Sign language semantics, Day 4: Plurality and dependency (nouns)

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Section 1

Overview

Dependent indefinites

- In natural language, **indefinites** introduce individuals into the discourse context.

  (1) I read a book. (It was interesting.)

  (2) I read three books. (They were interesting.)

- In many languages, indefinite determiners and numerals may be inflected to create a **dependent indefinite**.
  - This indicates that the value of the indefinite DP varies with respect to something else in the sentence or in context.

Dependent Indefinites (examples)

Spoken Language:

(3) **Telugu** (Balusu 2006)

pilla-lu renDu-renDu kootu-lu-ni cuus-ee-ru.
kids two-two monkey-Pl-Acc see-Past-3PPL
'(The) kids saw two monkeys each.'

Sign Language:

(4) **ASL**

BOYS IX-arc-a READ ONE-arc-a BOOK.
'The boys read one book *each*.'

- *Distributive meaning:* two monkeys per kid; one book per boy

Questions for today

1. What is the relation between a dependent term and its licensor? (Anaphoric or indirect?)
2. Does the distributive meaning reside in the dependent indefinite itself, or is it parasitic on a (possibly covert) distributivity operator elsewhere in the sentence?
3. How does a dependent indefinite 'see outside' the scope of a distributive operator?

The point of view from sign language

- **Dependent indefinites in ASL** fit into a broader typology:
  - interpretation
  - licensing conditions
  - even morphological marking via reduplication
- Additionally, ASL pattern employs the use of space.
  1. Overt representation of the relation between a dependent indefinite and its licensor.
     - Anaphoric!
  2. The spatial marking of dependency also appears on the adjectives SAME and DIFFERENT.
     - Intrinsically distributive!
- Consequences for recent theories of dependent indefinites.

Section 2

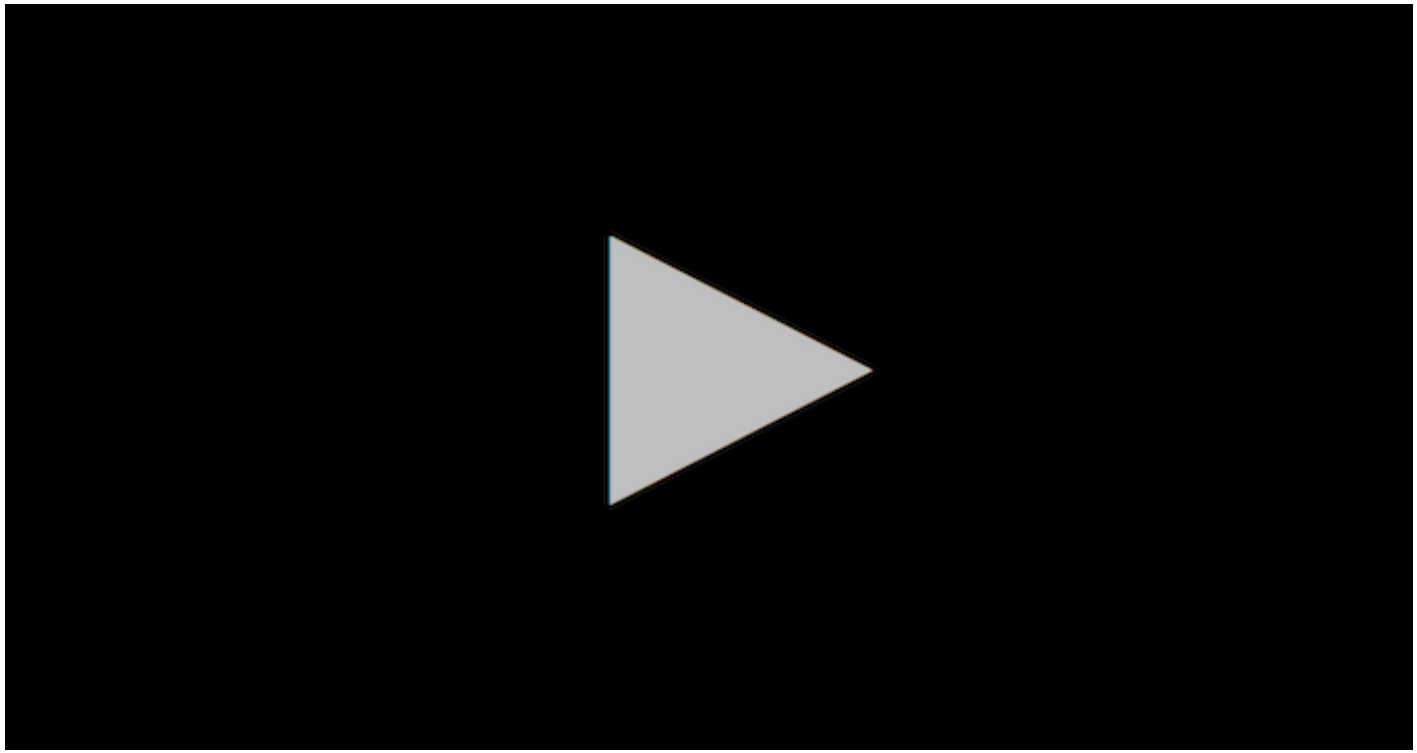
Visible dependency

The meaning of dependent indefinites

(4) BOYS IX-arc-a READ ONE-arc-a BOOK.
'The boys read one book *each*.'

- The meaning of dependent indefinites can be characterized by a **variation condition**.
  - *Variation condition:* the value taken by a dependent indefinite varies with respect to the atoms of the plural licensor.
- The variation condition can be seen in the fact that *collective readings* become unavailable with dependent indefinites.

The meaning of dependent indefinites



(5) a. ALL BOY LIFT ONE TABLE. ✓coll. ✓dist.

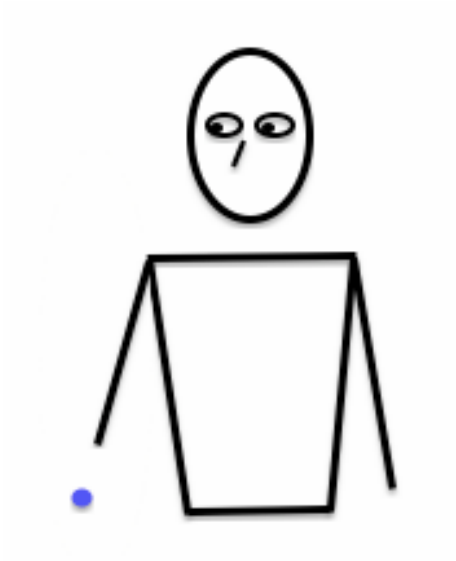
b. ALL BOY LIFT ONE-arc TABLE. * coll. ✓dist.
'All the boys lifted a table.'

The use of space in ASL

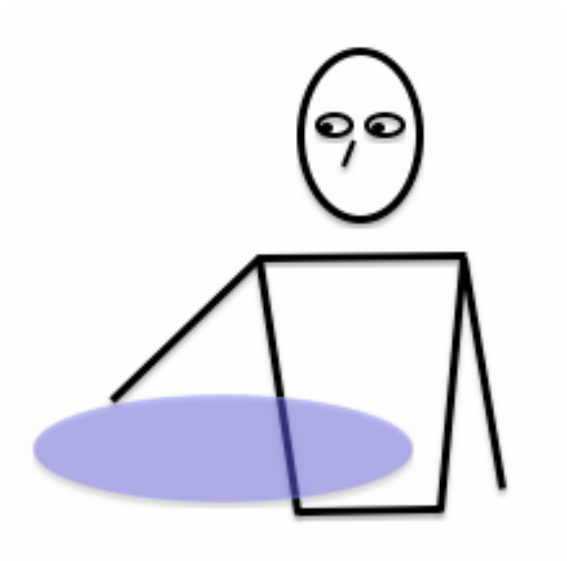
- Singular individuals indexed at points in space.

