, the singular pronoun “it” picks up the value of u_2 with respect to $H_{u_1=d}$ for each d , i.e. h_1 , h_2 and h_3 .
- This means that the collective atomicity condition of the singular pronoun is also neutralised under the scope of δ : $u_2 = 1$ is evaluated against h_1 , h_2 and h_3 , instead of H as a whole.

¹I disregard the status of pronoun number in this lecture, but it is more plausible to model it as a definedness condition imposed on the input context.

- As a result, the intended anaphora does not lead to number mismatch.
- This analysis of quantificational subordination hinges on presence of δ .
- Since δ evaluates a DRS with respect to subsets of assignments, it neutralises the collective atomicity condition.
- Otherwise, the collective atomicity condition is not satisfied with the value introduced with a singular indefinite under the scope of a quantifier.
- Coming back to the topic of dependent indefinites, the two approaches make different predictions.
- The Dist-licensor approach (Henderson, 2014; Guha, 2018, a.o.) predicts that dependent indefinites license feed quantificational subordination, but
- The Concord approach (Kuhn, 2017) predicts that dependent indefinites should **not** license quantificational subordination.²
- In this lecture, I offer a case study with Japanese dependent indefinite “zutsu.”

3 Dependent indefinites in Japanese

- Japanese has a suffix “-zutsu,” which attaches to cardinals and some quantity expressions.
- The unit NUM-zutsu shows several signatures of dependent indefinites.
- Its behaviour differs from those in Kaqchikel Mayan, ASL, Turkish, etc, and rather similar to those in Telugu (Balusu, 2006), Korean Oh (2001), etc.
- Take Telugu reduplicative numerals exemplified in (7).
- They trigger an obligatory distributive reading, but they may distribute over individuals or over *occasions*.
- I call (7a) an *individual reading*, and (8) an *occasion reading*.

²Whether non-distributive plural predication may ‘feed’ quantificational subordination will be the main focus of my talk in Semantics Research Group immediately after today’s lectures.

- (7) Ii pillalu **renDu-renDu** kootu-lu-ni cuus-ee-ru.
 these kid-PL two-two monkey-PL-ACC see-PAST-3rd PL
 a. “These kids saw two monkeys each.”
 b. “These kids saw two monkeys {each time / in each location}.”
 (Balusu, 2006, Telugu)
- Unlike dependent indefinites we have seen so far, Telugu dependent indefinites are compatible with a singular argument under an occasion reading.
- (8) Raamu **renDu-renDu** kootu-lu-ni cuus-ee-Du.
 Ram two-two monkey-PL-ACC see-PAST-3rd.SG
 “Ram saw two monkeys each time.” (Balusu, 2006, Telugu)
- Similarly, a dependent indefinite under the scope of an overt distributive quantifier is ambiguous in Telugu.
 - It still exhibits the signature of dependent indefinites: it is not made redundant under the scope of a distributive quantifier in (9a).
- (9) Prati pillavaaDu **renDu-renDu** kootu-lu-ni cuus-ee-Du.
 Every kid two-two monkey-PL-ACC see-PAST-3rd.SG
 a. “Every kid saw two monkeys (each).”
 b. “Every kid saw two monkeys {each time / at each location}.”
 (Balusu, 2006, Telugu)
- Japanese “zutsu” behaves in parallel with Telugu dependent indefinites.
- (10) Ken-to-Ryo-ga kaban-o san-ko-**zutsu** hakon-da.
 Ken-and-Ryo-NOM suitcase-ACC 3-CL-DIST carry-PAST
 a. “Ken and Ryo carried three suitcases each.” (individual)
 b. “Ken and Ryo carried three suitcases each time.” (occasion)
- (11) Shun-ga kaban-o san-ko-**zutsu** hakon-da.
 Shun-NOM suitcase-ACC 3-CL-DIST carry-PAST
 “Shun carried three suitcases at each salient occasion.”
- (12) Dono syokuin-mo kaban-o san-ko-**zutsu** hakon-da.
 which employee-also suitcase-ACC 3-CL-DIST carry-PAST
 a. “Every employee carried three suitcases (each).”
 b. “Every employee carried three suitcases each time.”

4 Setting up the testing ground

- In this section, I set up the background for testing quantificational subordination with “zutsu.”
- To examine quantificational subordination, one needs an anaphoric expression with an atomicity inference.³
- Otherwise, the unique contribution of overt distributor is not made visible.
- The *so*-series demonstratives in Japanese have the discourse anaphoric use as exemplified in (13b).⁴

- (13) a. Takashi-ga saikin ayasii ginkoo-in-ni a-tta.
 Takashi-NOM recently suspicious banker-DAT meet-PAST
 “Takashi recently met a suspicious banker.”
- b. **Sono**-ginkoo-in-ga han'nin-da.
 the-banker-NOM culprit-COP
 “The banker is the culprit.”

