Reduplication and Anaphors

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based on work with Livia Camargo Souza

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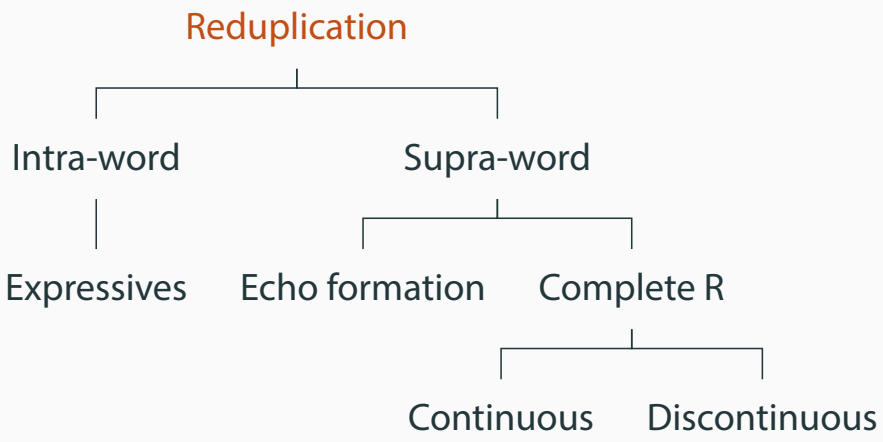
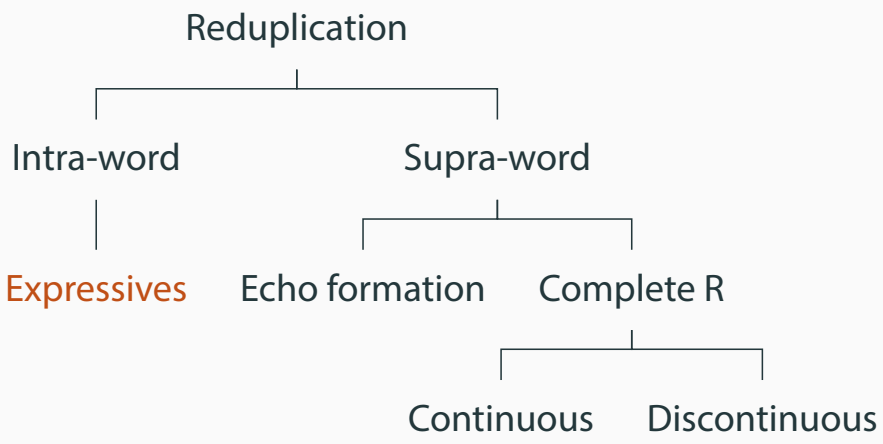
Zoomdemic 2.0

Reduplication in South Asia



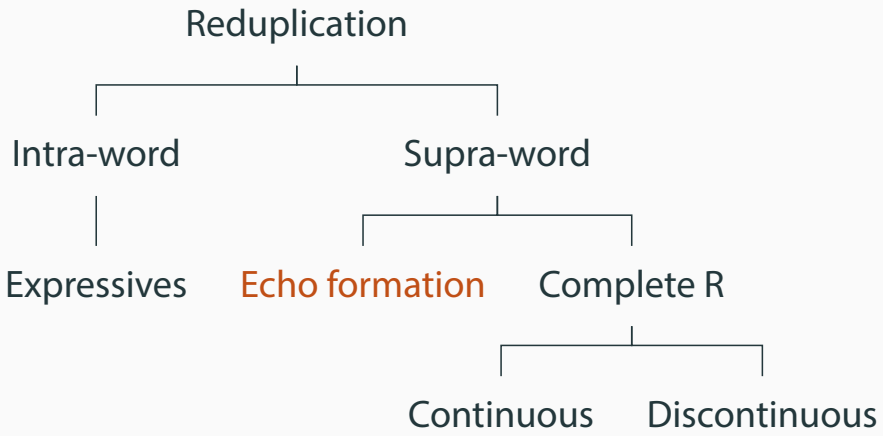
- Reduplication, a broad category of phenomena, is, broadly speaking, repetition of all or part of a lexical item.
- *Usually*, R affects the meaning.
- Abbi 1992 classifies R in South Asia based on a mix of morphosyntactic + semantic criteria.