(Lillo-Martin and Klima 1990, *i.a.*)

- Plurals are indexed over areas of space.



singular locus



plural locus

Dependent indefinites in space

A spatial representation of dependency:

- Dependent indefinites are obligatorily signed over the same area of space as their licensor.

(6) EACH-a PROFESSOR SAID ONE-arc-a STUDENT WILL RECEIVE B.
'Each professor said that one student will receive a B.'

(7) ?? EACH-a PROFESSOR SAID ONE-arc-b STUDENT WILL RECEIVE B.
'Each professor said that one student *from each contextually salient group* will receive a B.'

Removing ambiguity in ASL

- Because the arc-motion agrees with the licensor, we can specify **what the indefinite is dependent on**.
- Consider a sentence with two potential licensors.

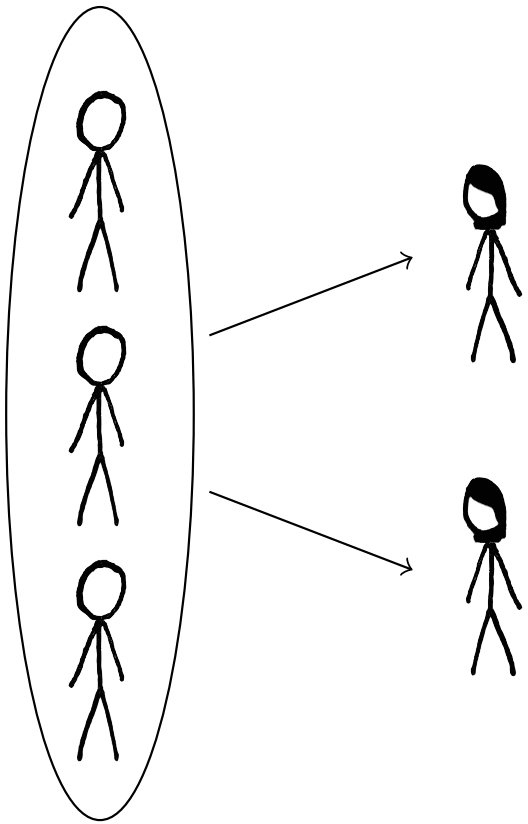
(8) **Hungarian** (p.c. Dániel Szeredi; four speakers)

A fiúk két-két könyvet adtak a lányoknak.
The boys two-two book give.3Pl the girls
'The boys gave the girls two books each.'

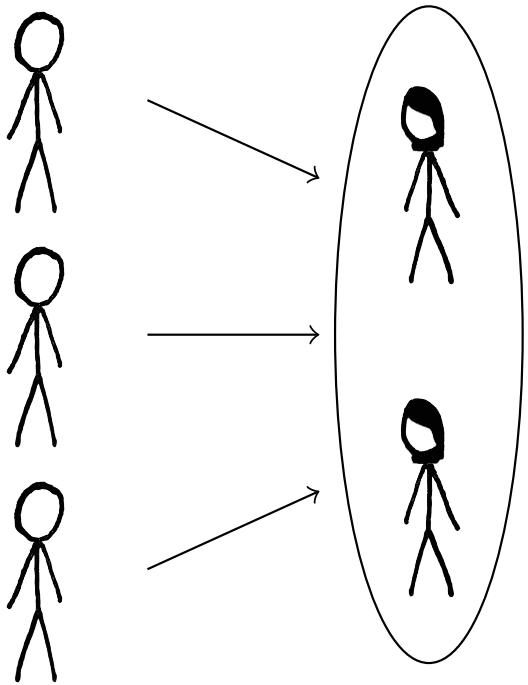
- Judgement: 'two-two' can depend on either boys or girls.

Ambiguity with multiple licensors

Distribution across the girls.
'To Mary, from the boys'

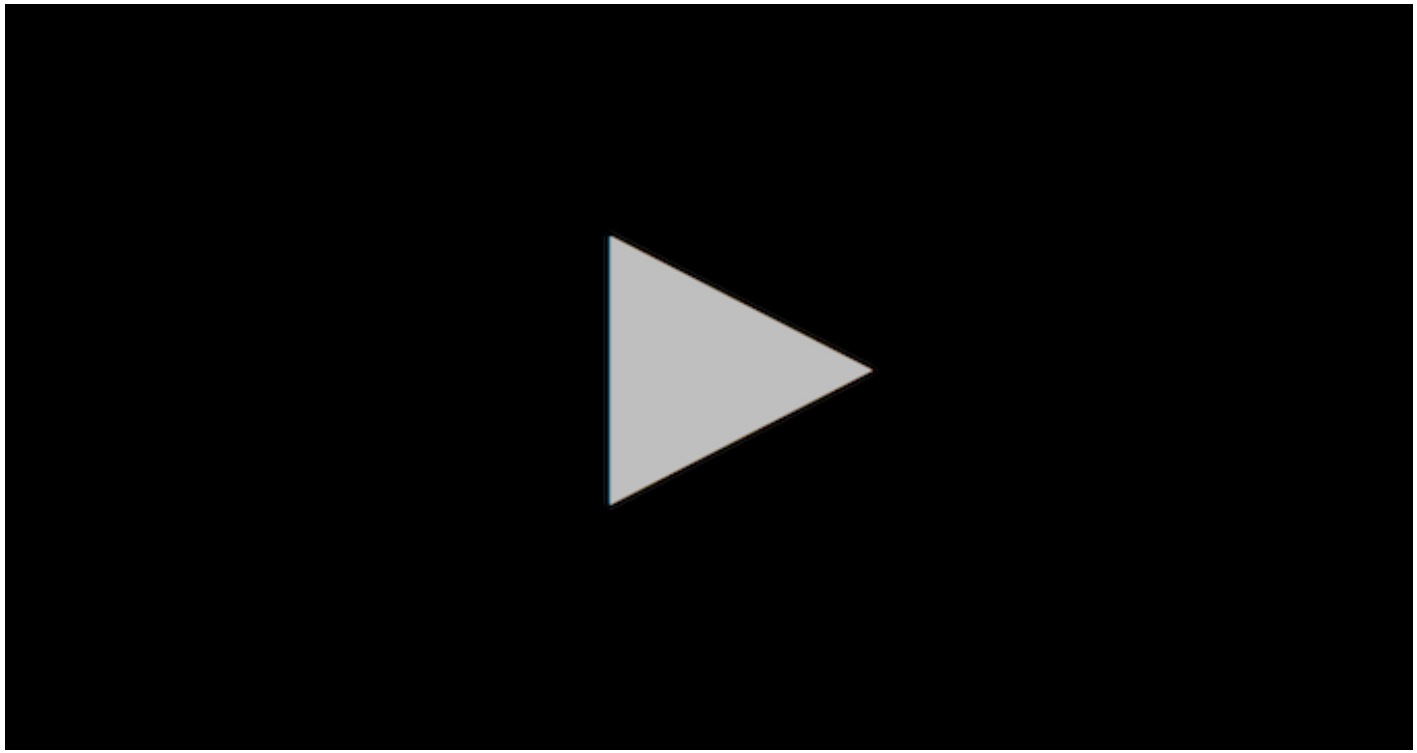


Distribution across the boys.
'To the girls, from John.'