- In this case, *so*-type anaphoric expressions have to be plural to pick up the value of a plural expression as exemplified in (14b) and (14c).

- (14) a. Takashi-ga saikin huta-ri-no ginkoo-in-ni a-tta.
 Takashi-NOM recently 2-CL-GEN banker-DAT meet-PAST
 “Takashi recently met two bankers.”
- b. *Sono-ginkoo-in-ga han'nin-da.
 the-banker-NOM culprit-COP
 “The banker is the culprit.”
- c. Sono-ginkoo-in-**tachi**-ga han'nin-da.
 the-banker-PL-NOM culprit-COP
 “The bankers are the culprits.”

³It is not obvious in Japanese because nominal arguments in Japanese are underspecified/ambiguous in regard to definiteness and plurality as exemplified in (i).

(i) Buin-ga booru-o katazuke-ta.
 member-NOM ball-ACC put away-PAST
 “({A / The}) club member(s) put away (a / the) ball(s).”

⁴I gloss “sono” as “the” without any theoretical commitment.

- However, the picture is not as simple as it seems: a singular *so*-type expression with an overt restrictor sometimes permits plural reference.⁵

- (15) Kono-daigaku-dewa ken'nai-kara-no shingakusha-ga daitasuu-o
 this-university-at-TOP in prefecture-from-GEN university goer-NOM majority-ACC
 shime-masu. Soshite, **sono**-gakusei-no hotondo-ga ken'nai-no
 occupy-polite.PRES. And, the-student-GEN most-NOM in prefecture-GEN
 kigyoo-ni shuushokushi-masu.
 company-to get employed-polite.PRES
 “In this university, the majority of students come from the prefecture.
 And, most of the students are recruited by companies in this prefecture.”

(p.c., Yasu Sudo)

- To avoid this confound, I employ *so*-type expressions with bound suffixal noun classes, e.g., “**so-re**” (it), “**so-ko**” (there), and “**so-itsu**” (the person).
- Especially, I use “**so-ko**” (there).⁶
- In an analogous context, “sono-kigyoo” (the company) permits plural reference, but “soko” (there) does not.

- (16) Kono-kyaria ibento-dewa kokunai kaigai-o towa-zu ooku-no kigyoo-ga
 this-career event-at-TOP domestic abroad-ACC ask-without many-GEN company
 buusu-o syutten-si-masu. Soshite, {**sono**-kigyoo / ***so-ko**}-no hotondo-ga
 booth-ACC exhibit-polite.PRES. And, {the-company / there}-GEN most-NOM
 ichi-nichi-no uchi-ni yuushuuna gakusei-o kakutokusi-masu.
 1-day-GEN within-at competent student-ACC obtain-polite.PRES
 “In this career event, a number of domestic and international companies
 exhibit a booth. And, most of {those companies / there} recruit a compe-
 tent student within one day.”

- At the first sight, an addition of “ichi-mei/hito-ri” (one-CL_{Person}) to *so*-type expressions with an overt NP seems to work.

⁵This itself is an interesting puzzle, but I do not go into further details as it goes beyond the scope of this article.

⁶See also Hoji (1995, 1997); Ueyama (1998, a.o.) for an argument that “so-ko” (there) is a rigidly singular-denoting item.

- (17) # Kono-daigaku-dewa ken'nai-kara-no shingakusha-ga daitasuu-o
 this-university-at-TOP in prefecture-from-GEN university goer-NOM majority-ACC
 shime-masu. Soshite, **sono-hito-ri**-no gakusei-no hotondo-ga
 occupy-polite.PRES. And, the-one-CL-GEN student-GEN most-NOM
 ken'nai-no kigyoo-ni shuushokushi-masu.
 in prefecture-GEN company-to get employed-polite.PRES
 "In this university, the majority of students come from the prefecture.
 And, most of the student are recruited by companies in this prefecture."

- This complex anaphoric form "sono-one-CL-NP" (the one NP) seems to require a pragmatic reason for the addition of cardinal modification.
- A naive addition of it to (13b) sounds strange.

- (18) a. Takashi-ga saikin ayasii ginkoo-in-ni a-tta.
 Takashi-NOM recently suspicious banker-DAT meet-PAST
 "Takashi recently met a suspicious banker."
 b. ?? Sono-**hito-ri**-no ginkoo-in-ga han'nin-da.
 the-1-CL-GEN banker-NOM culprit-COP
 "The one banker is the culprit."