Reduplication in South Asia



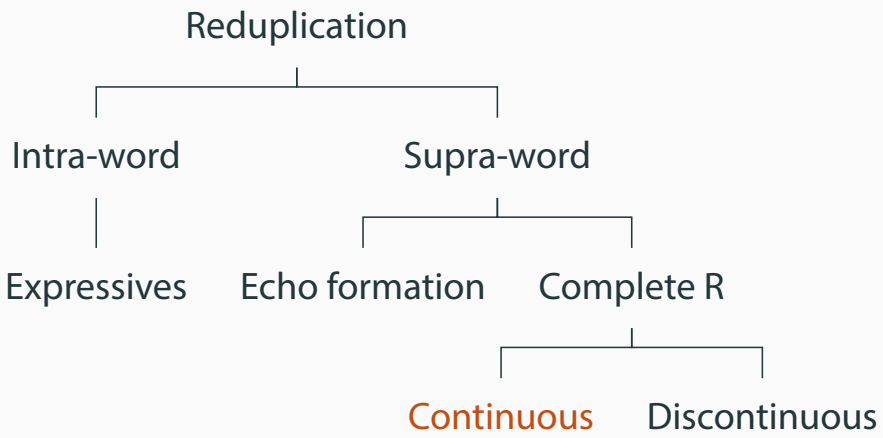
- Any vaguely doubled content. Individual parts have no meanings.
- H: *caT paTa* spicy
- T: *karakara* crispy
- Not to be confused with *expressive content* like honorification, attitudinal adjectives.

Reduplication in South Asia



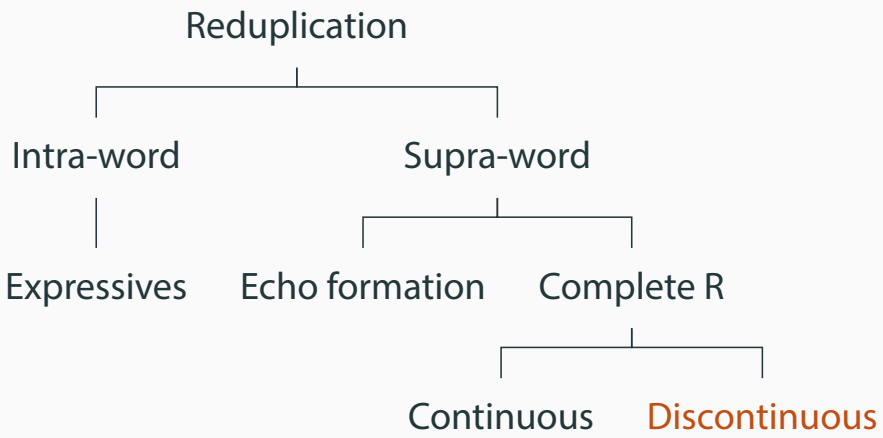
- E: Reduplication shmreduplication
- H: English Vinglish
- T: Pappu gippu (dal and other similar things)

Reduplication in South Asia



- H: *tukde tukde* gang
- H: *dekhte dekhte* (seeing seeing)
- ★ T: *rendu rendu* (two two)

Reduplication in South Asia



- E: one by one
- H: *kam se kam* (minimum)
- ★ T: *okari-[case] okaru* (one another)

What does R mean?

- It seems unlikely that we can provide a unified meaning for all forms of reduplication – both cross-linguistically, and within a language.
- Expressives, for instance, are idiomatic; deriving the meaning by composing R and the base is not straightforward.
- Echo formation activates conceptually related items[1]
  Nevins & Vaux 2003; Walter-Smith 2020
- Abbi 1992 documents the various ways in which total reduplication is interpreted. For instance, reduplicated adverbs can signal simultaneity, iteration, continuation and so on.