No ambiguity in ASL

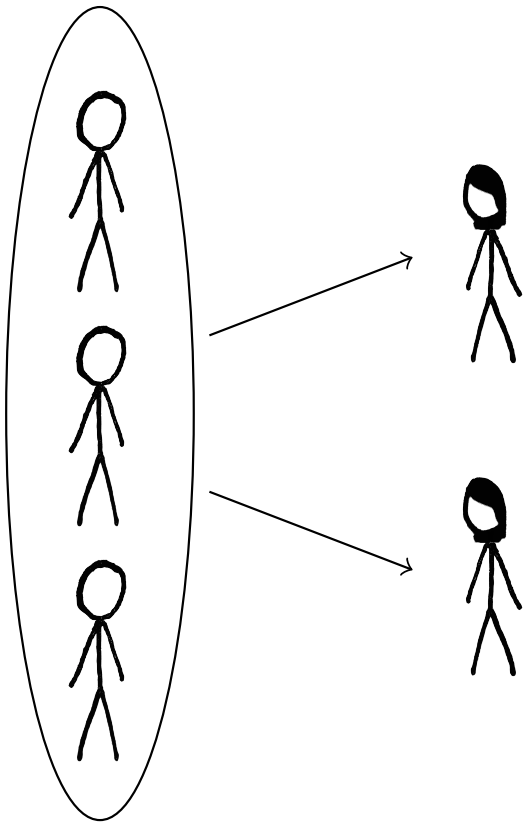
- With the use of space, ASL can disambiguate!



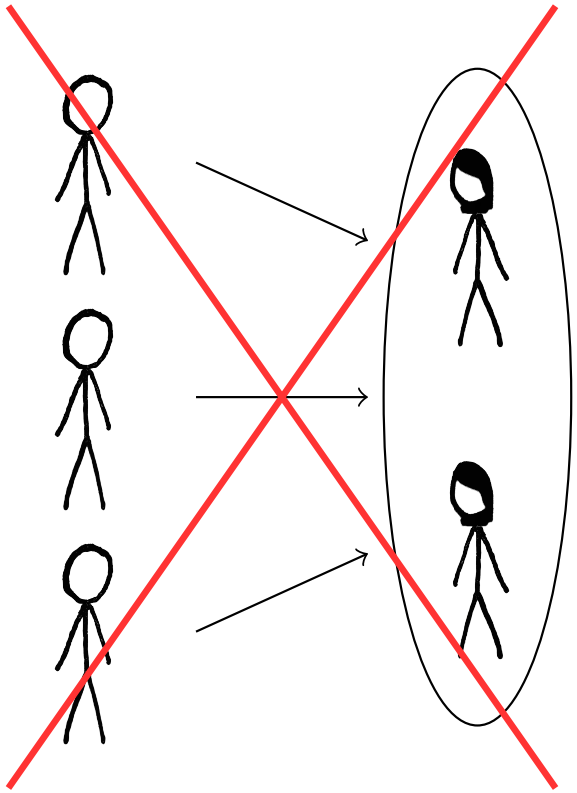
(9) ALL-a BOY-a GAVE ALL-b GIRL-b ONE-arc-b BOOK.
'All the boys gave all the girls one book *per girl*.'

No ambiguity in ASL

Distribution across the girls.
'To Mary, from the boys'



*Distribution across the boys.
'To the girls, from John.'



Theoretical import

- **Debate in the literature:** what is the relation between a dependent term and its licensor?
- Two sides:

Anaphoric link (like pronouns)	**Indirect relation** (like NPIs)
Brasoveanu & Farkas 2011	Balusu 2006
Brasoveanu 2011 (*different*)	Henderson 2014
Barker 2007 (*same*)	Cable 2014

- **New conclusion:** the ASL data is overtly anaphoric.

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- **New conclusion:** the ASL data is overtly anaphoric.

Connection to yesterday

- Yesterday our definition of /-alt/ also guaranteed a licensor. Which category did this definition fall into?

(10) $[\![\text{-alt}]\!] = \lambda V e[V(e) \wedge \exists e', e'' \preceq e[\theta(e') \neq \theta(e'')]]$

Connection to yesterday

- Yesterday our definition of /-alt/ also guaranteed a licensor. Which category did this definition fall into?

(12) $[\![\text{-alt}]\!] = \lambda V e[V(e) \wedge \exists e', e'' \preceq e[\theta(e') \neq \theta(e'')]]$

- Indirect.

Connection to yesterday

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(14) $[\![\text{-alt}]\!] = \lambda V e[V(e) \wedge \exists e', e'' \preceq e[\theta(e') \neq \theta(e'')]]$

- Indirect.
- On the other hand, this fit the empirical pattern.
- How change the definition to make anaphoric?

Connection to yesterday

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(16) $[\![\text{-alt}]\!] = \lambda V e[V(e) \wedge \exists e', e'' \preceq e[\theta(e') \neq \theta(e'')]]$

- Indirect.
- On the other hand, this fit the empirical pattern.
- How change the definition to make anaphoric?

(17) Given a licensor X,
$[\![\text{-alt}]\!] = \lambda V e[V(e) \wedge \exists \alpha[\alpha(e) = X \wedge \exists e', e'' \preceq e[\alpha(e') \neq \alpha(e'')]]]$

Section 3

A compositional puzzle: whence the distributive force?

A licensing puzzle

- A key property: **licensing**
- In many languages, dependent indefinites are...
  - ...licensed by plurals,
  - ...licensed by distributive operators,
  - ...ungrammatical when all arguments are singular.
- This holds in some form in...
  - Kaqchikel (Henderson 2014), Hungarian (Farkas 1997), Romanian (Brasoveanu & Farkas 2011), Albanian (Rushiti 2015), Telugu (Balusu 2006), some dialects of English (Champollion 2015a), and ASL (this work).

Licensing examples

(18) **Kaqchikel Mayan** (Henderson 2014)

a. Xeqatij ox-ox wäy.
we-eat three-three tortilla
'We each ate three tortillas.'

b. Chikijujunal ri tijoxela' xkiq'etej ju-jun tz'i'.
each the students hugged one-one dog
'Each of the students hugged a dog.'

c. * Xe'inchäp ox-ox wäy.
I-handle three-three tortilla
Desired reading: 'I took (groups of) three tortillas.'

Licensing examples

(19) **Telugu** (Balusu 2006)

a. Pilla-lu renDu-renDu kootuluni cuuseeru
kid-Pl two-two monkeys saw
'(The) kids saw two monkeys each.'
Two readings: 'participant key' and 'temporal key.'

b. Prati pillavaaDu renDu-renDu kootuluni cuuseeDu
Every kid two-two monkeys saw
'Every kid saw two monkeys (each).'
Two readings: 'participant key' and 'temporal key.'

c. Raamu renDu-renDu kootuluni cuuseeDu
Ram two-two monkeys saw
'Ram saw two monkeys each.'
Only 'temporal key' reading.

Licensing examples

(20) **Albanian** (Rushiti 2015)

a. Fëmijët kanë parë nga pesë mace.
children-the have seen DIST five cats
'The children have seen five cats each'

b. Në çdo dhomë kishte nga dy fotografi.
in every room there-were DIST two photos
'There were two (different) photos in each room'

c. * Në dhomë kishte nga dy fotografi.
in room there-were DIST two photos
Desired reading:
'There were two (different) photos in the room.'

Licensing examples

(21) **English**

a. The boys saw two zebras each.

b. % Every job candidate was in the room for fifteen minutes each.

c. * Ariella saw two zebras each.

- Here, % indicates a dialectal split on acceptability. For more on the grammaticality of binominal *each* under distributive operators in English, see Szabolcsi 2010, Ch. 8, Bauman et al. 2012, and Champollion 2015a.

Licensing examples

- American Sign Language fits in perfectly:

(22) **ASL**

a. BOYS IX-arc-a READ ONE-arc-a BOOK.
'The boys read one book each.'

b. EACH-EACH-a PROFESSOR NOMINATE ONE-redup-a STUDENT.
'Each professor nominated one student.'

c. * JOHN-a READ ONE-arc-a BOOK.
Desired reading: 'John read one book.'