- However, if it serves for another function, this strangeness is gone.

- (19) Nyuusu-ni yoreba, boo-hansyakai soshiki-ga zenseiryoku-o motte
 news-at following, some-antisocial force-NOM all energy by means of
 ichi-mei-no ginkoo-in-o o-tte-iru-rasii. Ano-soshiki-ga
 one-CL-GEN banker-ACC chase-STATE-PRES-EVID. that-organisation-NOM
sono-ichi-mei-no ginkoo-in-ni nanbyaku toiu jin'in-o saita-koto-o
 the-one-CL-GEN banker-to hundreds of people-ACC use-fact-ACC
 kangae-ru-to, soshiki-ni totte yohodo-no hutsugou-ga a-tta-ni
 think-PRES-then, organisation-to for very-GEN inconvenience exist-PAST-that
 chigainai.
 must.
 "According to the news, some antisocial force is chasing a banker, spending all their energy. Considering the fact that this organisation spends hundreds of people to this one banker, there must be serious inconvenience for them."

- This means is ultimately not satisfactory, though.

- If the antecedent of “sono-one-CL-NP” also accompanies “one-CL,” the same plural reference seems possible.

- (20) Kono-famiresu-ni-wa ichi-mei-no kyaku-ga yoku-otozurer-u.
 this-family restaurant-at-TOP 1-CL-GEN customer-NOM often-visit-PRES.
Sono-ichi-mei-no kyaku-no hotondo-ga kin'jo-ni sum-u
 the-one-CL-GEN customer-GEN most-NOM neighbourhood-at live-PRES
 daigakusei-da.
 undergrads-COP
 “Single-use customers often visit this restaurant. Most of those single-use customers are undergraduates who live nearby.”

- Thus, explicit addition of “one-CL” does not remove the confound with plural reference.
- For this reason, I only use “soko” to test quantificational subordination.⁷
- The overt adverbial distributor “sorezore” licenses quantificational subordination as exemplified in (21b).

- (21) a. Dono-gakusei^{u1}-mo yuumei kigyoo^{u2}-to kontakuto-o to-tta.
 which-student-also famous company-to contact-ACC take-PAST
 “Every student contacted to a famous company.”
- b. Karera_{u1}-wa **sorezore** soko_{u2}-ni entorii shiito-o oku-tta.
 they-TOP sorezore there-to entry sheet-ACC send-PAST
 “They each sent there an entry sheet.”
- (21b) is true if for each student x , x chose a famous company y and sent an entry sheet to y , i.e. the student-company correspondence introduced in (21a) is retrieved in (21b).

⁷It seems that “sore” does not behave like “soko:” it is compatible with a collective predicate.

- (i) Kono-mori-ni-wa koeda-ga takusan ochi-tei-ru node, **sore-o** atsume-te maki-ni
 this-forest-at-TOP twig-NOM many fall-STATE-PRES SO, it-ACC gather-CONJ firewood-as
 shi-yoo.
 do-EXHORTATIVE
 “There are a lot of twigs falling in this forest, so let’s gather them and use them as fire-woods.”

On the other hand, plural reference sounds much harder with “soitsu” (it comes with impolite or weakly derogatory flavour toward its referent), and thus it would also work fine for my purpose.

5 Subordination with dependent indefinites

- Now, let's see if “zutsu” licenses quantificational subordination.⁸
- First of all, “zutsu” independently requires its host to be plural, cf. *counting classifier requirement* of the binominal “each” in English.⁹

(22) # Ann-to-Belle_{u1}-ga kono-eiga_{u2}-o i-ppon-zutsu mi-ta.
 Ann-and-Belle-NOM this-movie-ACC one-CL-dist watch-PAST
 “Ann and Belle watched this movie each.”

- This precludes the option to directly combine NUM-zutsu and “soko.”
- Here, I use the two configurations in (23) to test the availability of quantificational subordination.¹⁰

(23) a. [NP ... soko^{u_n} ...]^{u_m}-o one-CL-zutsu (embedded NP)
 b. soko^{u_n}-ni NP^{u_m}-o one-CL-zutsu (ditransitive)

- The first configuration permits subordination.¹¹

⁸NB: my own judgement the data with “zutsu” in this section is getting less and less crisp.

⁹I thank to an anonymous reviewer of a journal for bringing it to my attention.

¹⁰It is worth asking if the binominal “each” may also occur in the same configurations.

¹¹I thank to Yasu Sudo (p.c.) for offering me an example, which (24) is based on. I modified the example mostly based on replacement of “sono-NP” with “soko.” I put aside the contribution of contrast at this point.