[1] As Lidz 2001 notes, EF applies to phrases as well, not just stems or words.

What does R mean?

- Reduplication in some cases signals distributivity.

  (1) H/U: cappa cappa chaan maaro

  (2) ganta ganta-ku mandu taagu
  hour hour medicine drink
  'Take this medicine every hour'

- Can also signal exclusivity

  (3) vaLLu vaLLu maaTla:Dukunna:ru
  they they spoke
  'They spoke among themselves'

Distributive Reduplication

- Famously, most, if not all South Asian languages have dependent indefinites formed by reduplicating numerals.
- These indefinites split the event based on either participants, times or locations of said event(s). Balusu 2006; Balusu & Jayaseelan 2013

(4) pillalu rendu rendu ko:tulanu coosææru
children two two monkeys saw
'The children saw two two monkeys' Balusu 2006

- The children saw two monkeys each Key: P
- The children saw two monkeys at each time Key: T
- The children saw two monkeys at each location Key: L

Distributive Reduplication

- These 'dependent indefinites' have an *anaphoric requirement*. When the subject is singular, there is no 'participant key' reading.

  (5) Akhil saw two two monkeys

- Similarly, if we establish a time and a place, the sentence is infelicitous.

  (6) # At 8:46 AM, in this enclosure, Akhil saw two two monkeys

- There is also a *variation requirement*. It cannot be the case that all sub-events are ones where the same monkey pair was seen.
- The latter is usually modelled as a constraint on the number of monkeys ($n(m) > 2$).[2]

[2] The formal nature of this requirement varies across proposals: not-at-issue, agnostic: Balusu 2006; postsupposition: Henderson 2014; presupposition: Kuhn 2017.

Distributive Reduplication

- As Balusu 2006 notes, when you reduplicate numerals, you can never distribute over the nouns they modify.

  (7) Two two monkeys ate four four bananas

- This sentence does not have a reading where each monkey ate 4 bananas or each banana was eaten by a monkey couple.
- Try it out with 4 monkeys: a, b, c, d. d is anti-social and does not like bananas. {a, b} and {b, c} ate 4 bananas each.

Distributive Reduplication

- You *can* distribute over the noun when you reduplicate the noun itself.

(8) inti-inti-ki parcha pampaamu
house-house-to pamphlet sent.1pl
'We sent the pamphlet to *each house*'

- Including indefinites:

(9) evar-evaru panDlu tinna:ru?
who-who fruits ate
'Who (all) ate fruits?'

(10) evar-evaru em-emi tinna:ru?
who-who what-what ate?
'Who ate what?' (Only pair-list accepted)

What else distributes?

- Distribution ⇄ Reduplication
- Some predicates distribute.[3]

(11) The students walked

(12) The students are intelligent

(13) The students praised the teacher

(14) # The students are many

- There are distributive quantifiers: *pratii* 'each' (Telugu)
- Some modifiers:

(15) The students and the teachers sang and danced, respectively

- Reciprocals

(16) The students cursed each other

[3] That's the most salient reading at least

Reciprocals

- Reciprocals in Telugu are made up of two indefinites (*okaru* 'one.hum'), separated by a case marker.

  (17) pillalu **okari-ni okaru** meccukunnaaru
  kids one-acc one praised
  'The kids praised one another'

  (18) pillalu **okari-to okaru** goDavapaDDaaru
  kids one-comm one fight
  'The kids fought with one another'

- I assume, following Subbarao & Lalitha Murthy 1999 that these are reduplicated. Contrast:

  (19) The boys each (with others) hit (some of) the other(s)

  (20) Okk-okka abbayi maroka abbayi-ni kottææDu[4]
  one-one boy another boy hit
  'Each boy hit another'

[4] Note that *one* behaves unlike other numerals. With humans, you can add *-ru* to obviate this.