A compositional puzzle

- Quantifiers like English *every* distribute down to atomic parts.

(23) **English**

a. The boys gathered.

b. * Every boy gathered.

c. * Edith gathered.

(24) **ASL**

a. MY FRIENDS, IX-arc-a GATHER.
'My friends gathered.'

b. * EACH STUDENT MY CLASS GATHER.
'Each student in my class gathered.'

c. * JOHN GATHER.
'John gathered.'

A compositional puzzle

- Dependent indefinites under distributive operators seem to be puzzlingly redundant (e.g. Balusu 2006, Oh 2005).
  - With a plural licensor, these morphemes seem to contribute distributive force themselves.
  - Under distributive operators, they appear to be semantically vacuous.
- If there are cases in which they are semantically vacuous, then why can't they appear innocently under singular subjects?

Two possible directions

Option 1: Treat licensing by distributives as the 'base case.'

(Brasoveanu and Farkas 2011, Henderson 2014)

- The at-issue meaning of a dependent indefinite is equivalent to that of a plain indefinite.
- A syntactic or semantic constraint (e.g. 'distributive concord') requires the indefinite to scope under a distributive operator.
- Licensing by plurals arises via a covert distributivity operator.

(25) The boys DIST [saw two-two zebras].

Two possible directions

Option 2: Treat licensing by plurals as the 'base case.'

(Balusu 2006, Cable 2014)

- The at-issue meaning of a dependent indefinite is itself quantificational/distributive.

(26) $[\![\text{two-two books}]\!]$ = Given a licensor X,
presupposing that X is nonatomic,
$\forall$ atomic parts x of X, there are two books associated with x

- For distributive operators:
  - The dependent indefinite is able to 'escape' from the distributive scope, to get access to a higher plurality.
  - This plurality is made available by the compositional system.

Comparing to yesterday

- Yesterday, we discussed another choice:
  pluralizing operators vs. **plurality filters**.
- Now, we are deciding between two kinds of plurality filters.

Operator: $\lambda P.\forall X[[\![\text{two books}]\!](X) \rightarrow P(X)]$

(P appears in the scope of $\forall$)

Filter:

Option 1: $\lambda P.\exists X[P(X) \ \wedge \ [\![\text{two books}]\!](X)]$

(+additional constraint requiring higher distributive operator)

Option 2: $\lambda P.\exists X[P(X) \wedge$
$\forall y \preceq Y[\mathbf{at}(y) \rightarrow \exists x \preceq X[[\![\text{two books}]\!](x) \ \wedge \ x \sim y]]]$

(P does not appear in the scope of $\forall$)

Comparing to yesterday

- Note that this is really a question about how to encode the cardinality condition.
- With /-alt/ yesterday, no entailment about cardinality; this is why the question didn't come up.

A problem for Option 1

(Option 1 = plural licensors require a covert distributivity operator)

- Distributive operators generally assumed to appear over VP.
- However, dependent indefinites may be conjoined with plain indefinites that are interpreted cumulatively.

(27) **Hungarian** (p.c. Dániel Szeredi)

A diákok két előételt és **egy-egy** főételt rendeltek.
The students two appetizers and one-one main-dish ordered.

'The students ordered two appetizers in total, and N main dishes where N is the number of students'

- If the dependent indefinite scopes under a covert distributive operator, the plain indefinite must do so, too, incorrectly entailing twice as many appetizers as students.

A problem for Option 1

(28) **Tamil (Chennai dialect)** (p.c. Anushree Sengupta)

Mānavarkkal thankalai kaga **oru-oru** appetizer o
students themselves for one-one appetizer and
irenDu desserts share-panna order pannagu.
two desserts share-do order did

'The students ordered one appetizer each for themselves and two desserts to share.'

Support for Option 2

(Option 2 = dependent indefinites are themselves distributive)

- **Observation:** the adjective *same* shows the same distributional pattern as dependent indefinites

(29) English *same* (on internal reading):

a. The students gave the same answer.

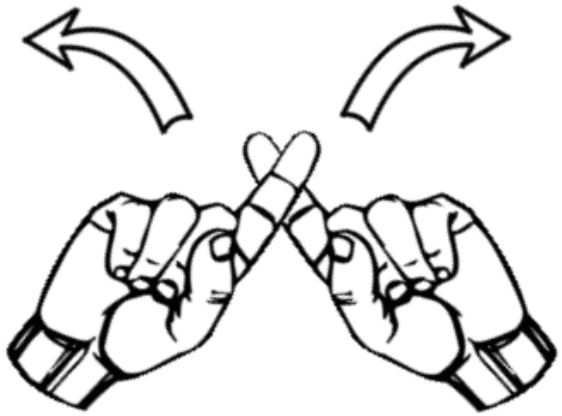
b. Each student gave the same answer.

c. * Edith gave the same answer.

- **Observation:** in ASL, dependent indefinites, SAME, and DIFFERENT are morphologically unified.

SAME and DIFFERENT

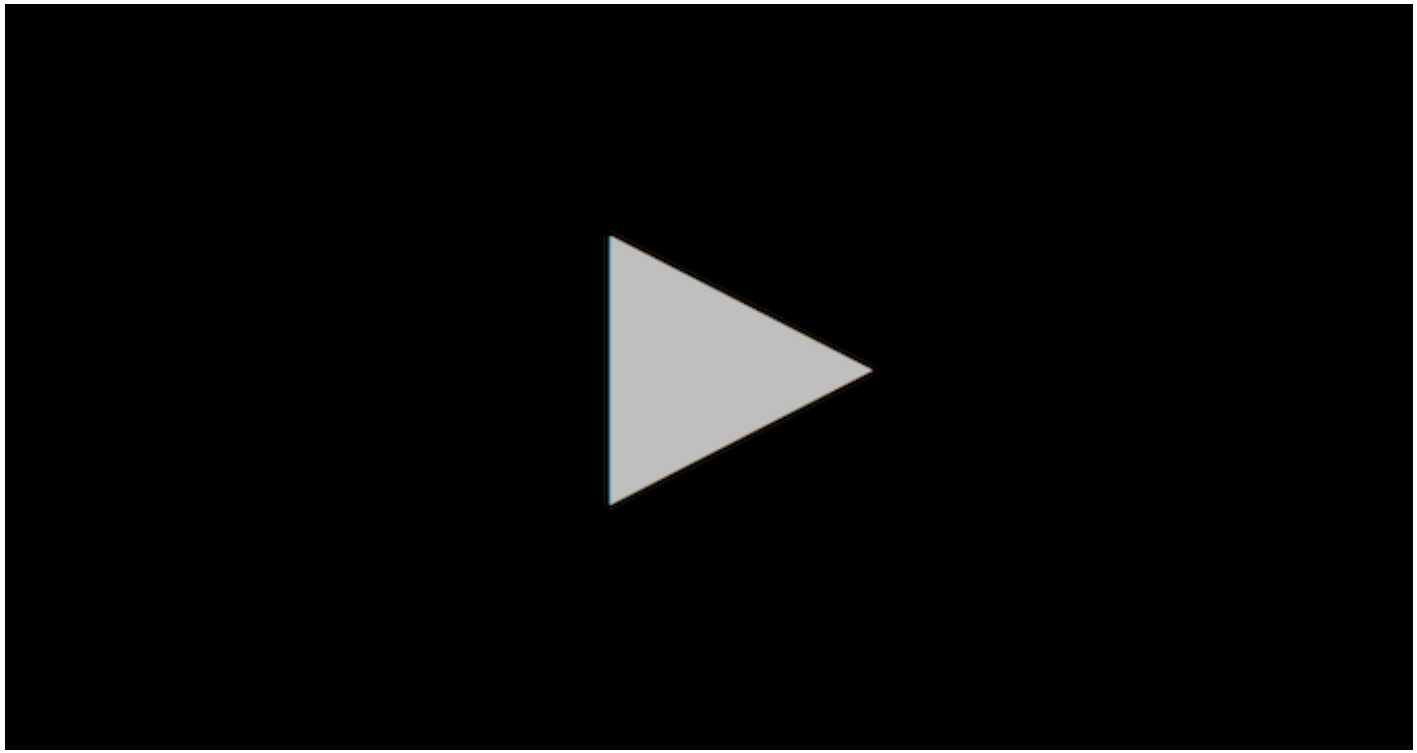
SAME



DIFFERENT

SAME and DIFFERENT

- SAME/DIFFERENT show the same pattern of spatial agreement.