- (i) a. Dono-seito^{u1}-mo, mazu, [jibun_{u1}-no shi-tte-iru rekishijoo no
 which-pupil-also first self-NOM know-STATE-PRES historical-GEN
 jinbutsu ichi-meij]-no namae-o kami-ni kai-ta.
 person-one-CL-GEN name-ACC paper-at write-PAST
 “Every pupil wrote the name of one historical figure they know.”
- b. Sono-go, teegakunen-no kodomo-tachi_{u1}-wa ichi-mon-**zutsu** [sono-jinbutsu_{u2}-ni
 after-that, lower grade-GEN child-PL-TOP one-CL-zutsu [the-person-at
 kansursu mondai]^{u3}-o to-ki, (koogakunen-no kodomo-tachi_{u1}-wa ni-mon-zutsu
 concern problem]-ACC solve-PAST, higher grade-GEN child-PL-TOP 2-CL-zutsu
 toi-ta.)
 solve-PAST
 “They each solved one question about the country each.”

- (24) a. *Dono-kodomo*^{u1}-mo [*jibun*_{u1}-ga shi-tte-iru toonan'ajia-no
 which-child-also self-NOM know-STATE-PRES South East Asia-GEN
kuni]-no *namae*-o *kami*-ni kai-ta.
 country-GEN name-ACC paper-at write-PAST
 “Every child wrote the name of a South East Asian country they
 know.”
- b. *Karera*_{u1}-wa [*soko*_{u2}-ni kansursu mondai]^{u3}-o *ichi-mon-zutsu* toi-ta.
 they-TOP [there-at concern problem]-ACC one-CL-zutsu solve-PAST
 “They solved one question about the country each.”

- Its variant with “sorezore” works fine as well.

- (25) a. *Dono-kodomo*^{u1}-mo [*jibun*_{u1}-ga shi-tte-iru toonan'ajia-no
 which-child-also self-NOM know-STATE-PRES South East Asia-GEN
kuni]-no *namae*-o *kami*-ni kai-ta.
 country-GEN name-ACC paper-at write-PAST
 “Every child wrote the name of a South East Asian country they
 know.”
- b. *Karera*_{u1}-wa **sorezore** [*soko*_{u2}-ni kansursu mondai]^{u3}-o *ichi-mon(-zutsu)*
 they-TOP sorezore [there-at concern problem]-ACC one-CL(-zutsu)
 toi-ta.
 solve-PAST
 “They each solved one question about the country (each).”

• The second configuration also permits subordination.

- (26) a. *Dono-maneejaa*^{u1}-mo [*AI*-no doonyuu-ni kusenchuu-no kaisya]^{u2}-o
 which-manager-also [AI-GEN introduction-at struggling-GEN company]-ACC
i-ssha ukemo-tta.
 one-CL take-PAST
 “Every manager took in charge of a company that is struggling with
 introduction of AI.”
- b. *Karera*_{u1}-wa *soko*_{u2}-ni yuunoo na buka^{u3}-o *hito-ri-zutsu* haken-shita.
 they-TOP there-to competent subordinate-ACC one-CL-zutsu send-PAST
 “They sent there one competent subordinate each.”

- Again, its variant with “sorezore” works fine as well.

- (27) a. Dono-maneejaa^{u1}-mo [AI-no doonyuu-ni kusenchuu-no kaisya]^{u2}-o
 which-manager-also [AI-GEN introduction-at struggling-GEN company]-ACC
 i-ssha ukemo-tta.
 one-CL take-PAST
 “Every manager took in charge of a company that is struggling with
 introduction of AI.”
- b. Karera_{u1}-wa **sorezore** soko_{u2}-ni yuunoo na buka^{u3}-o hito-ri(-**zutsu**)
 they-TOP sorezore there-to competent subordinate-ACC one-CL-zutsu
 haken-shita.
 send-PAST
 “They each sent there one competent subordinate (each).”

- These observations suggest the possibility that “zutsu” licenses quantificational subordination in the two configurations given in (23).

- (23) a. [NP ... soko^{u_n} ...]^{u_m}-o one-CL-zutsu (embedded NP)
 b. soko^{u_n}-ni NP^{u_m}-o one-CL-zutsu (ditransitive)

- This is a challenge to Kuhn (2017): his entry of dependent indefinites do not involve δ which may take scope over a pronoun.
- One revise his entry so that it involves δ that takes scope over other materials in the same clause.
- However, it wrongly predicts a strange inverse reading.