Reflexives

- Similar to reciprocals, reflexives are reduplicated, with an intervening case marker. However, the base is a pronoun, not an indefinite.

(21) pillalu **tama-ni taamu** mečcukunnaaru
kids they-acc they praised
'The kids praised themselves'

(22) pillalu-ku **tama-miida tama-ku** koopam
kids they-on they anger
'The kids are angry at themselves'

DR & Anaphors

- Our suggestion is that distributive reduplication and anaphors are alike:
- They distribute over their antecedent.
- The distributivity is encoded on the reduplicated complex

Balusu 2006; Kuhn 2017

- Since the δ is only over the complex, it does not scope over the verb, or any other material in the VP, a welcome result. Dotlačil 2013
- Reciprocals have a non-identity condition on the two variables, under the δ-operator.
- Reflexives have an overlap condition.

(23) The boys^{x} hit [one one]$^{y}_{x}$

(24) The boys^{x} hit [them them]$^{y}_{x}$

(25) The boys rewarded themselves.
(In-house awards by committee)

Singulars?

- Singular reflexives reduplicate too.
- It makes sense (possibly) that the plural reflexives can be distributive, but why do singular reflexives reduplicate?
- Hunch: *-kun-* requires reduplication, depending on where it attaches, or which aspect of the event it's modifying. Locations also show this distinction. Usually with no overt change in structure.

(26) abbayi tana-**ni** taanu tiTTukunnaaDu
boy he-acc he curse
'The boy cursed himself'

(27) abbayi tana-**lo** taanu tiTTukunnaaDu
boy he-loc he curse
'The boy cursed (someone) mentally'

- If this is right, then the distribution is redundant, but doesn't hurt.

Possible narrowing?

- Intuitively, continuity, iterativity and distributivity all have something in common: an event is broken open, and all the parts share something – the same event, multiple events of the same sort or a requirement that some other property hold true.
- If these intuitions are right, then at least some of the distinctions in Abbi 1992 can be neutralized.
- For a preliminary report on finding order in the chaos that is verbal reduplication, see Ashem & Sanyal 2016

Thanks for listening!