(30) BOY THEY-arc-a READ {ONE/SAME/DIFFERENT}-arc-a BOOK.
'The boys read {one book each/the same book/different books}.'

SAME – multiple licensors

- Like for dependent indefinites, ASL may remove ambiguity.

(31) Every boy gave every girl the same book.

a. *Reading 1:* unimaginative boys

b. *Reading 2:* unlucky girls

(32) Every boy gave every girl a different book.

(Bumford and Barker 2013)

(33) BOYS IX-arc-a EACH GIVE-alt-b ALL-b GIRL-b SAME-arc-b BOOK.

- Only 'Reading 1': same with respect to the girls.

Theoretical conclusion

- Dependent indefinites and the adjectives *same* and *different* should be treated in fundamentally the same way.

Support for Option 2

- Consider the meaning of *same*.

  (34) Each student lifted the same table.

- A different table-lifting for each boy; in this sense, there is variation with respect to the licensor.
- But of course, this is not all; *same* compares the tables lifted by each boy.
  - For each pair of boys, they lifted the same table.
- This meaning is inherently quantificational.

Support for Option 2

Thus...

- *Same* must be given inherently quantificational meaning.
- Morphological parallels in ASL suggest that dependent indefinites should be treated analogously.

The proposal in a nutshell

- Dependent indefinites introduce a plurality into a discourse.
- Two components of meaning:
  - **Presupposition:** the plurality can be divided into subpluralities that vary with respect to the atoms of a licensor.
  - **At-issue:** each of these subpluralities is of a given cardinality.
- Licensing by *each* is achieved by QR of the dependent indefinite, letting it scope outside the distributive operator.
  - Critically, the framework of **Plural Compositional DRT** allows the semantics to be able to make reference to the functional dependency even outside of the distributive scope.

Section 4

Introducing Plural Compositonal DRT

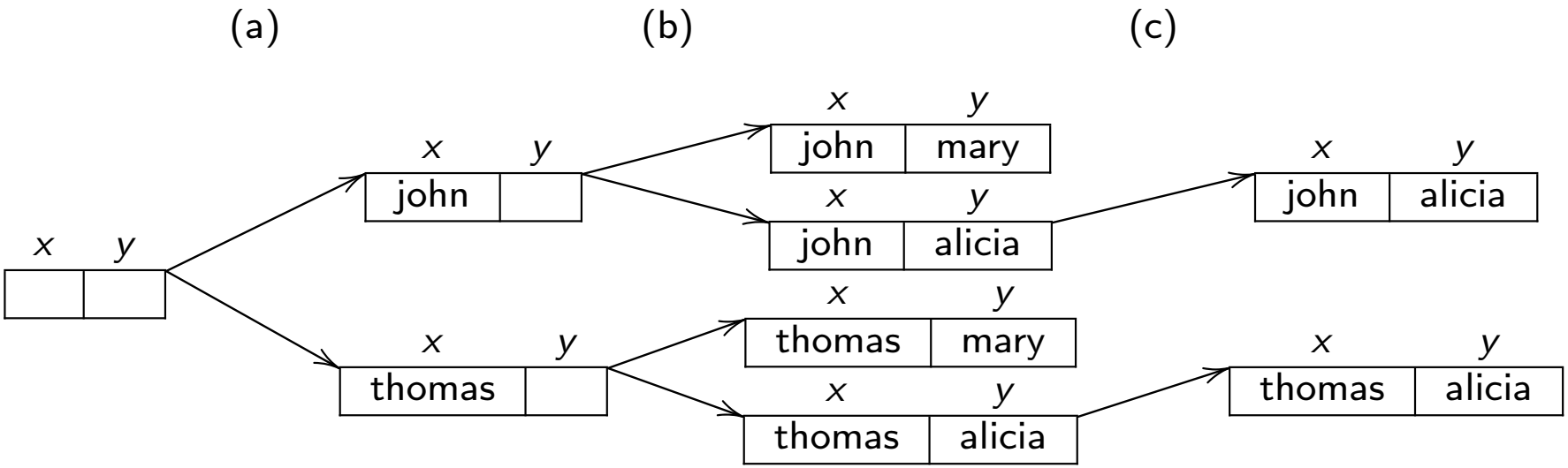
Background: dynamic semantics

- **Dynamic semantics:** discourse referents represented as the values of an assignment function, g (essentially, a list).
  - $g =$ | x | y | z | $\cdots$ |
    |---|---|---|---|
    | john | mary | | |

    (Groenendijk & Stokhof 1991)
- Passed through discourse: the output context of one sentence serves as the input context of the next.
- Indefinites can add new individuals to the end of this list. Pronouns retrieve elements from the list

Standard dynamic semantics, an example

(35) (a) A$_x$ boy entered. (b) A$_y$ girl exited. (c) She$_y$ was angry.



Universals in dynamic semantics

Standard dynamic semantics:

- Universals *every* and *each* taken to be 'externally static.'
  - Indefinites in their scope are not available to later discourse.

- At a first approximation, this seems to be correct:

(36) * Every$_x$ farmer owns a$_y$ donkey. It$_y$ kicked me in the shin.

- But...

Indefinites under universals

- **Quantificational subordination** (Heim 1990, Brasoveanu 2006)

  (37) Two$_x$ farmers each own a$_y$ donkey.
  Neither of them$_x$ treat it$_y$ very well.

- The pronoun *it* is anaphoric to the indefinite *a donkey*, yet it doesn't refer to a particular donkey or to the set of all donkeys.
  - It picks out the same correspondence that was introduced by the first sentence.

Indefinites under universals

Dynamic Plural Logic; Plural Compositional DRT

(van den Berg 1996, Nouwen 2003, Brasoveanu 2006)

- We need to be able to 're-open' the scope of a universal.
- Instead of just *checking* that there is one donkey per farmer, the system must *store* this representation.
- Instead of passing assignment functions through the discourse, it passes *sets* of assignment functions.
  - $G =$