- (28) Three students saw two-two zebras.
 \nleftrightarrow There are groups of two zebras such that for each group of two zebras, there are three students who saw them.

- In contrast, this is compatible with Henderson (2014); Guha (2018): the covert *Dist* may take scope over “soko” and thus subordination is expected.
- $\llbracket \text{zutsu} \rrbracket$ can be defined as an adverbial dependent indefinite as follows.

- (29) $\llbracket n\text{-zutsu}_{u_n} \rrbracket = \lambda P_{\langle ET \rangle} \lambda v [\text{inside}(v/u_n) = n]; \overline{[\text{outside}(v/u_n) > 1]}; P(v)$

- By combining it with the dependency-suppressing definition of plural extension (van den Berg, 1996, a.o.) or the dependency-suppressing definition of numerals (Guha, 2018), (29) requires insertion of covert *Dist* to satisfy the post-supposed outside condition.

- What about occasion distributive reading?
 - Judgements seem to vary, but it is generally slightly degraded than the previous examples.
- (30) a. Masanari^{u1}-wa itsumo chigau kuni-ni^{u2} chookikan taizai-suru.
 Masanari-TOP always different country-at stay-PRES.
 “Masanari always stays at a different country.”
- b. ? Kare_{u1}-wa soko_{u2}-ni koohai^{u3}-o hito-ri-zutsu tsure-tei-ku.
 he-TOP there-to junior peer-ACC one-CL-zutsu bring-PRES.
 “He bring there a junior peer of his each time.”
- If (30b) is acceptable under the subordination reading, it suggests that the relevant type of distributivity in its occasion distributive reading (generic / covert *always*) may also license quantificational subordination.
 - To capture this, one may adopt DPIL with events (Henderson, 2014; Guha, 2018; Law, 2020) and let “zutsu” be able to be dependent on an event dref.¹²
 - If one defines the covert genericity operator *Gen* so that it involves δ which is associated with an event/situation dref, (30b) can be analysed analogously to (24b) and (26b).
- Similarly, (31b) requires that each of the subject individuals sent an entry sheet one by one, at different timing.
 - Subordination sounds harder, but some people accept (31b) with a subordinated reading.
- (31) a. Dono-gakusei^{u1}-mo yuumei kigyoo^{u2}-to kontakuto-o to-tta.
 which-student-also famous company-to contact-ACC take-PAST
 “Every student contacted to a famous company.”
- b. % Karera_{u1}-wa hito-ri-zutsu soko_{u2}-ni entorii shiito-o oku-tta.
 they-TOP one-CL-zutsu there-to entry sheet-ACC send-PAST
 “They each sent there an entry sheet.”
- One may possibly regard this as a pluractional reading.

¹²This implies that the variation between Kaqchikel-type dependent indefinites and Telugu-type dependent indefinites lies in whether a dependent indefinite is selective or not. This is just a restatement of the pattern, though.

- (32) X-Ø-in-kan-**ala'** ju-jun wuj.
 Completive-Abs.3rd.Sg-Erg.1st.Sg-search-PA one-one book
 "I looked for a book (in each location or at each time.) (Henderson, 2014)

- (33) a. Q'ij qij x-Ø-u-kano-j jun wuj.
day day completive-Arg.3rd.Sg-Erg.3rd.Sg-search-Status a book.
“Every day she looked for a (different) book.”
- b. X-Ø-u-kano-la' jun wuj.
completive-Arg.3rd.Sg-Erg.3rd.Sg-search-PA a book.
“She looked for a (particular) book many times (many places.)”
- (Henderson, 2014)

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- (34) a. $\llbracket n\text{-zutsu}_{u_n} \rrbracket = \lambda P_{\langle EV, T \rangle} \lambda v \lambda \zeta \delta_\zeta(P(v)(\zeta); [\llbracket \text{distinct}(\zeta/u_n) \rrbracket; [\llbracket \text{inside}(v/u_n) = n \rrbracket; [\llbracket \text{outside}(v/u_n) > 1 \rrbracket]])$
 b. $\llbracket \text{distinct}(\zeta/u_n) \rrbracket = \lambda G \lambda H [G = H \ \& \ \forall d, e \in H(u_n) [H_{u=d}(\zeta) \neq H_{u=e}(\zeta)]]$

- Crucially, (34a) does not constrain that application of δ_ζ is non-vacuous.
- Thus, it is possible to embed (34a) under the δ operator that comes from a distributive quantifier or the covert *Dist*.
- This is analogous to Balusu's (2006) static analysis of Telugu dependent indefinites.
- This is not quite neat, but this is all what I can say at this point.
- Suggestions welcome!

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