Brickbats shmrickbats to: sreekar.raghotham@rutgers.edu

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DPIL

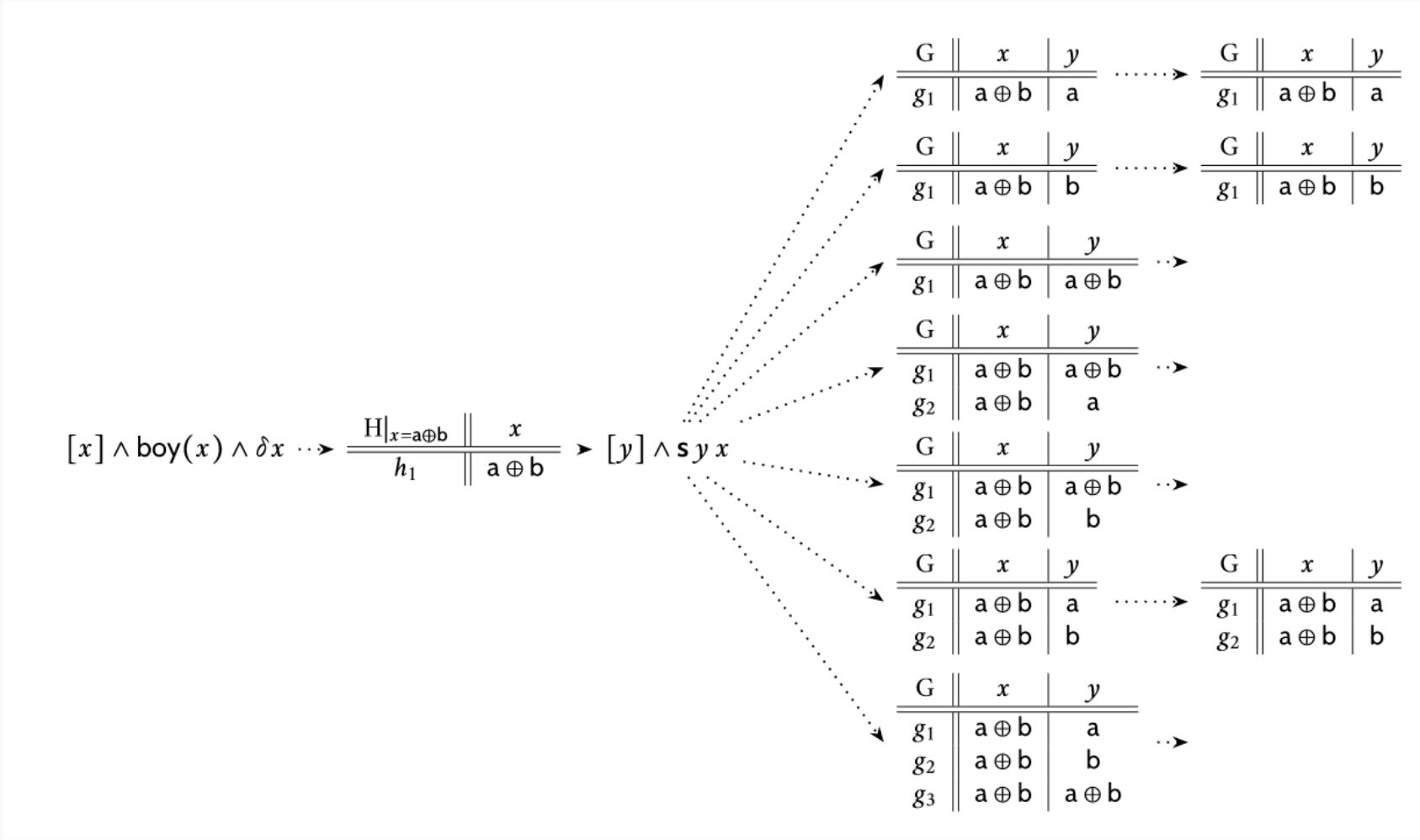
- To capture the range of meanings that reciprocals give rise to, we need machinery that stores dependencies between plurals. Dotlačil 2013
- Such machinery is already available to us – Dynamic Plural Logic(s) – and this is what we'll use today. van den Berg 1996; Murray 2008; Henderson 2014, a.m.o
- Here, I will only present the intuitive workings of this proposal.

Preliminaries

- Since we're dealing with plurals, we need assignment functions that can handle plurals.
- Second, we need to be able to access each atom (or sub-group) of this plurality to ensure variation w.r.t to the antecedent.
- DPlL has *information states* which are sets of assignment functions.

G	x	y	⋯	
g_1	⋯	a	b	⋯
g_2	⋯	{a,c}	d	⋯
⋯	⋯	⋯	⋯	⋯

Preliminaries



Reciprocals

- An example:

(28) abbayilu okari-ni okaru tiTTu-kun-naaru
boys one-acc one scold-vr-3pl
'The boys^{x} scolded [one another]$^{y}_{x}$'

(29) $\mathbf{max}^{x}(\text{boy}(x)) \wedge \delta x([y] \wedge \mathbf{ni}_{x,y}) \wedge \mathbf{s}\, y\, x \wedge \mathbf{gi}_{x,y}$

Reflexives

- Reflexives are minimally different. The only change is the condition in the scope of the distributive operator.

(30) abbayilu vaLLa-ni vaLLu tiTTu-kun-naaru
boys 3pl-acc 3pl scold-vr-3pl
'The boys^{x} scolded [themselves]$^{y}_{x}$'

(31) $\mathbf{max}^{x}(\mathrm{boy}(x)) \wedge \delta x([y] \wedge \mathbf{id}_{x,y}) \wedge \mathbf{s}\, y\, x \wedge \mathbf{gi}_{x,y}$