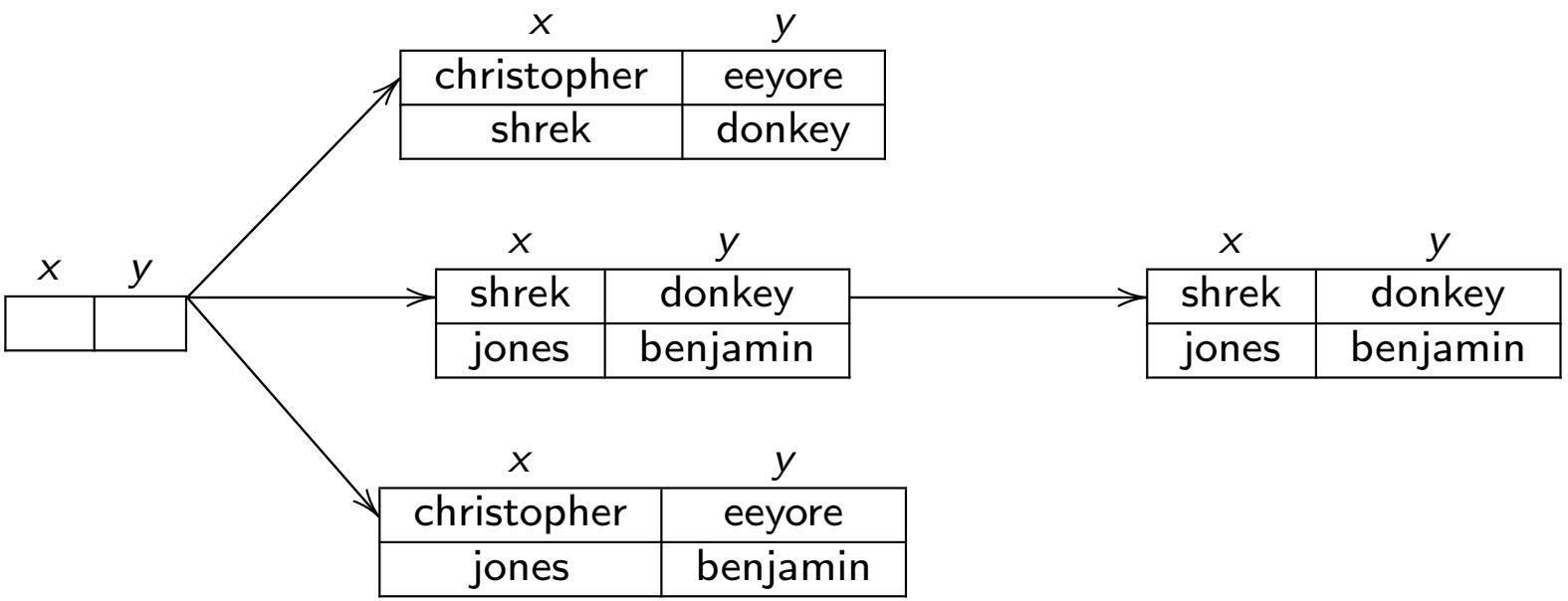
x	y
christopher	eeyore
jones	benjamin

$\ldots$

- G, H are variables over these 'information states' (i.e. tables).

Indefinites under universals

(38) Two$_x$ farmers each own a$_y$ donkey.
Neither of them$_x$ treat it$_y$ very well.



Information states vs. events

- An intuitive connection between information states and events.

(39)

x	y
shrek	donkey
jones	benjamin

(40) $e = e_1 \oplus e_2$
$\mathbf{ag}(e_1) = \text{shrek}$
$\mathbf{th}(e_1) = \text{donkey}$
$\mathbf{ag}(e_2) = \text{jones}$
$\mathbf{th}(e_2) = \text{benjamin}$

- In the system I will now introduce, logical operations are encoded in formally similar ways.
  - Cumulative readings.
  - Distributive operators.

System summary

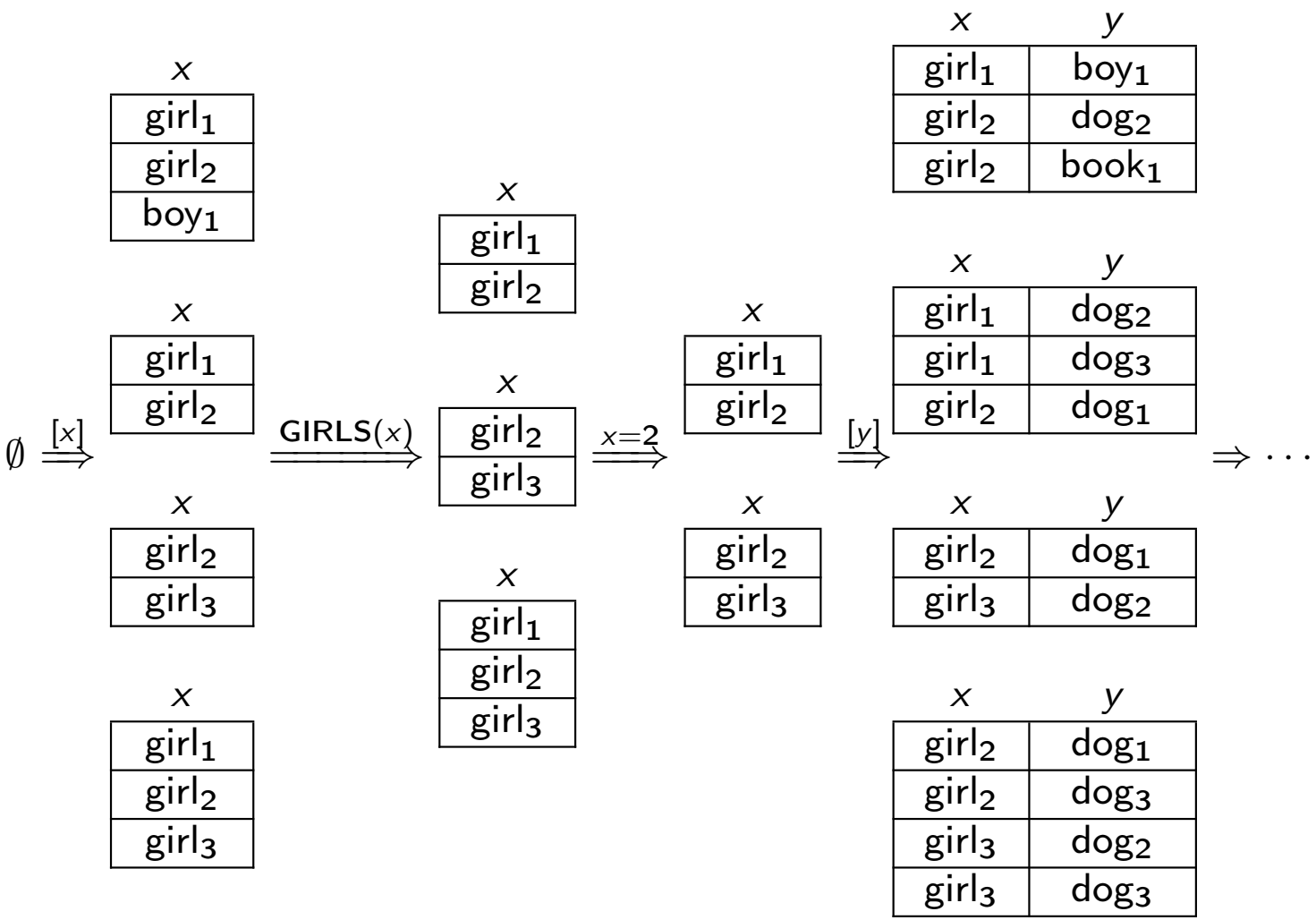
- I adopt the Plural Compositional DRT of Brasoveanu 2006

Informal summary

- $[x]$ introduces individuals across G at index x.
- Predicates test that a certain property holds for the values in each $g \in G$ (i.e. for each row in the table).
- Numerals are tests of the cardinality of the set of distinct values of some index x in G.

(41) a. Two$_x$ girls saw three$_y$ dogs.

b. $[x] \wedge \text{GIRLS}(x) \wedge x = 2 \wedge [y] \wedge \text{DOGS}(y) \wedge y = 3 \wedge \text{SAW}(x, y)$



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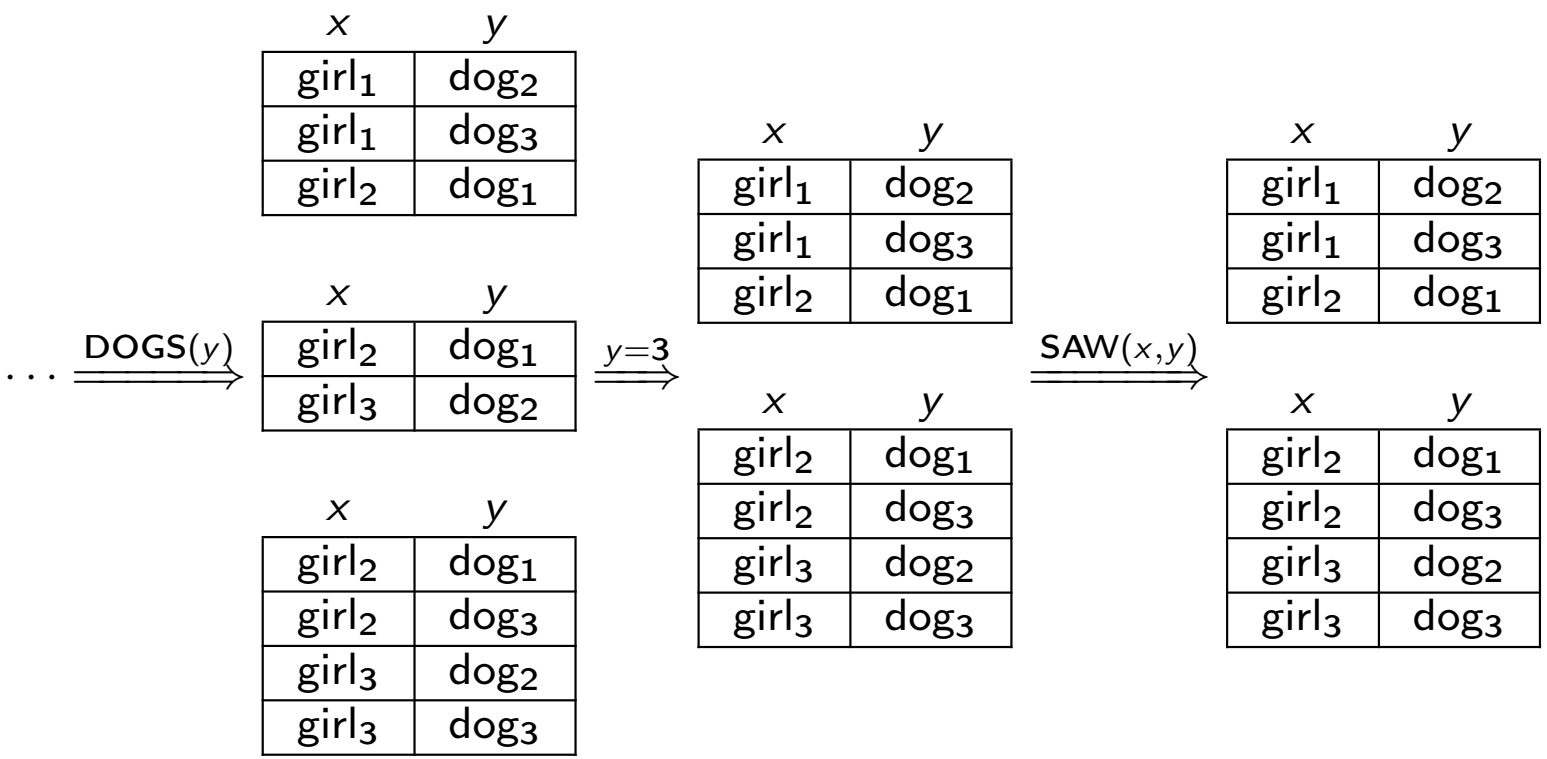
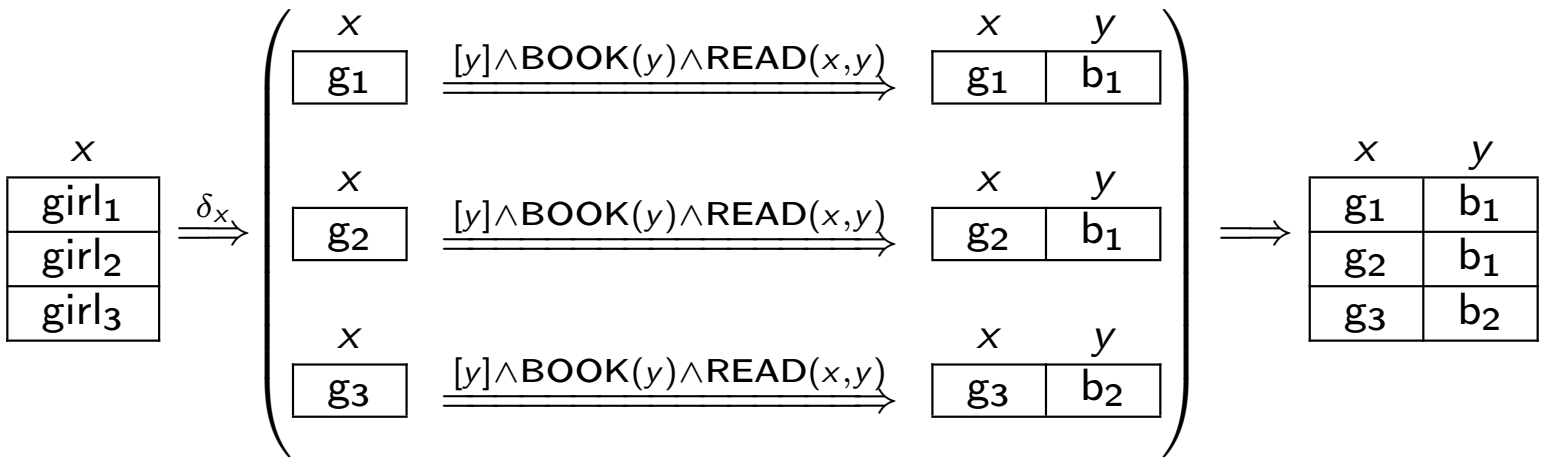


The distributive operator

- The distributive operator $\delta_x(\varphi)$ divides up a table with respect to the values of x, evaluates φ on each of these substates in parallel, then gathers up the resulting states.

(42) a. ... each read a book.

b. $\delta_x([y] \wedge \text{BOOK}(y) \wedge \text{READ}(y, x))$



From earlier: The proposal in a nutshell

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  - **At-issue:** each of these subpluralities is of a given cardinality.
- We can now translate these statements into PCDRT.

Substates based on the licensor

- First, an information state is divided up with respect to the values of the licensor. $\{G|_{x=d}(y)\}$ is a set of sets.

(43) $G|_{x=d}(y) := \{g(y) | g \in G \ \& \ g(x) = d\}$

- Below, x corresponds to the licensor; y corresponds to the dependent indefinite.

(44) a. $G =$

x	y
a	e
a	f
b	g
b	h
c	i
c	j

b. $\{G|_{x=d}(y)\} = \{\{\text{e, f}\}, \{\text{g, h}\}, \{\text{i, j}\}\}$

Presupposition of dependency

- **Presupposition:** the plurality can be divided into subpluralities that vary with respect to the atoms of a licensor.
- Formally, we define the predicate '**outside**$(y/x) > 1$':

(45) **outside**$(y/x) > 1$
$:= \quad \lambda GH.G = H \quad \& \quad |\{G|_{x=d}(y)\}| > 1$

- Equivalent to Nouwen's (2003) definition of dependency.

Cardinality assertion

- **At-issue:** each of these subpluralities is of a given cardinality.
- Formally, we define the predicate '**inside**$(y/x) = n$':

(46) $\textbf{inside}(y/x) = n$
$:= \quad \lambda GH.G = H \quad \& \quad \forall T \in \{G|_{x=d}(y)\}.|T| = n$

Lexical definitions

Dependent indefinites (anaphoric to a licensor)

(47) $[\![\text{two-two}^{y}_{x}]\!] =$
$\lambda NP.[y] \wedge N(y) \wedge P(y) \wedge \textbf{outside}(y/x) > 1 \wedge \textbf{inside}(y/x) = 2$

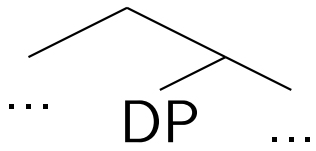
- Note that the two cardinality checkers are evaluated *after* the two predicates are introduced.
  - This allows the cardinality checkers to refer to an index that is introduced by an argument of the dependent indefinite.
  - This is the reflection in my analysis of Henderson's (2014) insight that the plurality condition of a dependent indefinite is somehow 'postsuppositional.'

Quantifier raising

Finally...

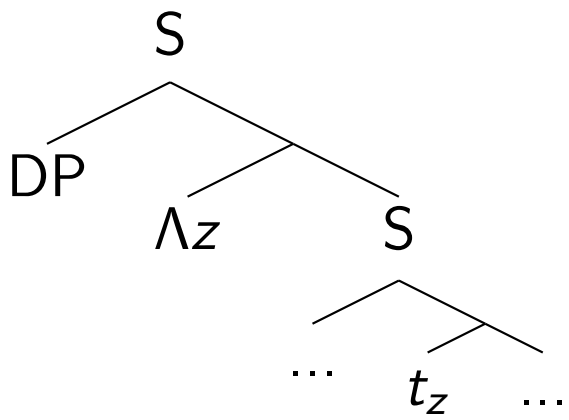
- I assume that quantifiers can move by Quantifier Raising (QR).

(48) a.



$\Rightarrow$

b.



Example 1

(49) a. Three^{x} students saw two-two$^{y}_{x}$ zebras.

b. $[x] \wedge \text{students}(x) \wedge [y] \wedge \text{zebras}(y) \wedge \text{saw}(y)(x) \wedge \mathbf{inside}(x) = 3 \wedge \mathbf{outside}(y/x) > 1 \wedge \mathbf{inside}(y/x) = 2$

(50)

student_1	zebra_1
student_1	zebra_2
student_2	zebra_1
student_2	zebra_2
student_3	zebra_1
student_3	zebra_3

student_1	zebra_1
student_1	zebra_2
student_2	zebra_3
student_2	zebra_4
student_3	zebra_5
student_3	zebra_6

...

Example 2 (unsuccessful derivation)

(51) a. Each^{x} student saw two-two$^{y}_{x}$ zebras.

b. $\mathbf{max}_x(\text{student}(x)) \wedge$
$\delta_x([y] \wedge \text{ZEBRAS}(y) \wedge \text{SAW}(y)(x) \wedge$
$\mathbf{outside}(y/x) > 1 \wedge \mathbf{inside}(y/x) = 2)$

(52) See handout for tree.

- Observe: the variation condition—i.e., the condition that $\mathbf{outside}(y/x) > 1$—appears inside the distributive scope of δ_x.
  - It is evaluated with respect to a substate of G where x is restricted to a single value.
  - The variation condition cannot be met, and the derivation fails.

Example 2 (successful derivation)

- The dependent indefinite takes scope outside the distributive operator.

(53) a. Each^{x} student saw two-two$^{y}_{x}$ zebras.

b. $[y] \wedge \textsc{zebras}(y) \wedge \mathbf{max}_x(\textsc{student}(x)) \wedge \delta_x(\textsc{saw}(y)(x)) \wedge \mathbf{outside}(y/x) > 1 \wedge \mathbf{inside}(y/x) = 2$

(54) See handout for tree.

- The variation condition '$\mathbf{outside}(y/x) > 1$' appears after distributive scope has closed, giving it access to the full set of values of x and y.

Section 5

Theoretical payoff: how to take scope

How to take scope?

- The essential insight for licensing by *each* comes from Henderson 2014.
  1. Dynamically tracking dependency relations with PCDRT.
  2. Evaluating the variation condition *after* the distributive scope has closed.
- However, on his analysis, dependent indefinites have the same at-issue content as plain indefinites. (They're not distributive.)
- For Henderson 2014, result is a kind of 'split-scope':
  - At-issue content must scope below the distributive operator.
  - The variation condition must scope above it.

Postsuppositions?

- Henderson: the variation condition is a **postsupposition**.

(Brasoveanu 2012)

- Formally, postsuppositions are a special *kind* of meaning.
(By analogy with presuppositions.)
  - Instead of being evaluated *in situ*, they are passed through the dynamic system until a later operator triggers their evaluation.

Postsuppositions?

On the other hand:

- The current analysis, with a distributive at-issue component, does not require separation of the two components of meaning; standard QR works, with no need for postsuppositions.

Further prediction of 'standard scope-taking':

- Sensitivity to **scope islands**

Scope islands

- Distributive operators get caught in certain syntactic environments.

(55) One policeman guarded every entrance to the building.

- Ambiguous

(56) If ⟨every relative of mine dies⟩, I'll inherit a house.

(57) I read one book that ⟨every friend recommended⟩.

- Not ambiguous

Scope islands

- Sensitivity to **scope islands**
  - Dependent indefinites are licensed by distributive operators by scoping over them.
  - Thus: ungrammaticality when an island boundary intervenes between a dependent indefinite and its potential licensor
- To my knowledge, not predicted by any other theory.

Island-sensitivity

- Islands indicated with angled brackets – $\langle \cdot \rangle$.

Hungarian (p.c. Márta Abrusán, two speakers)

(58) Minden professzor két-két diákról mondta, hogy
every professor two-two students-of said that
meglepné ha ⟨diplomát szereznének⟩.
surprised if diploma receive
'Every professor said of two students (each) that he would be surprised if they graduated.'

(59) * Minden professzor azt mondta, hogy meglepné, ha
every professor DEM said that surprised if
⟨két-két diák diplomát szerezne⟩.
two-two student diploma receive
'Every professor said that he would be surprised if two students (each) graduated.'

Island sensitivity

(60) a. Every professor said of the same student that if ⟨he graduated⟩, it would be a stain on the university's reputation.

b. * Every professor said that if ⟨the same student graduated⟩, it would be a stain on the university's reputation.

Section 6

Summary

Summary

- I addressed the following architectural questions:
  1. Do dependent indefinites have an anaphoric component?
  2. Are dependent indefinites quantificational?
- The latter of these turns out to be connected to a third architectural question:
  3. Do dependent indefinites see outside of distributive operators via postsuppositions or standard scope?
- *My answers were:*
  Dependent indefinites have an anaphoric component.
  They are quantificational. They are subject to standard scope.

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Split scope?

- Distributive operators can bind into the restrictor of a dependent indefinite that they license.

(61) **Hungarian** (p.c. anonymous *SALT* reviewer; replication with two speakers)

Minden rendező benevezte két-két filmjét.
every director entered two-two his-films
'Every director entered two of his films.'

Split scope?

- When a plain indefinite is coordinated with dependent indefinite licensed by a distributive operator, the plain indefinite can nevertheless covary with the distributive.

(62) **Hungarian** (three speakers)

Minden diák két előételt és egy-egy főételt rendelt.
Every student two appetizers and one-one main-dish ordered.
'Every student ordered two appetizers and one main dish.'

Cross-over effects?

- Observe:

  (63) * His$_i$ mother loves everyone^i.

- A problem?

  (64) The same$_i$ waiter served everyone^i.

- More like:

  (65) Even his$_i$ mother loves John^i.

Cross-sentential anaphora

(66) MY SCHOOL HAS [MANY CLASSES]-b.
EACH-a PROFESSOR NOMINATE ONE-redup-b STUDENT.
'My school has many classes. Each professor nominated one student *per class*.'